

# **The blurring line between the online and off-line world**

*On the counterintuitive relationship between people's offline materialistic tendencies and their attitude towards online vloggers*

Master Thesis



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## **Abstract**

This study examines the relationship between materialism and para-social interaction (PSI), and the moderating effect of social comparison, in the context of vlogging. Moreover the effectiveness of vlogs in terms of brand perceptions and purchase intentions subsequently is examined. An online experimental-based survey was conducted in order to identify these relationships. First, it was expected that materialism is negatively related to PSI as materialistic individuals tend to be bad at relationships. In line with expectations, results of the ANOVA showed a marginally negative relationship between materialism and PSI. Second, results of the regression analyses revealed a significant positive relationship between both PSI and brand perceptions, and brand perceptions and purchase intentions. Moreover, it was expected that downward comparison mitigates the negative relationship between materialism and PSI, due to less feelings of jealousy. Against expectations, results of the two-way ANOVA indicated that downward comparison did not significantly mitigate the negative relationship between materialism and PSI.

This study contributes to the literature by showing that materialism does not only negatively affect interpersonal relationships, but also online relationships. Furthermore, the findings of this study support the use of PSI, and vlogs as a marketing tool. However, companies should be aware of the potential consequences of using vlogs as marketing tool. Findings of this study support the notion that the effectiveness of vlogs can depend on the characteristics of the viewer.

***Keywords:*** *Vlog, Vlogging, Materialism, PSI, Social Comparison, YouTube, Social Media, Marketing*

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## **Chapter 1 Introduction**

### **1.1 The concept of vlogging**

Marketers increasingly use social media platforms with the goal to reach customers directly (Lee & Watkins, 2016). Due to the viral nature of social media, it provides the opportunity for marketers to stimulate word of mouth (Killian & McManus, 2015). Many firms make use of the social media platform “YouTube”, a video-sharing website. Users of this social media platform can upload their created videos, so that they can share it with an audience that can reach hundreds of millions of viewers (Freeman & Chapman, 2007). For example, Felix ‘PewDiePie’ Kjellberg reaches approximately 50 million subscribers with his uploaded videos. These YouTubers often create video blogs (hereafter referred to as *vlogs*), which are videos that involve the daily activities of YouTubers, and the particular products they use during these daily activities. These YouTubers are also referred to as “vloggers”. Due to the emergence of these vlogs and famous YouTube stars, the use of YouTube as a marketing tool for companies to connect with their customers became popular over the last few years (Lee & Watkins, 2016). The 12 most famous vloggers earned a combined \$70.5 million dollar in the year 2015 (Berg, 2016). Marketers use vlogs as an advertising medium by providing well-known vloggers with sponsored products, which the vloggers present to their audiences (Sanchez-Cortes, Kumano, Otsuka & Gatica-Perez, 2015). Consumers often watch these sponsored vlogs with functional purposes to, for example, find information about the product or to acquire product reviews (Lee & Watkins, 2016). However, the relational aspect of vlogging has not been examined extensively yet.

### **1.2 Para-social interaction (PSI) and materialism**

Lee and Watkins (2016) show that vloggers have a significant influence on their subscribers in terms of brand perceptions and purchase intentions subsequently. The influence of these vlogs, in terms of brand perceptions and purchase intentions, is the result of the para-social interaction (PSI) of the consumer with the vlogger. PSI explains the imaginary experience of consumers interacting with personas (vloggers in this case) as if they are engaged in a reciprocal relationship (Labrecque, 2014). Thus, Lee and Watkins (2016) find that PSI results in higher brand perceptions and, eventually, purchase intentions.

Lee and Watkins (2016) assess the influence of particular characteristics of the vlogger on PSI; and PSI effects on brand perceptions and purchase intentions. As PSI explains the

relationship between, in this case, both the and the viewer, it would also be interesting to investigate characteristics of the viewer on PSI. In this case, examining a consumer characteristic that is likely to respond to the sponsored products presented in vlogs would be relevant for managers as companies often use vlogs as a marketing tool (Sanchez-Cortes et al., 2015). Companies pay these vloggers an amount of money so that their products will be promoted in the vlogs (Morrison & Foerster LLP, 2015). Therefore, it would be valuable for managers to look at consumers, with a particular characteristic, who are more susceptible to advertisements and promotions. Subsequently, managers could examine the effect of this particular characteristic on brand perceptions and purchase intentions respectively. Also, since companies are trying to, for example, increase their amount of sales by using vlogs as promotional medium, consumers who have a higher desire for more possessions are worth taking a look at. This is because these consumers might be more easily tempted to buy these promoted products as these consumers desire the accumulation of possessions (Fitzmaurice, 2008).

Since materialism is related to a higher desire of possessions (Goldsmith & Clark, 2012) and materialistic individuals are often more vulnerable and responsive towards advertising and promotional efforts (Goldberg, Gorn, Peracchio & Bamossy, 2003) it would be interesting to examine the effect of having a materialistic mindset on PSI. Materialists are also highly interested in shopping new products (Fitzmaurice, 2008; Otero-López & Villardefrancos, 2013) therefore having a materialistic mindset might be salient in the vlogging context as these vloggers show all kinds of sponsored products. The term “materialism” refers to how important material goods are to a person’s life with the implication that materialistic people have an excessive concern for material objects (Goldsmith & Clark, 2012).

Literature shows that materialism has several negative consequences (e.g., Solberg, Diener & Robinson, 2003; Sharpe & Ramanaiah, 1999; Kasser & Ryan, 2001; Kasser & Ryan 1996; Górnik-Durose & Pilch, 2016; Otero-López & Villardefrancos, 2013; Mueller et al., 2011; Khodabakhsh & Besharat, 2011; Burroughs & Rindeisch, 2002; Kashdan & Breen, 2007; Sirgy, 1998; Kim & Kramer, 2015; Tsang, Carpenter, Roberts, Frisch & Carlisle, 2014) that could harm the quality of interpersonal relationships. Examples of these consequences are neuroticism, low agreeableness, low self-esteem and narcissism. Research (e.g., McNulty, 2008; Khodabakhsh & Besharat, 2011; Wang, Hartl, Laursen, Booth-Laforce & Rubin, 2015; Neto, 2007) shows that these consequences are negatively related to the quality of interpersonal relationships. Moreover, Kim and Kramer (2015) state that materialistic

individuals in general tend to be poor at relationships. As PSI explains the relationship between a media personality and an individual (Frederick, Lim, Clavio & Walsh, 2012; Horton & Wohl, 1956), a negative relationship between materialism and PSI is expected. As Lee and Watkins (2016) show that PSI leads to increased brand perceptions and purchase intentions, it is expected that materialism also has a negative effect on purchase intentions and brand perceptions subsequently. This is counterintuitive, as companies use vlogs for promotional purposes aiming at increased sales figures of the advertised products. One might expect that materialists will respond positively to these advertised products as they are prone to advertisements, promotional efforts and new products (Goldberg et al., 2003; Fitzmaurice, 2008; Otero-López & Villardefrancos). Since materialistic individuals have a high desire for more possessions (Goldsmith & Clark, 2012) it would be expected that they would respond positively to the advertised products in vlogs. A counterintuitive proposition would not be expected to be true when using common sense, intuition and gut feelings (Alvermann, 1989).

Moreover, as materialistic individuals often compare their possessions to those of others (Fitzmaurice, 2008) and are more prone to comparing themselves to others (Ogden & Venkat, 2001), the negative relationship between materialism and PSI could therefore be moderated by social comparison. Festinger (1954) first came up with the theory of social comparison. Festinger (1954) states that individuals compare themselves upward with someone who is better off, in terms of possessions, and compare themselves downward with someone who is worse off, in terms of possessions. As upward comparison strengthens the materialistic mindset by feelings of jealousy, the negative relationship between materialism and PSI is expected to be strengthened. Vice versa, downward comparison is expected to mitigate the negative relationship between materialism on PSI due to less feelings of jealousy.

### **1.3 Research goals**

Literature on the effectiveness of vlogs is limited. Only a few studies have examined vlogging (Lee & Watkins, 2016; Sanchez-Cortes et al., 2015; Hall, 2015; Harnish, & Bridges, 2016; Frobenius, 2014). Therefore, this research investigates whether there exists a relationship between materialism and PSI in the context of vlogging. More specifically, this study investigates the possible negative relationship between materialism and PSI and how this negatively relationship affects purchase intentions and brand perceptions subsequently. Lastly, this current study examines whether the fact that the vlogger is perceived to be higher or lower, in terms of possessions, by the viewer moderates this former relationship. Succintly put, the objective of this study is to find out whether there exists a negative relationship

between materialism and PSI and how this influences brand perceptions and purchase intentions subsequently. Moreover, this study examines whether social comparison moderates this former relationship.

## **1.4 Contributions**

### ***1.4.1 Theoretical contributions***

Former literature on the effectiveness of vlogs has only examined the influence of particular character traits on the effectiveness of vlogs (Lee & Watkins, 2016). The effectiveness of vlogs, based on a character trait of the viewer, has, however, not been examined yet. Therefore, this study addresses this research gap and provides a new theoretical angle in the current stream of literature on the effectiveness of vlogs.

Moreover, as this study examines the relationship between materialism and PSI, this study might provide new insights in the current stream of literature on materialism. A plethora of literature (e.g., McNulty, 2008; Khodabakhsh & Besharat, 2011; Wang, Hartl, Laursen, Booth-Laforce & Rubin, 2015; Neto, 2007) has already argued that materialism is negatively related to the quality of interpersonal relationships. However, no attempts have been made to examine how these consequences of materialism might affect online relationships with, in this case, vloggers.

Additionally, this study attempts to examine whether social comparison (Festinger, 1954) affects the relationship between materialism and PSI, which can give new theoretical insights about the influences of social comparison.

### ***1.4.2 Managerial contributions***

In addition to the theoretical contributions, this study is managerially relevant because it adds research to a marketing strategy that is increasingly used by companies. Nowadays, firms are progressively taking advantage of the large exposure and millions of subscribers of vloggers on YouTube (Grimani, 2016). With such a relatively new marketing strategy that many companies use, the question remains whether the strategy is effective or not. As materialistic individuals are interested in new products and are prone to promotions and advertisements (Goldberg et al., 2003; Fitzmaurice, 2008; Otero-López & Villardefrancos) it is important to know how materialistic individuals respond to the promotional efforts of companies in vlogs. Due to the fact that materialistic individuals are interested in new products and easily influenced by advertisements and promotions, this study provides a counterintuitive

proposition as a negative relationship between materialism and PSI is expected. This could help managers or companies to clarify the effectiveness of their promotional efforts in these vlogs.

### **1.5 Societal contributions**

Earlier research on PSI stated that it was a form of dysfunctional behaviour in the way that it could lead to neuroticism, isolation, loneliness, fear and less opportunities for 'real' social interactions as well as diminished interpersonal contact (e.g., Sood & Rogers, 2000; Cohen, 1997). According to these behavioural aspects, it will be socially relevant to be aware of the effects of watching vlogs on PSI and Materialism.

### **1.6 Outline of the research**

The setup of this paper is as follows. In section 2, an overview of the relevant literature will be presented on which hypotheses are formed and a conceptual model will be formulated. Subsequently, the research method will be given to test the hypothesis in section 3. In section 4 and 5, the results will be given together with a discussion and a conclusion.

## **Chapter 2 Literature Review**

This section will provide a theoretical background of para-social interaction (PSI), materialism and the social comparison theory. This first section will discuss PSI in detail as this study examines the effect of materialism on PSI. To understand the influence of materialism on PSI in the context of vlogging, it is essential to first provide an insight in the general concepts of PSI and materialism. Then a theoretical overview of materialism will be given. Lastly, this section will provide detailed information about the social comparison theory.

### **2.1 PSI**

#### ***2.1.1 Definition***

To properly discuss the concept of PSI, a clear definition of PSI is needed. In this current study, the following definition of PSI is adopted: “the imaginary experience of consumers interacting with personas as if they are engaged in a reciprocal relationship (Labrecque, 2014)”. The next section will examine how PSI is discussed in the literature.

#### ***2.1.2 Background of para-social interaction (PSI)***

Horton and Wohl (1956) introduced the concept of PSI as it emerged from media and communications literature. In the perception of Horton and Wohl (1956) the, in their time, new mass media, like radio and television, gave the illusion of a face-to-face relationship of the viewer with the broadcasting performer. The broadcasting performer is also referred to as personae. The personae can be several types of media figures like presenters, celebrities or actors (Ballantine & Martin, 2005). Horton and Wohl (1956) also refer to PSI as a relationship of “intimacy at a distance”. The intimacy can be explained by the fact that the individual will get feelings of intimacy after repeated relationships with the personae (e.g., after watching episodes of a series often) (Ballantine & Martin, 2005). After a while, individuals might watch the episodes more often to preserve the ‘friendship’ (e.g., Rubin, Perse, & Powell, 1985). Moreover, Rubin and McHugh (1987) find that this friendship with a media personality is established similarly to an interpersonal relationship and can function as a replacement of that interpersonal relationship. In the study of Horton and Wohl (1956) it is stated that PSI is established due to the fact that the performer speaks directly into the television camera so that it seems like the performer is interacting with the viewer. In the case of PSI, people are involved with the consumptions of the media user (Rubin et al., 1985).

According to Rubin et al. (1985), this involvement might express itself in many forms like the need for guidance from the personae, imagining being part of the social world of the program the personae is situated in, the desire to meet the media performers and seeing these media personalities as friends.

There are several reasons why people engage in PSI. Levy (1979) shows that people could benefit from the wisdom of the personae. These people can watch, for example, shows of the personae for informational purposes like advice and recommendations. Furthermore, in the articles of Levy (1979), Rubin et al. (1985), Rubin and Rubin (1985), and Rubin and McHugh (1987), it is stated that people with weak social ties might seek social interactions in a different manner. Thus, people with weak social ties engage in PSI more often as they consider the personae's as real friends (Levy, 1979; Rubin & Rubin, 1985). Rubin and McHugh (1987) state that the television exposure and the degree of attraction are important determinants of PSI. Furthermore, besides social attraction, research has shown that physical attraction and task attraction result in PSI (McCroskey & McCain, 1974). Moreover, Ballantine and Martin (2005) state that the higher the similarity of the media personality with the individual, the higher the level of PSI. The level of similarity is also referred to as 'homophily', that is "the degree to which people who interact are similar in beliefs, education, social status, and the like" (Eyal & Rubin, 2003).

PSI also holds several consequences. For example, Labreque (2014) investigated the role of PSI in social media environments. The study of Labreque (2014) states that the outcomes of PSI should be close to the outcomes of a "real relationship". For instance, the positive relationship between a "real friendship" and willingness to share info (Labreque, 2014) is also observed in case of PSI. Labreque (2014) states that these outcomes of this "real relationship" can express itself in a positive relationship between PSI and the willingness to share info.

Moreover, Labreque (2014) found a positive relationship between PSI and loyalty. Lee and Watkins (2016) investigated the influence of the characteristics of vloggers on PSI and on brand perceptions and purchase intentions subsequently. The study of Lee and Watkins (2016) shows that PSI has a significant effect on brand perceptions and on purchase intentions.

### ***2.1.3 PSI in the online context***

As the former section focused on the engagement of people with media personalities from radio and television, this section extends this view by incorporating computer-mediated environments.

The studies of Ballantine and Martin (2005), Hoerner (1999), Goldberg and Allen (2008) and Labreque (2014) prove that PSI is also established outside the boundaries of traditional media (e.g., television, radio). This current study discusses how PSI exists in an online (virtual) environment.

As traditional media often relies on one-way communication; the online environment makes two-way communication between an individual and a persona technologically possible (Labreque, 2014). Therefore, PSI is related to the concept of current media interactivity. (McMillian, 2002). Another example fostering PSI in the online environment is Twitter. Celebrities use Twitter to communicate with their fans (Stever & Lawson, 2013). Celebrities can send personal messages to their fans as he or she chooses. As Hargittai and Litt (2011) state; “users of social media can follow one another’s content without reciprocal obligation”. However, the concept of PSI would indicate that these interactions are expected to influence the users.

#### ***2.1.4 PSI in the vlogging context***

As the research context is vlogging in this current study, this section examines PSI in the vlogging context. Since PSI explains the relationship between a media personality and an individual (Frederick et al., 2012; Horton & Wohl, 1956), vlogging is related to PSI in the way that the vlogger is the media personality and the viewer of the vlogs is the individual. If viewers repeatedly watch vlogs, the viewers might get feelings of intimacy towards the vlogger, consequently these feelings of intimacy might eventually lead to a feeling of ‘friendship’. This feeling of ‘friendship’ might result in higher brand perceptions and in higher purchase intentions subsequently (Lee & Watkins, 2016). Because of these higher brand perceptions and purchase intentions, firms increasingly use vlogs as a strategic marketing tool (Grimani, 2016). Firms can use vlogs to promote their products as they send sponsored products to these vloggers and pay these vloggers an amount of money so that the products will be shown in the vlog. For firms, this is a form of celebrity endorsement as firms believe that celebrities are more influential than unknown models as celebrities have active personas in the minds of customers (McCracken, 1989). As these ‘influential’ vloggers

promote the products of a particular company, brand perceptions and purchase intentions might increase because of the PSI between the viewer and the vlogger.

## **2.2 Materialism**

### ***2.2.1 Definition***

To accurately introduce the concept of materialism, a well-understood definition of materialism is needed. In the current study, the following definition for materialism is applied: “the importance of material goods to a person’s life with the implication that materialistic people have an excessive concern for material objects and possessions (Goldsmith & Clark, 2012). According to Belk (1988), possessions include specific experiences, tangible assets and other persons. The next session will discuss the theoretical background of materialism.

### ***2.2.2 Background of Materialism***

Consumers who are highly materialistic value their possessions as central to their lives and judge themselves and others in terms of the accumulation of possessions. Moreover, materialistic Consumers have the perception of materialism as being critical in achieving happiness and well-being (Fitzmaurice, 2008). Materialistic customers also have a set of values and goals that are mainly focused on wealth, possessions, image, and status (Kasser, 2015). Belk (1985) conducted the first refined pursuit to measure materialism. Belk (1985) examined the relationship between possessions and sense of self, specifically the “extended self”. Belk (1988) describes the “extended self” as something that is not only seen as “me” (the self) but also things which are seen as “mine”. Evidence of the study of Belk (1988) shows that the acquiring of possessions contribute to sense of the extended self. Belk (1985) related materialism to three personality traits: possessiveness, nongenerosity, and envy. *Possessiveness* is defined as “the inclination and tendency to retain control over ownership of one’s possessions” (Belk, 1985). *Nongenerosity* is the “unwillingness to give possessions to or share possessions with others (Belk, 1985). Lastly, Schoeck (1966) defines *envy* as “displeasure and ill will at the superiority of [another person] in happiness, success, reputation, or the possession of anything desirable.”

Richins and Dawson (1990, 1992) state that materialism is rather tied up in the individual’s value system. In other words, according to Richins and Dawson (1990, 1992) materialism exists at the individual level. Richins and Dawson (1990) defined materialism as “an organizing or second-order value that incorporates both the importance placed on certain

end states (achievement and enjoyment values) and beliefs that possessions are appropriate means to achieve these states”. In the studies of Richins and Dawson (1990, 1992), three themes are central to materialism. First, the acquisition of possessions plays a central role in the lives of materialists. Accordingly, possessions influence the behavioural patterns of materialistic individuals. Second, the acquisitions of possessions contribute to the pursuit of happiness of materialistic individuals. Lastly, materialistic individuals often judge the success of other based on their acquired possessions.

In short, the study of Belk (1985) describes materialism as a character trait and sees the acquiring of possessions as a way to enable self-enhancement. In contrast, Richins and Dawson (1990, 1992) perceive materialism as a value orientation that guides people’s choices and conduct in a variety of situations. According to Richins and Dawson (1990, 1992), character traits are often formed at a very early age. Moreover, these character traits are minimally subject to change over the life span of an individual and are often immune to environmental stimuli. Richins and Dawson (1990, 1992) state that values are “(a) concepts or beliefs, (b) about desirable end states or behaviours, (c) that transcend specific situations, (d) guide selection or evaluation of behaviour and events (e) are ordered by key importance”. Richins (1994) also states that materialistic individuals often value goods in order to communicate their success to others. Additionally, Richins (1994) argues that the enjoyment from the consumption could more be a result of the process of acquiring the possession than from actually using the product.

Richins and Dawson (1990) moreover claim that materialistic values do change due to social conditions, age and environmental stimuli that encourage materialism. In other words, research from Richins and Dawson (1990, 1992) shows that materialistic individuals are situational bound. Hence, this current study considers materialism as a value orientation based on the belief that the effect of materialism on PSI in the context of vlogging is situational and affected by environmental stimuli (e.g., the kind of vlogger).

Several factors establish materialism. Grougio and Moschis (2014) studied the several antecedents of having a materialistic value orientation. Among the results, the finding that lower self-esteem favours materialistic values is most relevant for this particular study. Grougio and Moschis (2014) also state that disruptive life events, like disruptive family events, can lead to higher materialistic values. This is based upon the fact that these disruptive life events affect the self-esteem of an individual subsequently. Kasser, Ryan, Couchman and Sheldon (2004), support this notion by stating that materialistic value orientation can come from two main sources. Materialistic value orientation can come from the dissatisfaction of

psychological needs than can lead to the distressing effects of feelings of insecurity. This proposition is in line with the finding of Grougio and Moschis (2014) stating that disruptive life events that lead to higher materialistic values due to feelings of insecurity. Kasser et al. (2004) state that the exposure of individuals to materialistic models and values can lead to the development of materialistic values. For example, individuals who grew up in a materialistic social environment were more likely to have materialistic values (Kasser et al., 2004).

Having a materialistic value orientation holds several consequences. As Goldberg et al. (2003) state, the interest of materialistic individuals lies at shopping new products by being responsive to advertising and promotional efforts. The interest of shopping new products can also express itself in splurge purchases (e.g., Fitzmaurice, 2008; Otero-López & Villardefrancos, 2013). Moreover, many authors (e.g., Solberg et al., 2003; Sharpe & Ramanaiah, 1999; Kasser & Ryan, 2001; Kasser & Ryan 1996; Górnik-Durose & Pilch, 2016; Otero-López & Villardefrancos, 2013; Mueller et al., 2011) claim that materialistic values will result in unpleasant behaviours like neuroticism, low agreeableness, low self-esteem and narcissism, loneliness and depression. “Neuroticism is a long term tendency to be in a negative emotional mood which manifests itself in feelings of guilt, envy, anger and anxiety (Nordqvist, 2016). Whereas narcissism characterizes itself by feelings of privilege, self-enhancement, lack of empathy towards others and exploitative interpersonal behaviour (Rhodewalt & Peterson, 2009). Furthermore, Khodabakhsh and Besharat (2011) state that narcissism has a negative effect on the quality of interpersonal relationships. In addition to unpleasant behaviours, many authors (e.g., Burroughs and Rindeisch, 2002; Kashdan and Breen, 2007; Sirgy, 1998) claim that materialistic values will lead to a diminished consumer well-being. Moreover, materialistic individuals are often socially insecure (Roedder, 1999). This socially insecurity expresses itself the seeking of power and dominance in relationships (Bartholomew & Horowitz, 1991). As individuals often do not prefer to be dominated or possessed in a relationship, materialists are often poor at real relationships (Kim & Kramer, 2015). Last, Tsang et al. (2014) stated that individuals with a materialistic value orientation find it harder to be grateful toward others. This is mainly because materialists are often thinking about possessions they do not have instead of thinking about possessions they do already have.

### ***2.2.3 Materialism in the vlogging context***

As this current study investigates the effects of materialism on PSI in the vlogging context, it is necessary to examine the existing literature of materialism in the vlogging context. To the

best of my knowledge, no attempts have yet been made to examine the effects of materialism on PSI in the context of vlogging.

However, as many of the products shown in the vlogs are sponsored by companies (Sanchez-Cortes et al., 2015), the effects of materialism on these sponsored vlogs can therefore be compared with the effects of materialism on advertisements.

First, Goldberg et al. (2003) state that materialistic individuals are extra responsive to advertisements as their interest lies in shopping new products. Likewise, materialistic individuals are more interested in commercials and are more likely to respond to particular promotions (Goldberg et al., 2003). Also, materialistic individuals seem to be more affected by the use of celebrity endorsement for brands (Goldberg et al., 2003). More specifically, Goldberg et al. (2003) state that individuals would be more likely to purchase a product after seeing a famous person speak about it in the media. This finding of Goldberg et al. (2003) can be explained by the fact that celebrities are, in general, more influential than normal persons (McCracken, 1989). These aforementioned findings (Goldberg et al., 2003; McCracken, 1989) indicate that the marketing strategy to include vloggers in the promotional processes of a company is a good idea as vloggers can be perceived as celebrities or famous personas.

### **2.3 Social Comparison Theory**

Ogden and Venkat (2001) claim that materialistic individuals are more likely to be affected by social comparison than others. Festinger (1954) came up with the theory of social comparison. Festinger (1954) stated that individuals compare themselves to others in terms of possessions and consumptions. According to this theory, individuals compare themselves upward with someone who has more possessions than them and downward with someone with fewer possessions than them (Festinger, 1954). Lee and Watkins (2016) state that individuals tend to compare upward with someone who they perceive to be better than them and compare downward with someone who is worse than them. This is in line with the *identification-contrast model* (Buunk & Ybema, 1997) saying that individuals view others as reference point to evaluate their own situation. So, individuals feel alleviated when other individuals are doing worse. Even more, they will feel frustrated when they realize that they are worse off than the other. Thus, individuals can increase their subjective well-being by comparing themselves downward with someone with fewer possessions (Zee, Buunk, Sanderman, Botke & Bergh, 1999). Vice versa, comparing upward with someone with more possessions will lead to a decreased subjective well-being. Also Ogden and Venkat (2001) state that upward comparison will lead to lower satisfaction with one's possessions while a

downward comparison will result in higher satisfaction with one's possessions. Richins (1995) stated that upward comparison will lead to discontent feelings and an increased desire for more possessions. The next section discusses the two hypotheses that are formed in response to these former findings.

## **2.4 Hypotheses**

### ***2.4.1 Hypotheses 1 and 2***

Literature about materialism has shown that having a materialistic value orientation is related to several negative consequences (e.g., Solberg et al., 2003; Sharpe & Ramanaiah, 1999; Kasser & Ryan, 2001; Kasser & Ryan 1996; Górnik-Durose & Pilch, 2016; Otero-López & Villardefrancos, 2013; Mueller et al., 2011; Khodabakhsh & Besharat, 2011; Burroughs and Rindeisch, 2002; Kashdan and Breen, 2007; Sirgy, 1998; Kim & Kramer, 2015; Tsang et al., 2013). These negatives consequences have the possibility to negatively affect interpersonal relationships.

First, having a materialistic mindset can express itself in feelings of neuroticism. Neuroticism includes feelings of envy to one another (Nordqvist, 2016). Additionally, envy characterizes itself by feelings of hostility, inferiority, and resentment towards an individual who possesses something desirable (Smith & Kim, 2007). According to Salovey and Rodin (1988) envy can lead to disrespecting the other person. Disrespecting other persons due to feelings of envy can decrease the quality of a relationship. Moreover, McNulty (2008) state that neurotic individuals, in general, have more troubles in their personal relationships.

Second, materialism can also result in narcissistic behaviours. Whereas narcissism characterizes itself by feelings of privilege, self-enhancement, lack of empathy towards others and exploitative interpersonal behaviour (Rhodewalt & Peterson, 2009). Due to these aforementioned characteristics of narcissism, narcissism has a negative effect on the quality of interpersonal relationships (Khodabakhsh & Besharat, 2011).

Third, Wang, Hartl, Laursen, Booth-Laforce and Rubin (2016) state that another negative consequence of materialism, low agreeableness, is related to more relationship problems and interpersonal difficulties.

Lastly, materialistic individuals are often ungrateful to others. Whereas grateful individuals are associated with prosocial characteristics (Neto, 2007), ungrateful individuals are associated with having less prosocial characteristics.

Following these findings, one can assume that materialistic individuals tend to be poor at interpersonal relationships. Also, Kim & Kramer (2015) stated that materialistic individuals tend to be poor at real relationships as they seek power and dominance in relationships. As PSI explains the relationship between a media personality and an individual (Frederick et al., 2012; Horton & Wohl, 1956), this current study hypothesizes that materialistic individuals are less likely to score high on PSI relatively to non-materialistic individuals due to neuroticism, narcissism, low agreeableness and ungratefulness. Therefore, the following is hypothesized:

*H1: Materialists are less likely to score high on PSI relatively tot non-materialists as they tend to be bad at relationships with other people.*

Lee and Watkins (2016) state that PSI is positively related to brand perceptions and purchase intentions subsequently. Lee and Watkins (2016) studied the influence of vlogs in terms of brand perceptions and purchase intentions solely for luxury products. As this current study investigates the relationship between materialism and the effectiveness of vlogs in general, hypotheses about the effects on PSI on brand perceptions and purchase intentions should also be incorporated. Hence, this research examines the following:

*H2: PSI is positively related to (a) brand perceptions and (b) purchase intentions subsequently*

### **2.4.2 Hypothesis 3**

As materialistic individuals are more likely to be affected by social comparison (Ogden & Venkat, 2001), the relationship between materialism and PSI is likely to be moderated by it. In the context of vlogging, social comparison examines whether it matters if a vlogger is perceived to be higher or lower than the viewer in terms of possessions. Individuals will compare themselves upward with a vlogger who is perceived to be higher than them, in terms of possessions, and downward with a vlogger who is perceived to be worse than them in terms of possessions. Upward comparison will lead to discontent feelings and an increased desire for more possessions (Richins, 1995). Moreover, upward comparison can also express itself in feelings of envy to one another and it can harm interpersonal relationships (Fromm, 1976). Whereas, downward comparison can give a confidence boost and can alleviate the mood an individual is in (Buunk & Ybema, 1977). Lennarz, Lichtwarck-Aschoff, Finkenauer and Granic (2016) state that upward comparison leads to increased feelings of jealousy to one

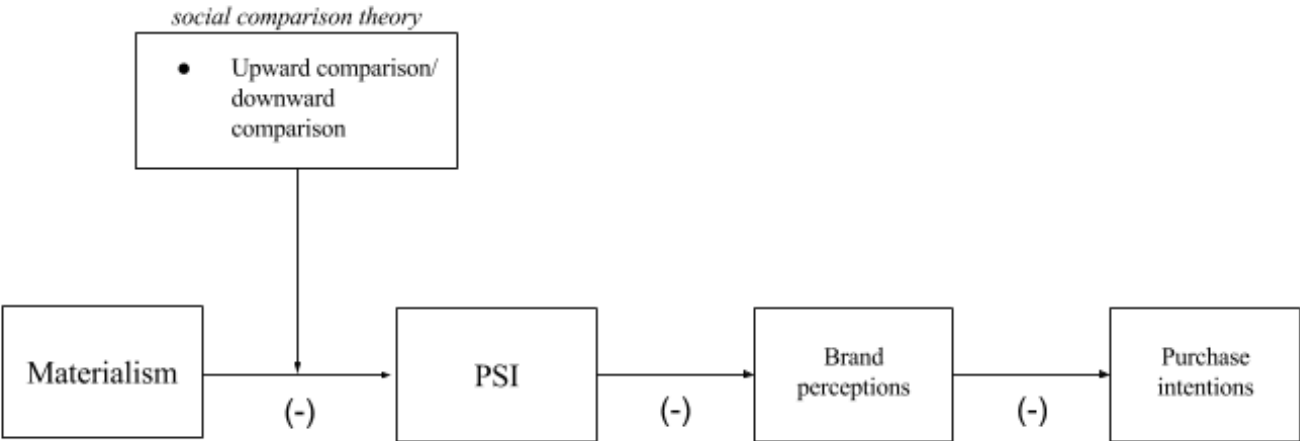
another than when individuals are comparing themselves downward with one another. This can be explained by the fact that an individual is perceived to be better off in the case of upward comparison, resulting in feelings of jealousy towards this individual as feelings of inferiority increase.

One might expect that upward comparison will strengthen the hypothesized negative relationship between materialism and PSI through the increased desire for more possessions and increased feelings of jealousy. In contrast, downward comparison has the possibility to mitigate materialism as the individual has already more possessions than the vlogger in this case. Hence, downward comparison might lead to decreased materialism through the decreased desire for possessions and less feelings of jealousy to one another.

These former findings indicate that the negative effect between materialism and PSI due to consequences of materialism like feelings of neuroticism, narcissism, low agreeableness and ungratefulness can be mitigated by downward comparison. In other words, when an individual is comparing oneself downward with a vlogger with fewer possessions, social comparison can mitigate the negative effect between materialism and PSI. Therefore, the following is hypothesized:

*H3: The effect of H1 is mitigated if the individual compares oneself downward with a vlogger*

**2.5 Conceptual model**



## **Chapter 3 Methodology**

### **3.1 Introduction**

This section discusses the methodology part of this thesis. First, the design of the study will be discussed. Then the research procedure will be provided together with the sample and data collection. After that, the different measures will be given together with the control variables.

### **3.2 Research design**

This study examines the relationship between materialism and PSI, and the moderating effect of social comparison on this relationship. Moreover, this thesis studies the relationship of PSI on brand perceptions and purchase intentions subsequently. These hypothesized relationships are tested by means of a quantitative study. A quantitative study was applied as materialism, PSI, social comparison, brand perceptions and purchase intentions can be measured by analysing data (Field, 2013).

The relationship between materialism and PSI was measured by manipulating materialism. Also, the moderating effect of social comparison on the relationship between materialism and PSI was manipulated. Therefore, an experimental study was conducted since an experiment is a quantitative research method whereby one or more independent variables are manipulated in order to determine the causative or causal effect of these manipulated independent variables on one or more dependent variables (‘t Hart, Boeije & Hox, 2009). The experiment was conducted online as it is the most efficient way to do research in this case. To capture the relationship between materialism and PSI and the moderating effect of social comparison, a between-subjects design was conducted as the respondents in the manipulated groups will be compared and the respondents will only be randomly assigned to one experimental condition.

Thus, to test the three hypotheses a between-subjects online experiment was conducted with materialism and social comparison as stimuli of which both were manipulated. Hence, a 2 (High - and low materialism) x2 (upward comparison and downward comparison) factorial design was applied in this research, shown in table 1.

	<b>Social comparison</b>	
<b>Materialism</b>	<i>Upward comparison</i>	<i>Downward comparison</i>

<b>High</b>	High materialism / upward comparison	High materialism / downward comparison
<b>Low</b>	Low materialism / upward comparison	Low materialism / Upward comparison

*Table 1. Research design*

Next, both manipulations of materialism and social comparison are explained in greater detail.

First, Materialism refers to how important material goods are to a person’s life with the implication that materialistic people have an excessive concern for material objects (Goldsmith & Clark, 2010). To manipulate a materialistic mind-set, the concern for material objects has to be primed. Several research studies have shown that situational cuing can encourage a materialistic mind-set (e.g., Bauer, Wilkie, Kim & Bodenhausen, 2012). Therefore, to manipulate for materialism, this study used 13 pictures of luxury goods to encourage materialistic values (e.g., jewelry, cars, and clothing). Furthermore, following the article of Lang, Bradley and Cuthbert (1997) stating that pictures of natural scenes are neutral in valence, 13 images of natural scenes that avoid consumer products were used to manipulate for materialism. An overview of the pictures used can be found in Appendix 1.

Second, Social comparison was manipulated by providing the respondents a text that manipulates the perception of their social standing relative to others, adapted from the study of Cheon and Hong (2016). Cheon and Hong (2016) manipulated the perception of the socio-economic status (SES) of people. More specifically, they manipulated one’s perception of his or her social standing relative to others in terms of possessions of material and social resources. This relates to social comparison in the way that people compare themselves upward with someone higher on the social ladder and will compare themselves downward with someone who is lower on the social ladder. People higher on the social ladder have more possessions of material- and social resources and people lower on the social ladder have fewer possessions of material- and social resources. The text used to manipulate for social comparison in this study is provided in table 2.

<b>Upward comparison</b>	<b>Downward comparison</b>
<i>Think of this ladder as representing where people stand in the Netherlands. Now, please</i>	<i>Think of this ladder as representing where people stand in the Netherlands. Now, please</i>

<p><i>compare yourself to the people at the very top of the ladder. These are the people who are the best off—those who have the most money, most education, and most respected jobs. In particular, we'd like you to think about how YOU ARE DIFFERENT FROM THESE PEOPLE in terms of your own income, educational history, and job status. Where would you place yourself on this ladder relative to these people at the very top?</i></p> <p><i>Now imagine yourself in a getting acquainted interaction with one of the people you just thought about from the very top of the ladder. Think about how the DIFFERENCES BETWEEN YOU might impact what you would talk about, how the interaction is likely to go, and what you and the other person might say to each other.</i></p>	<p><i>compare yourself to the people at the very bottom of the ladder. These are the people who are the worst off—those who have the least money, least education, and least respected jobs. In particular, we'd like you to think about how YOU ARE DIFFERENT FROM THESE PEOPLE in terms of your own income, educational history, and job status. Where would you place yourself on this ladder relative to these people at the very bottom?</i></p> <p><i>Now imagine yourself in a getting acquainted interaction with one of the people you just thought about from the very bottom of the ladder. Think about how the DIFFERENCES BETWEEN YOU might impact what you would talk about, how the interaction is likely to go, and what you and the other person might say to each other.</i></p>
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*Table 2. Manipulation of social comparison*

Since other research (e.g., Kraus & Keltner, 2009; Kraus, Côté & Keltner, 2010; Adler, Epel, Castellazo & Ickovics, 2000) has successfully manipulated SES in this manner, this way of manipulating social comparison was chosen. Subsequent to having been exposed to the text manipulating for social comparison, the respondents were shown a particular vlog. The intention and expectation hereafter was that the respondents would compare themselves to the vlogger in a manner similar to the manipulation. More specifically, it was expected that respondents in the upward comparison condition would perceive the vlogger to be higher than them, in terms of possessions. In contrast, respondents in the downward comparison condition were expected to perceive the vlogger to be lower than them, in terms of possessions. A vlog was used from “Mireillabellebeauty”, presenting the *Maybelline Falsies Mascara* in this study. This particular video was chosen as she is presenting one particular product. This is important as the brand perceptions and purchase intentions of *Maybelline* and its *Falsies Mascara* can be measured in this manner. Moreover, the vlogger is selling the product in an emphatic manner by mentioning all the benefits of the mascara. The video is 2:30 minutes long, which is relatively long for an experiment but the video should also not be too short as the respondents need to have the possibility to form an imaginary relationship with the

vlogger. In addition, the vlogger is relatively unknown so the respondents probably do not know the vlogger in advance. This is important as the respondents should not have an imaginary relationship with the vlogger already as this may influence the level of PSI. Hence, familiarity bias was prevented. Due to these former mentioned reasons, this vlog is suitable for the experiment of this current study.

The stimuli were pre-tested to test whether the manipulated stimuli evoked the desired effect at the respondents and to validate the method of the study. The pre-test consisted of four separate tests, two separate tests to either test the manipulation of materialism and two separate pre-test to test the manipulation of social comparison. Respondents were randomly assigned to either the pre-test of materialism or the pre-test of social comparison. The next section will explain the procedure of pre-tests in depth.

First, respondents assigned to the pre-test of materialism were first exposed to either the 13 pictures of the financial goods or the 13 pictures of the natural scenes. Respondents needed to indicate the pleasantness of each picture in order to improve the quality of the manipulation. After being exposed to these particular pictures, the respondents filled out several questions to measure whether the manipulation of materialism had worked or not. More specifically, the respondents needed to answer 11 selected items from the Aspiration Index (Grouzet et al., 2005) to check whether the manipulation of materialism had worked. The aspiration index consists of several subscales that measure both intrinsic and extrinsic aspirations of people. For this study, three subscales, measuring extrinsic aspirations (money-, social image-, and popularity subscale), from the aspiration index (Grouzet et al., 2005) were used. These three subscales were chosen since these subscales concern materialistic subjects. Two examples of the survey questions from the aspiration index are provided in table 3. The respondents needed to indicate both the importance and the likelihood of the survey items adapted from the aspiration index (Grouzet et al., 2005).

---

*I will have many expensive possessions*

*I will be admired by many people*

---

*Table 3.*

Second, the respondents who were randomly assigned to the pre-test of social comparison were first shown a picture of a ladder whereafter they read the passage provided in table 1. After reading the text, the respondents needed to indicate the number that corresponds to the rung where the respondents' think they stand in relation to the people in

the text. Moreover, after selecting a rung the participants needed to write a brief description about how they would interact with the people high or low on the social ladder. This choice was made in order to improve the quality of the manipulation of social comparison. After the respondents read the text and answered the corresponding questions, they were exposed to a vlog from “*Mireillabellebeauty*” presenting the *Maybelline Falsies Mascara*. Afterwards, a manipulation check was performed consisting of survey items from a social comparison scale developed by Allan and Gilbert (1995) including 10 questions measured on a ten-point scale. Regarding this scale, low scores refer to feelings of inferiority towards one another and high scores point to feelings of superiority to one another. Two examples of the questions are provided in table 5.

**In comparison to the vlogger, I feel:**

---

*Inferior – Superior*

*Incompetent – More competent*

---

*Table 4*

The pre-tests were conducted online, using qualtrics. A complete overview of the pre-test together with the corresponding questions can be found in Appendix 2.

### **3.3 Main experiment**

#### **3.3.1 Procedure**

The main experiment was conducted online using Qualtrics. The online experiment was spread through social media platforms like E-mail, Facebook WhatsApp. The link provided on these social media platforms guided the respondents to the online experiment.

The online experiment contained two stimuli materials. First, the online experiment contained 13 pictures to manipulate for materialism. Second, the respondents got to read a text whereafter they were exposed to a vlog.

First, the online experiment provided a welcome screen with information about the experiment (e.g., the duration of the experiment). Thereafter, the same procedure to manipulate for materialism was used as in the pre-test. After the respondents were manipulated for materialism, they needed to answer the 11 selected questions from the aspiration index (Grouzet et al., 2005) to check whether the manipulation evoked the desired response.

Subsequently, the respondents were randomly assigned to either the manipulation of upward- or downward comparison. The same manipulation of social comparison was used as in the pre-test. Thereafter, the respondents needed to answer the 10-item questionnaire adapted from the social comparison scale developed by Allan and Gilbert (1985) to examine if the manipulation of social comparison has worked.

After the manipulation of social comparison, the vlog was shown from “*Mireillabellebeauty*” presenting the presenting the *Maybelline Falsies Mascara*. After the respondents watched the vlog, the respondents needed to answer 11 survey items measuring their PSI with the vlogger used in this study. Afterwards, a couple of questions were asked to measure the respondents’ brand perceptions of *Maybelline* and the purchase intentions of *Maybelline Falsies Mascara*. After completing the experiment, the respondents needed to indicate their age, gender, their place of residence and their income level whereafter they were thanked for participating in the experiment. When the data collection was complete, the data was analysed using SPSS. An overview of the experiment can be found in Appendix 3.

### **3.3.2 Data collection and sample**

As this study concerned an online experiment, data was collected through social media platforms. First, a link to the experiment was sent to acquaintances and the link was shared on social media platforms. As these acquaintances were able to forward the link to others, this study followed snowball sampling procedure (Coleman, 1958), or also referred to as chain referral sampling. Concerning the sample of the experiment, this study is interested in female respondents only as the YouTube vlogger is presenting a mascara and men, usually, do not wear mascara and therefore are probably not interested in it. Accordingly, their brand perceptions and purchase intentions will presumably not change.

The minimum number of desired respondents for this study was 80. This is based on the sample size requirement that Hair, Black, Babin and Anderson (2010) state for an experiment. Hair et al. (2010) stated that the minimum number of observations for each cell is 20. As this study conducted a 2x2 factorial design, it has 4 cells which equals a minimum number of observations of 80. However, due to the fact that larger sample sizes reduce the sampling error in a study (Hair et al., 2010) it was desirable to collect more observations per cell. Hair et al. (2010) indicated that a sample size of at least 100 is required in order to improve the generalizability of the study. The experiment was both conducted in English and Dutch as this, eventually logically leads to more respondents.

### **3.3.3 Measures**

#### *Materialism*

The materialism manipulation procedure that was used and validated in the pre-test was also used in the main experiment.

#### *Social comparison*

The manner in which social comparison was manipulated in the pre-test was also used in the main experiment.

#### *PSI*

The dependent variable in this study is PSI. PSI explains the imaginary experience of consumers interacting with personas as if they are engaged in a reciprocal relationship (Labrecque, 2014). To measure PSI, 11 items were used measured on a 7-point Likert scale (anchored by totally disagree - totally agree). The scale of Rubin et al. (1985) was used to measure PSI, modified to the vlogging context. Two examples of questions from the scale of Rubin et al. (1985) can be found in table 6.

---

*I look forward to watching the YouTube vlogger on her YouTube channel.*

*If the YouTube blogger appeared on another YouTube channel, I would watch that video.*

---

*Table 5.*

#### *Brand perceptions*

Several research (e.g., Keller, 2001; Morris, Woo, Geason & Kim, 2002) indicated that consumers process and perceive brands both in a cognitive and emotional manner prior to decision making.

Following the study of Knight and Young Kim (2006), this current study measured brand perceptions by measuring consumers' perceived quality and perceived emotional value. Perceived quality is the consumer's subjective judgement about a brand (Yoo, Donthy & Lee., 2000), referring to the cognitive manner of processing a brand. In contrast, perceived emotional value concerns the affective judgements towards a brand (Supphellen, 2000). Six items were used to both measure perceived quality (Dodds et al., 1991) and emotional value (Yoo & Donthu, 2002) measured on 7-point Likert scale (anchored by totally disagree - totally agree). Examples of questions from the scale can be found in table 7.

---

*The likely quality of X is extremely high*  
*The likelihood that X would be functional is very high*

---

*Table 6.*

#### *Purchase intentions*

The purchase intentions for the product presented in the vlog need to be measured in order to properly understand the effect of brand perceptions on purchase intentions.

Purchase intentions represent personal action tendencies relating to the brand (Bagozzi, Tybout, Craig & Sternthal, 1979; Ostrom, 1969). A 5-item questionnaire measuring purchase intentions was used in this study. The scale is adapted from the study of Spears and Singh (2004) that developed a valid measure for both purchase intentions and brand attitudes. The 5-items, measured on a seven-point semantic differential format are provided below (table 8).

---

*I would never – definitely buy the product*  
*I definitely do not intend – intend to buy the product*

---

*Table 7.*

Cronbach's Alpha was used to determine each scale's internal consistency. An overview of the scales that will be used can be found in Appendix 4.

#### **3.3.4 Control variables**

This study incorporated several control variables. The respondents were asked multiple demographic questions that were added as control variables in the study subsequently.

First, the target group of this study are women as the YouTube vlogger is presenting a product that men are, most of the time, not interested in. However, due to the fact that men were still able to participate in the experiment as the experiment is spread throughout social media, this current study still controls for gender. Gender was measured by asking the respondents whether they are male or female.

Second, research has shown that materialism can be related to age (e.g., Chaplin & John, 2007). Accordingly, age was controlled for in this study to examine whether age has an influence on our hypotheses. Age was categorized in 7 groups.

Third, there might be cross-cultural differences in materialism. Hence, the variable culture was controlled for in this study by asking the respondents whether they live in the Netherlands or outside the Netherlands.

Last, as income level has been shown to correlate highly with materialism (Richins, 1987; Ahuvia & Wong, 2002), it will also be incorporated in this study as a control variable. The income variable will be measured with 3 categories.

### **3.4 Research ethics**

For the research ethics, this thesis followed the APA general principles of research ethics (Smith, 2003). First, concerning the confidentiality, the results of this study were only used for this research, therefore the answers in the experiment were treated completely confidentially. Also, the respondents did not have to indicate their name, keeping the results of the experiment anonymous. Also, participants were not obliged to take part of the experiment and they were able to decline any time to take part of the exam. However, when they did decide to take part of the experiment they were thanked gratefully and the prospective research benefits were stated in the experiment.

### **3.5 Limitations**

Due time constraints and lack of resources there might be possible limitations in this master thesis. First, the master thesis trajectory takes about half-a-year, the quality of the master thesis could be improved in case of an extended trajectory. Second, as this study conducts an online experiment, respondents might get distracted during the experiment by external factors as the respondents can participate in the experiment wherever they want. Moreover, since the experiment might be perceived to be relatively long, respondents may be distracted rather easy. Lastly, this study might be prone to social desirability answering.

## **Chapter 4 Results**

### **4.1 Pre-test**

The pre-test was conducted among 102 respondents. Among these 102 respondents, 37 respondents did not fully complete the experiment and were excluded from the sample. All the respondents included in this pre-test were purposefully female. This pre-test was conducted for two main reasons. First, it was conducted to examine whether the manipulation of materialism has worked. Second, it was conducted to identify whether the manipulation of social comparison has worked. Due to these two main reasons, two different pre-tests were conducted. The respondents were randomly assigned to either the pre-test of the materialism manipulation or pre-test of the social comparison manipulation.

#### ***4.1.1 Materialism manipulation***

First, an analysis was conducted to check whether the manipulation of materialism was successful. 33 respondents were randomly assigned to the pre-test for the manipulation of materialism. For this manipulation, respondents were exposed to 13 pictures of either financial goods or pictures of natural scenes. Thereafter the respondents were asked a set of survey questions to check whether the manipulation of materialism has worked.

A One-way between subjects ANOVA was conducted to check for differences in the means of the high materialism group and low materialism group. The results of the one-way ANOVA (Appendix 7.A) showed a significant difference in the scores for the high materialism group ( $M = 5.08$ ,  $SD = 1.06$ ) and the low materialism group ( $M = 4.17$ ,  $SD = 1.40$ ) condition; ( $F(1, 31) = 4.464$ ,  $p = 0.043$ ). This result argues that respondents exposed to the 13 pictures of the financial goods had significantly higher materialistic values after being exposed to the pictures of the financial goods than respondents exposed to the pictures of natural scenes.

#### ***4.1.2 Social comparison manipulation***

To check whether the manipulation of social comparison has worked, the same analysis was conducted as with the materialism manipulation check. 32 respondents were randomly assigned to the pre-test of the manipulation of social comparison. For this manipulation, the respondents got to read a text priming either upward social comparison or downward social comparison. Thereafter they were exposed to a vlog from *Mirellebellabeauty* of approximately 2.5 minutes and were asked a set of survey questions concerning how the

respondents felt in comparison with this vlogger subsequently. A One-way between subjects ANOVA was conducted to examine whether the respondents who read the text priming upward comparison perceived the vlogger to be higher than them, in terms of possessions, than respondents who read the text priming downward comparison. Results (Appendix 7.B) showed that there does not exist a significant difference between the means of the upward social comparison ( $M = 5.05$ ,  $SD = 2.26$ ) and the downward social comparison ( $M = 5.75$ ,  $SD = 1.62$ ) condition; ( $F(1, 30) = 1.050$ ,  $p = 0.314$ ). Indicating that, according to the statistics, priming either upward or downward social comparison does not significantly change the perception the respondents have towards the vlogger. More specifically, the respondents who got to read the text priming upward comparison did not significantly perceive the vlogger to be higher than them, in terms of possessions, than respondents who got to read the text priming downward comparison. However, the means do differ to a large extent since respondents who got to read the text priming upward comparison generally scored ( $M = 5.05$ ,  $SD = 2.26$ ) lower on the social comparison scale than respondents who got to read the text priming downward comparison ( $M = 5.75$ ,  $SD = 1.62$ ). Besides, the sample size is that small that it could have contributed to an insignificant result. After conducting the pre-test no further adjustments were made in the stimulus and the manipulation of materialism and social comparison for the final questionnaire.

## **4.2 Main Results**

### ***4.2.1 Descriptive statistics***

In total 286 respondents participated in the study. Before conducting the analyses, the dataset was cleaned. First, only 169 respondents remained in the sample after excluding cases with missing values. 93 cases were excluded, as they stopped during the experiment. Some respondents forgot to fill out one question from the scale of a construct. These missing values were replaced by the mean of the variable. However, 8 respondents did not fill out a whole set of survey items from a construct, and therefore these cases were excluded from the sample.

Also, the survey was targeted towards female respondents only but 6 males participated in the experiment as well. These 6 male respondents were excluded from the sample. Lastly, a timer check was conducted to check whether the respondents really watched the whole video. The results showed that a number of respondents has not finished watching the whole vlog. Not watching the vlog to completion might influence the manipulation of social comparison, the brand perception and the purchase intentions of the respondents. Therefore a particular set of

respondents was excluded from the sample. Respondents that did not watch the vlog longer than 1:40 minutes were excluded from the sample. This is based on the argumentation that, first, respondents that did not watch the vlog for longer than 30 seconds did not have the possibility to explicitly compare themselves with the vlogger in question. Moreover, in the first 30 seconds the vlogger is not specifically mentioning the several benefits of *Maybelline* or the *Maybelline Falsies Mascara*, which might influence the respondents' brand perceptions and purchase intentions. Second, before 1:10 minute the vlogger is solely talking about the *Maybelline* brand in general, whereas she states the benefits of the *Maybelline falsies mascara* after 1:10 minute till 1:40 minute. As respondents need to have a general indication of the brand *Maybelline* and its *Maybelline Falsies Mascara* in order to properly measure the respondents' brand perceptions and purchase intentions. Third, after 1:40 minute the vlog gets a bit repetitive and no valuable further information about *Maybelline* or its mascara is given. Therefore, respondents that did not watch the vlog longer than 1:40 minute were excluded from the sample remaining a sample of 122 respondents.

The descriptive statistics from the 122 valid responses (Appendix 8) are presented below in table 1.

		Frequency	Percent
<b>Gender</b>	<i>Male</i>	0	0
	<i>Female</i>	116	100
<b>Age</b>	<i>12-17 years old</i>	1	.9
	<i>18-24 years old</i>	98	80.3
	<i>25-34 years old</i>	13	10.7
	<i>35-44 years old</i>	1	.9
	<i>45-54 years old</i>	3	2.5
	<i>55-64 years old</i>	5	4.1
	<i>65-74 years old</i>	1	.8
<b>Income level</b>	<i>Above average (&gt;€35.000)</i>	10	8.2
	<i>Average (€35.000)</i>	10	8.2
	<i>Below average (&lt;€35.000)</i>	102	83.6
<b>Residence</b>	<i>The Netherlands</i>	103	84.4

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*Table 8. Descriptive statistics of sample excluding respondents that did not watch the whole vlog.*

Then, the data was checked for outliers. However, no influential cases were indicated. Therefore, no outliers were deleted from the dataset.

#### **4.2.2 Manipulation check**

To check whether both manipulations worked in the main experiment, two one-way ANOVA's had been conducted.

First, the outcomes of the one-way ANOVA (Appendix 9.A) from the manipulation of materialism reveal that there exists a significant difference at the 10% level in the means for the high materialism ( $M = 4.55$ ,  $SD = 0.94$ ) and the low materialism ( $M = 4.24$ ,  $SD = 1.09$ ) condition; ( $F(1, 120) = 2.810$ ,  $p = 0.096$ ). This means that, at the 10% significance level, respondents in the high materialism condition have higher materialistic values after being exposed to the 13 pictures of financial goods than respondents in the low materialistic condition that have been exposed to the 13 pictures of natural scenes. In the pre-test the materialism manipulation was significant at the 5% level.

Second, the outcomes of the one-way ANOVA (Appendix 9.B) from the social comparison manipulation show a significant difference in the means for the upward comparison ( $M = 5.84$ ,  $SD = 1.61$ ) and the downward comparison ( $M = 6.48$ ,  $SD = 1.51$ ) condition; ( $F(1, 120) = 5.079$ ,  $p = 0.026$ ). This result indicates that the respondents primed with the upward social comparison text perceived the vlogger to be higher than them, in terms of possessions. Contrarily, respondents primed with the downward social comparison text perceived the vlogger to be lower than them, in terms of possessions.

#### **4.2.3 Factor analysis**

Before proceeding with the factor analyses, all reverse variables were reverse coded prior to including them in the analyses.

First, to assess discriminant validity of the construct used in this study, an exploratory factor analysis (principal axis factoring) has been performed. More specifically, this exploratory factor analysis checks whether the items that load on one factor, were in accordance with theoretical expectations. If all items of a construct load high on one factor, the responses to these items can be combined into a single score for that construct. After

including all items in the factor analysis (Appendix 10.A), the scores of Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) were observed first. To indicate that all variables are correlated in the population, the Bartlett test of sphericity needs to be significant ( $p < 0.05$ ). Moreover, the score of KMO should be above 0.5 in order to proceed with the factor analysis. The Bartlett's test of sphericity was significant in this study and the KMO values were above the threshold of 0.5 (0.840).

When all items were entered into a principal component analysis with oblique rotation, 9 factors had an eigenvalue above 1 and explained 75.065 percent of the common variance. Based on the criterion of an eigenvalue of at least 1, 9 factors were extracted. An eigenvalue above 1 is required as it represents a great amount of variance in the dataset (Field, 2013). After examining the scores for the eigenvalues and common variance, the communalities were examined. Hair et al. (2010) stated that communalities above 0.5 are required. The item 'PSI Q8' had a communality of .399 and therefore is below the threshold .5. A low communality indicates that the item shares a low amount of variance with other items (Field, 2013). Therefore, item 'PSIQ8' was deleted from the set of items. After deleting item 'PSIQ8' (Appendix 10.B), the value of KMO was adequate (.844) and Bartlett's test of sphericity significant. Based on the criterion of eigenvalues of at least 1, 9 factors were extracted explaining 75.83 percent of the common variance. All factor loadings were above the required .5 (Hair et al., 2010) but there were some cross loaders in the data. Afterwards, looking at the correlation matrix (Appendix 10.B), correlations above .3 were identified. As the interpretability of the factors can be improved through rotation (Field, 2013), factor rotation was applied in the factor analysis. According to Field (2013) it is most appropriate to use oblique rotation in the case of correlations above .3 among variables. Next, the factor analyses for each construct individually will be discussed in order to find the underlying structure of the constructs.

Several items are used in this study to measure materialism. Appendix 10.C shows the SPSS output of the factor analysis for the construct materialism. The Bartlett's test of sphericity is significant ( $p = 0.000$ ) and KMO is meritorious (Field, 2013) with a value of .892 and therefore factor analysis is allowed. Also, all communalities were above the threshold of 0.5 and therefore no items were deleted. Based on the criterion of an eigenvalue of at least 1, 5 factors were extracted. Even though 5 factors were extracted, all items load relatively high on factor one. The fact that all items load high on factor one can also be seen by the extreme point of reflexion in the scree-plot (Appendix 10.C). Also, as can be seen in Appendix 10.C stating that factor 1 explains 50.1% of the common variance in the model. The

cross-loaders can be explained by the fact that three subscales (money-, social image- and popularity subscale) from the aspiration index (Grouzet et al., 2005) were used to measure materialism. Therefore, all items measure materialistic values, which could explain the high loadings on factor one, but the subscales concern different materialistic subjects. The different materialistic subjects offers an explanation for the cross loaders. Following both this argumentation and the large contribution of factor 1 to the common variance of the model, the items measuring materialism were forced into one factor. After forcing the items into one factor (Appendix 10.D), the value of KMO was still adequate with a value of .892 and Bartlett's test of sphericity significant. Moreover, all items still loaded practically significant (Hair et al., 2010) on the first factor after forcing all items into one factor. Therefore the items measuring materialism were combined into one construct.

10 items in this research measured the construct social comparison. Appendix 10.E shows the output of SPSS of the factor analysis for the social comparison construct. KMO was adequate with a value of .912 and Bartlett's test of sphericity was significant ( $p = 0.000$ ). All communalities were above the threshold of 0.5 and therefore no items were deleted based on communalities. However, the component matrix showed that item 'ComparisonQ5' loaded on 2 factors. All other items only loaded on factor one. Therefore, item 'Comparison Q5' was deleted from the set of items measuring social comparison. After deleting variable 'Comparison Q5' (Appendix 10.F), the value of KMO was still adequate with a value of .908 and Bartlett's test of sphericity significant ( $p = 0.000$ ). From the construct social comparison only one factor is extracted based on the criterion of an eigenvalue above 1. This indicates that the 9 items to measure the construct social comparison can be combined to form one construct.

11 items measured the construct PSI in this study. After deleting item 'PSIQ8' in the factor analyses with all items included, 10 items measured the construct PSI (Appendix 10.G). Again, the value of KMO is above the threshold of 0.5 with a value of .901 and Bartlett's test of sphericity is significant ( $p = 0.000$ ). All communalities of the items measuring PSI were above 0.5, and therefore no items were deleted. Based on the criterion of an eigenvalue of at least 1, one factor was extracted explaining 67,4 percent of the common variance.

To measure the construct brand perception, 6 items were used. An overview of the SPSS output of the factor analysis for the brand perception construct can be found in Appendix 10.H. KMO was adequate with a value of .871 and Bartlett's test of sphericity was significant ( $p = 0.000$ ). Moreover, all communalities were above the threshold of 0.5. One factor was

extracted for the construct brand perception based on the criterion of an eigenvalue of at least 1. Therefore, the 6 items to measure brand perception were combined into one construct.

Last, to measure purchase intentions, 5 items were used (Appendix 10.I). KMO was adequate with a value of .911 and Bartlett’s test of sphericity was significant ( $p = 0.000$ ). No communalities were below the threshold of .5 and therefore no items were deleted from the set of survey items. Based on the criterion of an eigenvalue of at least 1, one factor for the construct purchase intentions was extracted. Therefore, the 5 items measuring purchase intentions were combined into one construct.

#### ***4.2.4 Reliability analyses***

Before constructing the scales for analysis, the internal consistency of the scales needs to be assessed. This needs to be done to assess the degree of consistency between a set of measurements for a variable (Hair et al., 2010) to see whether a measure reflects the construct it should be measuring (Field, 2013). For the scales to be internally consistent, Cronbach’s alpha ( $\alpha$ ) of each scale needs to be assessed. There exists a lot of discussion about the appropriate threshold scientific studies should use in their method for Cronbach’s alpha. In this study the generally agreed limit for Cronbach’s alpha ( $\alpha$ ) is used with a limit of .70. (Hair et al., 2010). Appendix 11 shows the scores of Cronbach’s alpha ( $\alpha$ ) for all constructs in this study. All constructs in this study have a Cronbach’s alpha ( $\alpha$ ) with a value above .90, which indicates that all scales used in this study are reliable. An overview of all individual values for Cronbach’s alpha for each construct can be found in table 2.

<b>Construct</b>	<b>Items</b>	<b>Cronbach’s Alpha (<math>\alpha</math>)</b>
<b>Materialism</b>	22	.951
<b>Social Comparison</b>	9	.939
<b>PSI</b>	10	.945
<b>Brand Perceptions</b>	6	.935
<b>Purchase Intentions</b>	5	.959

*Table 9. Reliability analysis sample excluding 58 respondents*

#### 4.2.5 Hypotheses testing

##### 4.2.5.1 Hypothesis 1

*Materialists are less likely to score high on PSI relatively to non-materialists as they tend to be bad at relationships with other people.*

First, before proceeding with the ANOVA, all assumptions were checked (Appendix 12). Second, Levene's test needs to be insignificant in order to proceed with an ANOVA. The outcomes of the test of homogeneity of variances in order to proceed with an ANOVA analyses (Appendix 13). Therefore, H1 was analysed using one-way ANOVA to examine the relationship between materialism (IV) and PSI (DV).

	<b>N</b>	<b>Mean</b>	<b>SD</b>
<b>Low materialism</b>	61	2.97	1.59
<b>High Materialism</b>	61	2.53	1.17
<b>Total</b>	122	2.75	1.41

*Table 10. Descriptive statistics ANOVA H1*

Outcomes showed an insignificant score (0.114) for the Levene's test. Therefore, it is allowed to conduct an ANOVA. To examine whether materialists are less likely to score high on PSI relatively to non-materialists, a one way-ANOVA was conducted. Results showed that individuals in the high materialism condition scored relatively lower ( $M = 2.53$ ,  $SD = 1.17$ ) on PSI than respondents in the low materialism condition ( $M = 2.97$ ,  $SD = 1.59$ ). Results show that this difference between the two conditions is marginally significant; ( $F(1,120) = 3.013$ ,  $p = .085$ ). This indicates that non-materialists do score higher on PSI than materialists do, at the 10% significance level.

	<b>Sum of squares</b>	<b>Df.</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Between Groups</b>	5,887	1	5,887	3,013	,085
<b>Within Groups</b>	234,457	120	1,954		
<b>Total</b>	240,344	121			

*Table 11. Results of one-way ANOVA H1*

#### 4.2.5.2 Hypothesis 2

*PSI is positively related to (a) brand perceptions and (b) purchase intentions subsequently.*

In order to proceed with the regression analyses, to find out whether PSI is positively related to brand perceptions and purchase intentions subsequently, several assumptions need to be met. The assumptions were checked and all assumptions were met (Appendix 14), therefore it was allowed to conduct a regression analysis.

First, to examine whether PSI (IV) is positively related to brand perceptions (DV), a regression was conducted. Results of the regression (Appendix 15) showed that PSI explained a significant proportion of variance in the scores for brand perceptions,  $R^2 = .351$ ,  $F(1,120) = 65.009$ ,  $p = 0.000$ . Results showed that there exists a significant relationship between PSI and brand perceptions,  $\beta = .543$ ,  $t(121) = 8.063$ ,  $p = 0.000$ , supporting hypothesis 2A. More specifically, in this study, higher PSI with the vlogger leads to higher brand perceptions of the brand *Maybelline*.

	<b>B</b>	<b><math>\beta</math></b>	<b>SE</b>	<b>Sig.</b>
<b>PSI</b>	.54	.59	.07	.000
<b>R<sup>2</sup> (adjusted R<sup>2</sup>)</b>	.35 (.35)			

*Table 12. Regression analysis with dependent variable: Brand Perceptions H2A*

Second, hypothesis 2B was analysed by running another regression to find out whether brand perceptions (IV) are positively related to purchase intentions (DV). Results of the regression (Appendix 16) showed that brand perception explains a great deal of the variance in the purchase intentions,  $R^2 = .446$ ,  $F(1,120) = 96.495$ ,  $p = 0.000$ . The findings indicate that there exists a significant relationship between brand perceptions and purchase intentions,  $\beta = 1.381$ ,  $t(120) = 9.823$ ,  $p = 0.000$ . This finding supports hypothesis 2B, suggesting that increased brand perceptions will increase the purchase intentions. In this study, increased brand perceptions of *Maybelline* increases the purchase intentions of *Maybelline Falsies Mascara*.

	<b>B</b>	<b><math>\beta</math></b>	<b>SE</b>	<b>Sig.</b>
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<b>Brand</b>	1.38	.668	.141	.000
<b>Perceptions</b>				
<b>R<sup>2</sup> (adjusted R<sup>2</sup>)</b>	.45 (.44)			

*Table 13. Regression analysis with dependent variable: Purchase Intentions H2B*

#### 4.2.5.3 Hypothesis 3

*The effect of H1 is mitigated if the individual compares itself downward with a vlogger.*

To analyse whether downward comparison mitigates the effect between materialism and PSI, a two-way ANOVA was conducted (Appendix 17). In order to proceed with the ANOVA, the Levene's test needs to be insignificant. Results first showed a significant result for the Levene's test. As a significant Levene's test violates the assumption of homoscedasticity, the variable PSI was transformed. After transforming the variable PSI, Levene's test was insignificant and therefore it was allowed to conduct a two-way ANOVA.

<b>Materialism</b>	<b>Social Comparison</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
<b>High</b>	<b>Upward comparison</b>	27	1.57	0.39
	<b>Downward Comparison</b>	34	1.53	0.37
<b>Low</b>	<b>Upward Comparison</b>	36	1.58	0.41
	<b>Downward Comparison</b>	25	1.79	0.48

*Table 14. Descriptive statistics of two-way ANOVA H3*

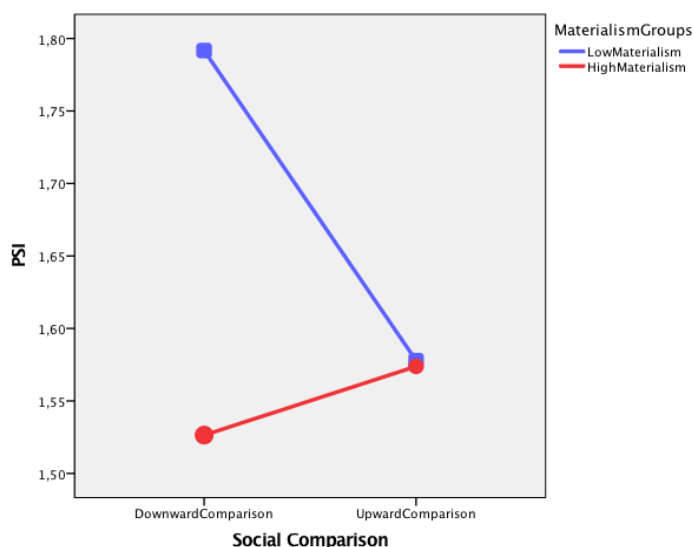
Results of the two-way ANOVA (Appendix 17) showed that there is no significant main effect for social comparison, ( $F(1,118) = 1.228, p = 0.270$ ). This indicates that social comparison does not significantly influence PSI independent of materialism. Moreover, results showed a marginal significant main effect for materialism ( $F(1,118) = 3.215, p = 0.076$ ), such that materialistic individuals scored higher on PSI at the 10% significance level

than non-materialists. The interaction between social comparison and materialism was marginally significant, arguing that scores for PSI are different for materialists and non-materialists individuals in the case of upward or downward comparison; ( $F(1,118) = 3.026, p = 0.085$ ).

Source	Sum of squares	Df.	Mean square	F	Sig.	Partial $\eta^2$
<b>Corrected Model</b>	1.133	3	.379	2.249	.086	.054
<b>Intercept</b>	311.847	1	311.847	1856.196	.000	.940
<b>Social Comparison</b>	.206	1	.206	1.228	.270	.010
<b>Materialism</b>	.540	1	.540	3.215	.076	.027
<b>Social Comparison * Materialism</b>	.508	1	.508	3.026	.085	.025
<b>Error</b>	19.824	118	.168			
<b>Total</b>	335.800	122				

Table 15. Results two-way ANOVA H3

In other words, the marginal significant interaction term indicates that social comparison does marginally moderate the relationship between materialism and PSI at the 10% significance level.



### *Figure 1: Outcomes of Simple test H3*

Figure 1 shows that the level of PSI will increase for materialistic individuals in case of upward comparison while it decreases in case of downward comparison. This is in contradiction with hypothesis 3 stating that downward comparison will mitigate the negative effect between materialism and PSI. Moreover, further analysis of the interaction effect showed that the influence of social comparison on the relationship between materialism and PSI is only significant for non-materialistic individuals ( $F(1,118) = 4.014, p = 0.047$ ). For materialistic individuals, social comparison had no significant effect on the scores of PSI ( $F(1,118) = 0.201, p = .655$ ). The simple effects test also showed that the mean difference in PSI in case of upward comparison is not significant ( $F(1,118) = 0.001, p = .969$ ). In case of downward comparison the mean difference in PSI between high- and low materialistic individuals of .898 is significant ( $F(1,118) = 6.033, p = 0.015$ ). This indicates that social comparison only moderates the relationship between PSI and materialism in case of downward comparison for non-materialistic individuals. Therefore, hypothesis 3 is rejected, as downward comparison does not significantly mitigate the hypothesized negative relationship between materialism and PSI.

#### **4.2.6 Control variables**

To test whether the control variables significantly influences the relationship between materialism and psi and the moderating effect of social comparison, an ANCOVA was conducted. The variables age, income level and place of residence were included in the ANCOVA with PSI as dependent variable. The control variables were included in the sample as fixed factors since these control variables were divided in categories in the survey and are therefore labelled as categorical variables. After adding the control variables in the ANCOVA, the outcomes (Appendix 18) revealed insignificant results for all control variables. First, the control variable age had an insignificant result ( $F(16, 105) = .951, p = .462, \text{partial } \eta^2 = .052$ ) indicating that age did not significantly influenced the outcomes of the model. Next, both the control variable place of residence ( $F(1, 105) = .031, p = .860, \text{partial } \eta^2 = .000$ ) and the control variable income level ( $F(2, 105) = .249, p = .780, \text{partial } \eta^2 = .005$ ) were insignificant. These findings confirm that all control variables; age, income level or place of residence insignificantly influenced the scores of PSI. Meaning that no control variables have a main effect on the relationship between materialism and PSI. Due to these

insignificant results for the control variables in the main analysis, no further analyses were done with the control variables.

<b>Source</b>	<b>Sum of Squares</b>	<b>Df.</b>	<b>Mean square</b>	<b>F</b>	<b>Sig.</b>	<b>Partial <math>\eta^2</math></b>
<b>Corrected model</b>	2.041	16	.128	.780	.750	.097
<b>Intercept</b>	44.330	1	44.330	246.067	.000	.701
<b>Age</b>	1.028	6	.171	.951	.462	.052
<b>Place of residence</b>	.021	1	.021	.116	.735	.001
<b>Income level</b>	.090	2	.045	.249	.780	.005
<b>Error</b>	18.916	105	.180			
<b>Total</b>	335.800	122				

*Table 16. Results ANCOVA control variables*

## **Chapter 5 Discussion**

This chapter will discuss the main findings of this study. First, a discussion of the results and possible explanations of these results will be given together with a short conclusion of this study. Thereafter, the theoretical contributions of this paper will be provided together with the managerial contributions. Lastly, limitations of this study will be given and some suggestions for further research.

### **5.1 General discussion**

The overall aim of this paper was to find out whether there is a negative relationship between materialism and PSI and the possibly moderating effect of social comparison on this relationship. Moreover, the effect of PSI on brand perceptions and purchase intentions subsequently was studied. To examine this, an online experimental between-subjects study was conducted.

First, results of this study first showed a marginal significant relationship between materialism and PSI, marginally supporting hypothesis 1. This indicates that materialistic individuals score lower on PSI than non-materialistic individuals at the 10% significance level. The results of hypothesis 1 are in line with several research studies (e.g., Solberg et al., 2003; Sharpe & Ramanaiah, 1999; Kasser & Ryan, 2001; Kasser & Ryan 1996; Górnik-Durose & Pilch, 2015; Otero-López & Villardefrancos, 2013; Mueller et al., 2011; Khodabakhsh & Besharat, 2011; Burroughs and Rindeisch, 2002; Kashdan and Breen, 2007; Sirgy, 1998; Kim & Kramer, 2015; Tsang et al., 2013) stating that materialism is related to several negative consequences like neuroticism, narcissism, low agreeableness and ungratefulness. Research (e.g., Salovey & Rodin, 1988; McNulty, 2008; Rhodewalt & Peterson, 2009; Wang, Hartl, Laursen, Booth-Laforce & Rubin, 2016; Neto, 2007) has shown that these negative consequences of materialism are negatively related to the quality of interpersonal relationships. As PSI explains the relationship between a media personality and an individual, this study expected that these negative consequences of materialism could also negatively affect the quality of interpersonal relationships with media personalities. Results indeed showed that materialism is negatively related to PSI with, in this case, a vlogger at the 10% significance level. Therefore, it can be said that the negative consequences of materialism do not only express itself in offline relationships but that these negative consequences of materialism can also express itself in online relationships.

Second, hypothesis 2 is supported by the fact that PSI is positively related to brand perceptions and purchase intentions subsequently. More specifically, increased PSI with, in this case, a vlogger will subsequently lead to higher brand perceptions and purchase intentions. Lee and Watkins (2016) already argued that PSI could lead to feelings of ‘friendship’ with a media personality and how these feelings increase brand perceptions of the particular products the vlogger is showing. Also, Rubin et al. (1985) stated that people are involved with the consumptions and possessions of the media user in case of PSI and how this could strengthen brand-consumer relationships. The findings of this study are in line with these notions of Lee and Watkins (2016) and Rubin et al. (1985) as results of the analyses of this study show a significant positive relationship between PSI and brand perceptions. Next, Lee and Watkins (2016) also showed that brand perceptions lead to increased purchase intentions subsequently. Results of this study indeed showed a significant effect of brand perceptions on purchase intentions subsequently.

Hypothesis 3 stated that the effect of hypothesis 1 is mitigated if the individual compares itself downward with a vlogger. Accordingly, downward comparison does not mitigate the negative relationship between materialism and PSI and therefore hypothesis 3 is not supported. Succinctly put, PSI will not increase when a materialistic individual compares itself downward with, in this case, a vlogger. This hypothesis was formed based on the fact that research (e.g., Buunk & Ybema, 1977) has stated that downward comparison can give a confidence boost and can lessen feelings of jealousy towards another. Contrarily, upward comparison can express itself in increased feelings of jealousy to one another (e.g., Lennarz, Lichtwarck-Aschoff, Finkenauer & Granic, 2016; Fromm, 1976). Therefore, this current study argued that downward comparison could alleviate the negative relationship between materialism and PSI due to less feelings of jealousy to one another. However, for materialistic individuals, there was no significant moderating effect of social comparison found in the case of either upward or downward comparison. One possible reason for the insignificant relationship is the long time period between the manipulation of materialism, the manipulation of social comparison and the particular survey questions about PSI. Therefore, even though the manipulation of social comparison was significant, the relatively long time period between the manipulations could have altered the results.

Moreover, social comparison includes the phenomenon that individuals compare themselves to others in terms of possessions and consumptions (Festinger, 1954). More precisely, individuals compare themselves upward with someone who has more possessions than them and downward with someone with fewer possessions than them (Festinger, 1954).

However, in the vlog used in this study, only one product is presented. It might be possible that the respondents were not able compare their cumulative amount of possessions with the possessions of the vlogger as she was not showing a lot of possessions in the vlog. This might be a reason why, in this study, social comparison does not significantly moderate the relationship between materialism and PSI. Noteworthy, results did show a significant interaction effect for non-materialistic individuals in the case of downward comparison. This indicates that downward comparison does significantly alleviate scores on PSI for non-materialistic individuals. In other words, PSI will increase when a non-materialistic individual compares itself downward with, in this case, a vlogger.

Last, results have shown that the control variables age, income level and place of residence do not significantly influence the main analysis between materialism (IV) and PSI (DV). One possible explanation for these insignificant result could be the fact that there existed unequal distributions of the control variables of respondents in both samples. For example, among the respondents 80.3 percent was in the age range of 18-24 years old. The same holds for the distribution of income level where approximately 83.6 per cent of the respondents had an income level that is below average. Lastly, 84.4 per cent of the respondents of this study are currently living in the Netherlands. The outcomes might have been different in case of more equal distributions among the control variables.

## **5.2 Conclusion**

Firms increasingly use the social media platform 'YouTube' and its associated vlogs as a strategic marketing tool (Grimani, 2016). However, the effectiveness of this strategic marketing tool is still relatively unknown. The findings of this study showed that using 'YouTube' and its promotional vlogs as marketing tool can be effective for brand managers. Specifically, it can be valuable for brand managers to use promotional vlogs as marketing tool in order to build relationships with their customers. This is especially valuable for managers as this study shows that PSI is positively related to brand perceptions and purchase intentions subsequently. However, findings of this study also showed that materialistic individuals are likely to respond negatively to these promotional vlogs as materialism is negatively related to PSI. Therefore, this study supports the use of promotional vlogs as marketing tool however the effectiveness of these promotional vlogs can depend on the characteristics of the viewer.

## **5.3 Implications**

This section will discuss the several theoretical and managerial implications of this study. First, the theoretical contributions of this study will be discussed whereafter the managerial implications will be discussed.

### ***5.3.1 Theoretical implications***

This study discusses the increasingly important social media platform ‘YouTube’ and its associated vlogs used by companies as marketing tool. Companies increasingly use ‘YouTube’ and vlogs as marketing tool with the aim to improve their sales figures. However, the effectiveness of using the social media platform ‘YouTube’ and vlogs as marketing tool for companies has not been examined extensively yet. The study of Lee and Watkins (2016) made an attempt to find empirical evidence for the effectiveness of vlogs as a strategic marketing tool. Lee and Watkins (2016) found that particular characteristics of vloggers are positively related to PSI and that PSI is subsequently positively related to brand perceptions and purchase intentions. Findings of the study of Lee and Watkins (2016) therefore argue that the use of promotional vlogs can be useful for establishing relationships with consumers as it will lead to increased brand perceptions and purchase intentions. However, the study Lee and Watkins (2016) was centered on the effectiveness of vlogs, in terms of brand perceptions and purchase intentions, based on particular characteristics of the vlogger itself. However, as PSI explains the imaginary relationship between both the viewer and the media personality, the effectiveness of vlogs can also depend on characteristics of the viewer itself. Hence, this current study set out to investigate the influence of a particular characteristic of the viewer on the effectiveness of vlogs, in terms of brand perceptions and purchase intentions. Findings of this study therefore contribute to the scarce theoretical understanding of the effectiveness of using vlogs as a marketing tool as this study examines the influence of materialism on the effectiveness of vlogs, in terms of brand perceptions and purchase intentions.

The plethora of literature on materialism provided in this study has already shown that the negative consequences of materialism are negatively related to the quality of interpersonal relationships. However, former literature has only provided empirical evidence for the negative relationship between materialism and off-line relationships. Results of this particular study showed that materialism is marginally negatively related to PSI. The findings of this thesis provide a rich new insight on the current stream of literature on materialism as this study provides evidence of the same negative effects of materialism on online relationships. As the present is a time of digitalization, it is of great importance to acknowledge the fact that materialistic tendencies are also likely to overflow from the off-line world to online platforms.

This finding of a negative relationship between materialism and PSI is also surprising as former literature (e.g., Goldberg et al., 2003; Fitzmaurice, 2008; Otero-López & Villardefrancos; Goldsmith & Clark, 2012) indicated that materialistic individuals are likely to respond positively to advertised products as they are often inclined to advertisements, promotional efforts, new products and have a desire for more possessions. Moreover, materialistic individuals are more likely to be influenced by celebrity endorsement (Goldberg et al., 2003). Therefore, it would be expected that materialistic individuals would also respond positively to promotional vlogs. The finding of the negative relationship between materialism and PSI indicates that materialistic individuals are rather not likely to respond positively to promotional vlogs.

Furthermore, even though not hypothesized, this study found that social comparison does significantly moderate the relationship between materialism and PSI for non-materialistic individuals. To the best of my knowledge, this study made the first attempt to examine the possibly moderating role of social comparison on the relationship between materialism and PSI. Even though hypothesis 3 is not supported, the finding that social comparison does moderate the relationship between materialism and PSI for non-materialistic individuals does provide an important additional insight. This finding is in line with findings of Buunk and Ybema (1977) stating that downward comparison can give confidence boost and lessen feelings of jealousy to one another. This finding indicates that, for non-materialistic individuals, downward comparison can fuel feelings of superiority and confidence and will eventually lead to higher scores on PSI. Therefore, this evidence provides insight in the current stream of literature on social comparison by indicating that social comparison could also influence relationships in online environments.

### ***5.3.2 Managerial implications***

As the social media platform ‘YouTube’ is increasingly used by companies for marketing purposes (Lee & Watkins, 2016; Sanchez-Cortes et al., 2015), it is valuable for managers to examine how effective this marketing strategy is. As the present is a time of digitalization, going with the flow and keeping up with the trend is of vital importance to businesses of today. However, betting on a new trend without fully grasping the consequences of it is undesirable. As the social media platform ‘YouTube’ and its associated vlogs is increasingly used by companies for marketing purposes (Lee & Watkins, 2016; Sanchez-Cortes et al., 2015), understanding this new marketing technique all its related aspects should be of equal

importance. Any possible negative effect of the technique should be mapped accurately, so that a negative impact on brand image can be ruled out.

First, this study found a marginally significant effect between materialism and PSI. As this study also supports the notion that PSI is positively related to brand perceptions and purchase intentions subsequently, this can lead to valuable managerial insights. Since this negative relationship between materialism and PSI is counterintuitive from a managerial perspective, this finding can be valuable for managers as they can look for different tactics to persuade materialistic individuals to buy their products. Looking for different tactics to persuade materialistic individuals can be valuable since this study suggests that the use of promotional vlogs as marketing tool might not be that effective when dealing with materialistic individuals.

Besides, managers could look for ways to mitigate or even solve this negative relationship between materialism and PSI. Likewise, as PSI leads to higher brand perceptions and purchase intentions, managers can conclude that the relationship consumers have with a particular vlogger can lead to higher brand perceptions and purchase intentions subsequently. This indicates that, for managers, it can be valuable to use 'YouTube' and vlogs as a marketing tool. However, the effectiveness of promotional vlogs can depend on the characteristics of the consumer. Accordingly, managers can use the results of this study for new marketing strategies in the future.

## **5.4 Limitations and suggestions for further research**

The next section will first discuss the several limitations of this study and thereafter provide some suggestions for further research.

### ***5.4.1 Limitations***

There are several noteworthy limitations to this study despite the fact that it has been critically conducted.

A first limitation of this study is the fact that the experiment was conducted online. The respondents were able to participate in the experiment wherever they wanted to. It is possible that a respondent participated in the experiment in, for example, the train. External factors could have altered the results of this study. For instance, respondents could have been distracted while watching the vlog which could consequently have affected the outcomes of the experiment.

Next, the fact that there were unequal groups in each condition is a limitation to this study. Qualtrics randomly assigned respondents in a condition in order to obtain equal groups in every condition eventually. However, some respondents stopped during the experiment and were excluded from the sample, which could have caused the unequal distribution of respondents among the conditions. If the groups in each condition were more equal there is a possibility that the outcomes of the ANOVA analyses would have been different. For example, results of the two-way ANOVA did show an insignificant result for the moderating effect of social comparison for materialistic individuals. However the amount of respondents in the upward comparison- and downward comparison condition differed to a large extent. If the respondents had been distributed more equally among the conditions, the results of the two-way Anova would reveal more reliable findings.

Another limitation is the fact that there were unequal groups in terms of demographics. For example, most respondents were in the age range of 18-24. Now, the outcomes showed that the control variables did not significantly influence the main study. However, this could have been different if the groups were more equal in terms of demographics. For example, Chaplin (2007) found that materialism first increases from middle childhood to early adolescence and thenceforth decreases again. Therefore, if the demographic groups would have been more homogeneous, maybe older people would, in general, score higher on PSI due to less materialistic feelings. An explanation for the unequal groups for the control variables could be the fact that the respondents were acquired through direct networks. As the respondents were acquired through the direct network, the sample consisted mostly of friends, acquaintances or, for example, fellow students who have similar demographics in terms of age, income level and place of residence.

The last drawback of this study is the absence of a questions asking the female respondents whether they wear mascara often or not. This could have altered the results of this study in the way that females who wear mascara often would possibly score higher on purchase intentions than females who do not wear mascara that often. Therefore, including a question in the survey controlling for the amount of mascara females wear could have improved the quality of this study.

#### ***5.4.2 Further research***

As the literature on vlogging and the social media platform ‘YouTube’ is relatively scarce, there are also some potentially fruitful avenues for future research.

First, in case of social comparison, people compare their possessions with the possessions of others. However, in this study a vlog was used presenting only one product. It might be an idea to do further research, on social comparison as a moderator, on the relationship between materialism and PSI using a vlog where the vlogger shows a lot of possessions. It was not possible to use a vlog where a lot of possessions are shown in this study as the effect of PSI on brand perceptions and purchase intentions was also examined in this study. Hence, a vlog presenting only 1 brand or product was more useful in this experiment. Thus, in the future it would be interesting to examine the moderating role of social comparison with a vlogger that shows more possessions. As the moderating effect of social comparison now showed insignificant results for materialistic individuals, showing more possessions in a vlog could have altered this insignificant result. More specifically, because materialistic individuals often judge others in terms of the accumulation of possessions (Fitzmaurice, 2008) showing more possessions in a vlog could fuel the influence of social comparison on the relationship between materialism and PSI as social comparison states that individuals compare themselves to others in terms of possessions.

Next, this study examined the relationship between materialism and PSI with a vlog showing mascara. Due to the fact that generally only females use mascara, male respondents were excluded from the sample. For further research the relationship between materialism and PSI concerning a gender-neutral product could be examined. In this way, both females and males could be included in the sample. It would be valuable for managerial purposes to examine whether males and females are influenced by vlogs to the same extent.

Last, examining the influence of vlogs in case of consumers with other characteristics than materialism would be interesting. This would be especially worthy for managers as they would obtain more insights in the effectiveness of vlogs as marketing tool in the case of different consumers with different characteristics.

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## Appendix



## Appendix 1. Overview of pictures

### A. High materialism manipulation



**B. Low materialism manipulation**



## **Appendix 2. Overview of pre-tests**

### **A. Pre-test for materialism manipulation**

*Page 1:*

Dear participant,

Thank you for participating.

The results of this questionnaire will be treated with confidentiality.

Thank you for your co-operation.

*Page 2:*

Next you will see 13 pictures where after you will need to answer 10 questions about these pictures. You will also need to rate the pleasantness of the pictures.

#### **■ 13 Pictures will be shown (either of the financial goods or natural scenes)**

*Page 3:*

Please indicate the importance of the following statements;

1. I will have many expensive possessions
2. I will be financially successful
3. I will have enough money to buy everything I want
4. I will have a job that pays well
5. I will keep up with fashions in clothing and hair
6. People will often comment about how attractive I look
7. I will achieve the “look” I’ve been after
8. My image will be one other’s find appealing
9. I will be admired by many people
10. My name will be known by many different people
11. Most everyone who knows me will like me

*Page 4:*

Please indicate the likelihood of the following statements;

1. I will have many expensive possessions
2. I will be financially successful
3. I will have enough money to buy everything I want
4. I will have a job that pays well
5. I will keep up with fashions in clothing and hair
6. People will often comment about how attractive I look
7. I will achieve the “look” I’ve been after

8. My image will be one other's find appealing
9. I will be admired by many people
10. My name will be known by many different people
11. Most everyone who knows me will like me

Page 5:

Thank you for filling out this questionnaire.

Please indicate your gender for improvement of this study

Gender:

Male

Female

### **B. Pre-test for social comparison manipulation**

Page 1:

Dear participant,

Thank you for participating.

The results of this questionnaire will be treated with confidentiality.

Thank you for your co-operation.

Page 2:

On the next page you will get to read a short passage.

Page 3:

*(either the upward comparison or downward comparison will be shown)*

<b>Upward comparison</b>	<b>Downward comparison</b>
<p><i>Think of this ladder as representing where people stand in the Netherlands. Now, please compare yourself to the people at the very top of the ladder. These are the people who are the best off—those who have the most money, most education, and most respected jobs. In particular, we'd like you to think about how YOU ARE DIFFERENT FROM THESE PEOPLE in terms of your own income, educational history, and job status. Where would you place yourself on this ladder relative to these people at the very top?</i></p> <p><i>Now imagine yourself in a getting acquainted</i></p>	<p><i>Think of this ladder as representing where people stand in the Netherlands. Now, please compare yourself to the people at the very bottom of the ladder. These are the people who are the worst off—those who have the least money, least education, and least respected jobs. In particular, we'd like you to think about how YOU ARE DIFFERENT FROM THESE PEOPLE in terms of your own income, educational history, and job status. Where would you place yourself on this ladder relative to these people at the very bottom?</i></p>

<p><i>interaction with one of the people you just thought about from the very top of the ladder. Think about how the DIFFERENCES BETWEEN YOU might impact what you would talk about, how the interaction is likely to go, and what you and the other person might say to each other.</i></p>	<p><i>Now imagine yourself in a getting acquainted interaction with one of the people you just thought about from the very bottom of the ladder. Think about how the DIFFERENCES BETWEEN YOU might impact what you would talk about, how the interaction is likely to go, and what you and the other person might say to each other.</i></p>
--	--

*Page 4:*

Thank you for reading the tekst. Next, you will get to see a short vlog.

- Vlog will be shown

*Page 5:*

For an unrelated study please answer the following 10 questions;

**In comparison to the vlogger I feel;**

1. Inferior – Superior
2. Incompetent – More competent
3. Unlikeable – More likeable
4. Left out – Accepted
5. Different – Same
6. Untalented – More talented
7. Weaker – Stronger
8. Unconfident – More confident
9. Undesirable – More desirable
10. Unattractive – More attractive

*Page 6:*

Thank you for taking the time to participate in this experiment!

Please indicate your gender in order to improve this study.

Gender:

Male

Female

### **Appendix 3. Overview of main experiment**

*Page 1:*

Dear participant,

Thank you very much for taking the time to participate in this study for my Master Thesis.

By participating in this study you have the opportunity to assist in a scientific research while helping me out on a personal level as well.

The results of this questionnaire will be treated with confidentiality,

Thank you for your co-operation.

Kind regards,

Eline van der Rest

Student Master Marketing

Radboud University Nijmegen

*Page 2:*

The study consists of four unrelated studies.

The first study will consist of a series of pictures whereafter you will need to answer a couple of questions.

*Page 3:*

When you click the "next" button, you will be presented with a series of pictures.

Please observe the pictures carefully.

After being exposed to each picture you will need to rate the pleasantness of the pictures

- 13 pictures of either financial goods or natural scenes will be shown

*Page 4:*

Thank you for taking the time to evaluate the pictures.

Now please answer the 11 questions below.

Please answer the questions with complete honesty.

*Page 5:*

Please indicate the importance of the following statements;

1. I will have many expensive possessions
2. I will be financially successful
3. I will have enough money to buy everything I want
4. I will have a job that pays well
5. I will keep up with fashions in clothing and hair
6. People will often comment about how attractive I look
7. I will achieve the “look” I’ve been after
8. My image will be one other’s find appealing
9. I will be admired by many people
10. My name will be known by many different people
11. Most everyone who knows me will like me

Page 6:

Please indicate the likelihood of the following statements;

12. I will have many expensive possessions
13. I will be financially successful
14. I will have enough money to buy everything I want
15. I will have a job that pays well
16. I will keep up with fashions in clothing and hair
17. People will often comment about how attractive I look
18. I will achieve the “look” I’ve been after
19. My image will be one other’s find appealing
20. I will be admired by many people
21. My name will be known by many different people
22. Most everyone who knows me will like me

Page 7:

For the next study you will get to read a short message.

Please take your time to read it.

Page 8:

Upward comparison	Downward comparison
<p><i>Think of this ladder as representing where people stand in the Netherlands. Now, please compare yourself to the people at the very top of the ladder. These are the people who are the best off—those who have the most money, most education, and most respected jobs. In particular, we’d like you to think about how YOU ARE DIFFERENT FROM THESE PEOPLE in terms of your own income, educational history, and job status. Where would you place yourself on this ladder relative to these people at the very top?</i></p>	<p><i>Think of this ladder as representing where people stand in the Netherlands. Now, please compare yourself to the people at the very bottom of the ladder. These are the people who are the worst off—those who have the least money, least education, and least respected jobs. In particular, we’d like you to think about how YOU ARE DIFFERENT FROM THESE PEOPLE in terms of your own income, educational history, and job status. Where would you place yourself on this ladder relative to these people at the very bottom?</i></p>

*Now imagine yourself in a getting acquainted interaction with one of the people you just thought about from the very top of the ladder. Think about how the DIFFERENCES BETWEEN YOU might impact what you would talk about, how the interaction is likely to go, and what you and the other person might say to each other.*

*Now imagine yourself in a getting acquainted interaction with one of the people you just thought about from the very bottom of the ladder. Think about how the DIFFERENCES BETWEEN YOU might impact what you would talk about, how the interaction is likely to go, and what you and the other person might say to each other.*

Please select the number that corresponds to the rung where you think you stand in relation to these people (Rung 10 is highest)

	Rung	Rung	Rung	Rung	Rung	Rung	Rung	Rung	Rung	Rung
	1	2	3	4	5	6	7	8	9	10
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now imagine yourself in a getting acquainted interaction with one of the people you just thought about from the very top of the ladder. Think about how the DIFFERENCES BETWEEN YOU might impact what you would talk about, how the interaction is likely to go, and what you and the other person might say to each other.

Please write a brief description about how you think this interaction would go.

Page 9:

Thank you for reading the text.

When you click "next", you will see a short vlog of 2,5 minutes.

Please click "next" until you have watched the whole video.

- Vlog will be shown

Page 10:

Thank you for taking the time to watch the video,

for an unrelated study please answer the following 10 questions below:

**In comparison to the vlogger I feel;**

1. Inferior – Superior
2. Incompetent – More competent
3. Unlikeable – More likeable
4. Left out – Accepted

5. Different – Same
6. Untalented – More talented
7. Weaker – Stronger
8. Unconfident – More confident
9. Undesirable – More desirable
10. Unattractive – More attractive

*Page 11:*

For another study, please answer the following questions about the vlogger from the video shown previously:

1. I look forward to watching the YouTube vlogger on her YouTube channel.
2. If the YouTube blogger appeared on another YouTube channel, I would watch that video.
3. When I'm watching the YouTube vlogger, I feel as if I am part of her (friend)group.
4. I think the YouTube vlogger is like an old friend.
5. I would like to meet the YouTube vlogger in person.
6. If there were a story about the YouTube vlogger in a newspaper or magazine, I would read it.
7. The YouTube vlogger makes me feel comfortable, as if I am with friends.
8. I feel sorry for the Youtube vlogger whenever she makes a mistake
9. I like to compare my ideas with what the Youtube vlogger says
10. I see the Youtube vlogger as a natural, down-to-earth person
11. I like hearing the voice of the Youtube vlogger in my home

*Page 12:*

For the last study please answer the following questions:

1. The likely quality of Maybelline is extremely high
2. The likelihood that Maybelline would be functional is very high
3. The likelihood that Maybelline is reliable is very high
4. The likelihood that Maybelline has a good reputation is very high
5. The likelihood that Maybelline gives me pleasure is very high
6. The likelihood that Maybelline makes me feel good is very high

Please answer the following questions:

7. I would never – definitely buy the Lash Sensational Mascara
8. I definitely do not intend – intend to buy the Lash Sensational Mascara
9. I have a very high – low purchase interest
10. I would definitely not buy it – Definitely buy it
11. I would probably not – Probably purchase it

*Page 13:*

Thank you very much for taking the time to participate in this study.

Due to your participation the quality of my Master Thesis will improve.

To improve the quality of the study, we want you to provide the following information

Age:

1. Under 12 years old
2. 12-17 years old
3. 18-24 years old
4. 25-34 years old
5. 35-44 years old
6. 45-54 years old
7. 55-64 years old
8. 65-74 years old
9. 75 years or older

Gender:

1. Male
2. Female

Place of residence:

1. The Netherlands
2. Outside the Netherlands

Income level:

1. Above average (>€35.000)
2. Average (€35.000)
3. Below average(<€35.000)

## Appendix 4. Overview of measurement scales

Construct:	Measurement:	Scale:	Adopted from:
Materialism	1. I will have many expensive possessions	1 – 7 Likert scale	Grouzet et al. (2005)
<i>Manipulation check</i>	2. I will be financially successful	Very unimportant – Very important	
	3. I will have enough money to buy everything I want		
	4. I will have a job that pays well		
	5. I will keep up with fashions in clothing and hair		
	6. People will often comment about how attractive I look		
	7. I will achieve the “look” I’ve been after		Richins & Dawson (1992)
	8. My image will be one other’s find appealing		
	9. I will be admired by many people		
	10. My name will be known by many different people		
	11. Most everyone who knows me will like me		
	1. I will have many expensive possessions	1 – 7 Likert scale	
	2. I will be financially successful	Very unlikely – Very likely	
	3. I will have enough money to buy everything I want		
	4. I will have a job that pays well		
	5. I will keep up with fashions in clothing and hair		
	6. People will often comment		

- 
- about how attractive I look
7. I will achieve the “look” I’ve been after
  8. My image will be one other’s find appealing
  9. I will be admired by many people
  10. My name will be known by many different people
  11. Most everyone who knows me will like me

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Social Comparison	<ol style="list-style-type: none"> <li>1. Inferior – Superior</li> <li>2. Incompetent – More competent</li> </ol>	1 – 10 range	Allan & Gilbert (1985)
<i>Manipulation check</i>	<ol style="list-style-type: none"> <li>3. Unlikeable – More likeable</li> <li>4. Left out – Accepted</li> <li>5. Different – Same</li> <li>6. Untalented – More talented</li> <li>7. Weaker – Stronger</li> <li>8. Unconfident – More confident</li> <li>9. Undesirable – More desirable</li> <li>10. Unattractive – More attractive</li> </ol>		
PSI	<ol style="list-style-type: none"> <li>1. I look forward to watching the YouTube vlogger on her YouTube channel.</li> <li>2. If the YouTube blogger appeared on another YouTube channel, I would watch that video.</li> <li>3. When I'm watching the YouTube vlogger, I feel as if I am part of her (friend)group.</li> <li>4. I think the YouTube vlogger is like an old friend.</li> <li>5. I would like to meet the YouTube vlogger in person.</li> <li>6. If there were a story about the YouTube vlogger in a newspaper or magazine, I would read it.</li> <li>7. The YouTube vlogger makes me feel comfortable, as if I am with friends.</li> <li>8. I feel sorry for the youtube vlogger whenever she makes</li> </ol>	<p>1 – 7 Likert scale</p> <p>Strongly disagree – strongly agree</p>	Rubin, Perse & Powell (1985); Lee & Watkins (2016)

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	a mistake		
	9. I like to compare my ideas with what the Youtube vlogger says		
	10. I see the Youtube vlogger as a natural, down-to-earth person		
	11. I like hearing the voice of the Youtube vlogger in my home		
Brand perceptions <i>(Perceived quality)</i>	1. The likely quality of X is extremely high 2. The likelihood that X would be functional is very high 3. The likelihood that X is reliable is very high 4. The likelihood that X has a good reputation is very high	1 – 7 Likert scale  Strongly disagree – strongly agree	Dodds et al. (1991)
Brand perceptions <i>(perceived emotional value)</i>	1. The likelihood that X gives me pleasure is very high 2. The likelihood that X makes me feel good is very high	1 – 7 Likert scale  Strongly disagree – strongly agree	Yoo & Donthu (2002)
Purchase intentions	1. I would never – definitely buy the product 2. I definitely do not intend – intend to buy the product 3. I have a very high – low purchase interest 4. I would definitely not buy it – Definitely buy it 5. I would probably not – Probably purchase it	1 – 10 range	Spears & Singh (2012)

## Appendix 5. Timeline

27 March – 10 April	Conduct Pre-test
10 April – 20 April	Analyse results
20 April – 27 April	Write results of pre-test + adjust main experiment if needed
27 April – 11 May	Conduct Main experiment + try to refine thesis
11 May – 18 May	Analyse results
19 May – 26 May	Write results
26 May – 2 June	Write discussion and conclusion
2 June – 19 June	Time to revise the whole master thesis
<u>19 June</u>	<u>Deadline Master Thesis</u>

## Appendix 6. Research Integrity Form - Master Thesis

Name:	Student number:
RU e-mail address:	Master specialisation:
Thesis title:	
Brief description of the study:	

It is my responsibility to follow the university's code of academic integrity and any relevant academic or professional guidelines in the conduct of my study.

This includes:

- providing original work or proper use of references;
- providing appropriate information to all involved in my study;
- requesting informed consent from participants;
- transparency in the way data is processed and represented;
- ensuring confidentiality in the storage and use of data;

If there is any significant change in the question, design or conduct over the course of the research, I will complete another Research Integrity Form.

Breaches of the code of conduct with respect to academic integrity (as described / referred to in the thesis handbook) should and will be forwarded to the examination board. Acting contrary to the code of conduct can result in declaring the thesis invalid

**Student's Signature: Date: To be signed by supervisor**

I have instructed the student about ethical issues related to their specific study. I hereby declare that I will challenge him / her on ethical aspects through their investigation and to act on any violations that I may encounter.

**Supervisor's Signature:** \_\_\_\_\_ **Date:**

**Appendix 7. One-way ANOVA Pre-test**  
**a. Pre-test Social comparison**

**Descriptives**

MeanUpwardComparison

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
DownwardComparison	17	5,7529	1,62023	,39296	4,9199	6,5860	2,60	8,60
UpwardComparison	15	5,0474	2,25678	,58270	3,7976	6,2972	2,10	8,20
Total	32	5,4222	1,94499	,34383	4,7210	6,1235	2,10	8,60

**Test of Homogeneity of Variances**

MeanUpwardComparison

Levene Statistic	df1	df2	Sig.
5,706	1	30	,023

**ANOVA**

MeanUpwardComparison

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,967	1	3,967	1,050	,314

Within Groups	113,305	30	3,777		
Total	117,272	31			

**b. Pre-test Materialism**

**Descriptives**

MeanHighMaterialism

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
LowMaterialism	15	4,1697	1,39894	,36121	3,3950	4,9444	2,14	6,05
HighMaterialism	18	5,0758	1,06406	,25080	4,5466	5,6049	3,36	6,36
Total	33	4,6639	1,29136	,22480	4,2060	5,1218	2,14	6,36

**Test of Homogeneity of Variances**

MeanHighMaterialism

Levene Statistic	df1	df2	Sig.
1,379	1	31	,249

**ANOVA**

MeanHighMaterialism

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6,717	1	6,717	4,464	,043
Within Groups	46,647	31	1,505		
Total	53,363	32			

## Appendix 8. Descriptives and frequencies

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age...	122	2	8	3,39	1,041
Gender...	122	1	1	1,00	,000
Place of residence...	122	1	2	1,16	,364
Income level...	122	1	3	2,75	,594
Valid N (listwise)	122				

### Age...

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 12-17 years old	1	,8	,8	,8
18-24 years old	98	80,3	80,3	81,1
25-34 years old	13	10,7	10,7	91,8
35-44 years old	1	,8	,8	92,6
45-54 years old	3	2,5	2,5	95,1
55-64 years old	5	4,1	4,1	99,2

65-74 years old	1	,8	,8	100,0
Total	122	100,0	100,0	

**Gender...**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	122	100,0	100,0	100,0

**Place of residence...**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The Netherlands	103	84,4	84,4	84,4
	Outside the Netherlands	19	15,6	15,6	100,0
	Total	122	100,0	100,0	

**Income level...**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Above average (>€5.000)	10	8,2	8,2	8,2
	Average (€5.000)	10	8,2	8,2	16,4
	Below average (<€5.000)	102	83,6	83,6	100,0
	Total	122	100,0	100,0	

## Appendix 9. Manipulation check

### A. Materialism

**Descriptives**  
**MaterialismMean**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
LowMaterialism	61	4,2407	1,09155	,13976	3,9611	4,5202	1,36	6,50
HighMaterialism	61	4,5499	,94029	,12039	4,3091	4,7907	2,59	7,00
Total	122	4,3953	1,02632	,09292	4,2113	4,5793	1,36	7,00

### ANOVA

**MaterialismMean**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,917	1	2,917	2,810	,096
Within Groups	124,537	120	1,038		
Total	127,454	121			

### B. Social comparison

**Descriptives**  
**SocialComparisonMean**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
DownwardComparison	59	6,4802	1,50759	,19627	6,0873	6,8731	3,00	10,00
UpwardComparison	63	5,8413	1,61681	,20370	5,4341	6,2485	1,20	9,30

Total	122	6,1503	1,59113	,14405	5,8651	6,4355	1,20	10,00
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**ANOVA**

**SocialComparisonMean**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12,439	1	12,439	5,079	,026
Within Groups	293,897	120	2,449		
Total	306,336	121			

**Appendix 10. Factor analysis**

**A. Factor analysis all items included**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,846
Bartlett's Test of Sphericity	Approx. Chi-Square	6328,954
	df	1431
	Sig.	,000

**Communalities**

	Initial	Extraction
MaterialismImportanceQ1	1,000	,678
MaterialismImportanceQ2	1,000	,765
MaterialismImportanceQ3	1,000	,648
MaterialismImportanceQ4	1,000	,788

MaterialismImportanceQ5	1,000	,800
MaterialismImportanceQ6	1,000	,725
MaterialismImportanceQ7	1,000	,717
MaterialismImportanceQ8	1,000	,691
MaterialismImportanceQ9	1,000	,774
MaterialismImportanceQ10	1,000	,802
MaterialismImportanceQ11	1,000	,644
MaterialismLikelihoodQ1	1,000	,755
MaterialismLikelihoodQ2	1,000	,729
MaterialismLikelihoodQ3	1,000	,759
MaterialismLikelihoodQ4	1,000	,657
MaterialismLikelihoodQ5	1,000	,799
MaterialismLikelihoodQ6	1,000	,792
MaterialismLikelihoodQ7	1,000	,704
MaterialismLikelihoodQ8	1,000	,799
MaterialismLikelihoodQ9	1,000	,825
MaterialismLikelihoodQ10	1,000	,817
MaterialismLikelihoodQ11	1,000	,731
ComparisonQ1	1,000	,746
ComparisonQ2	1,000	,718
ComparisonQ3	1,000	,716
ComparisonQ4	1,000	,810
ComparisonQ5	1,000	,629
ComparisonQ6	1,000	,742
ComparisonQ7	1,000	,780
ComparisonQ8	1,000	,731
ComparisonQ9	1,000	,770
ComparisonQ10	1,000	,709

PSIQ1	1,000	,836
PSIQ2	1,000	,860
PSIQ3	1,000	,746
PSIQ4	1,000	,727
PSIQ5	1,000	,729
PSIQ6	1,000	,750
PSIQ7	1,000	,742
PSIQ8	1,000	,399
PSIQ9	1,000	,692
PSIQ10	1,000	,633
PSIQ11	1,000	,726
BrandPerceptionsQ1	1,000	,793
BrandPerceptionsQ2	1,000	,853
BrandPerceptionsQ3	1,000	,826
BrandPerceptionsQ4	1,000	,668
BrandPerceptionsQ5	1,000	,820
BrandPerceptionsQ6	1,000	,739
PurchaseIntentionsQ1	1,000	,852
PurchaseIntentionsQ2	1,000	,911
PurchaseInt3REV	1,000	,697
PurchaseIntentionsQ4	1,000	,894
PurchaseIntentionsQ5	1,000	,891

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings <sup>a</sup>
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	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	14,799	27,406	27,406	14,799	27,406	27,406	6,380
2	9,520	17,630	45,035	9,520	17,630	45,035	7,865
3	6,063	11,227	56,263	6,063	11,227	56,263	6,764
4	2,659	4,924	61,186	2,659	4,924	61,186	10,239
5	2,145	3,971	65,158	2,145	3,971	65,158	8,859
6	1,542	2,856	68,014	1,542	2,856	68,014	5,671
7	1,468	2,719	70,733	1,468	2,719	70,733	6,864
8	1,301	2,410	73,143	1,301	2,410	73,143	5,394
9	1,038	1,922	75,065	1,038	1,922	75,065	1,464
10	,996	1,845	76,910				
11	,933	1,728	78,637				
12	,805	1,490	80,128				
13	,761	1,409	81,537				
14	,723	1,340	82,877				
15	,644	1,192	84,068				
16	,591	1,094	85,162				
17	,551	1,021	86,183				
18	,548	1,014	87,198				
19	,474	,878	88,076				
20	,462	,855	88,931				
21	,444	,823	89,754				
22	,391	,724	90,478				
23	,359	,666	91,143				
24	,350	,648	91,791				
25	,338	,625	92,416				
26	,314	,581	92,997				
27	,290	,538	93,535				

28	,271	,503	94,037			
29	,264	,489	94,527			
30	,244	,452	94,979			
31	,239	,443	95,422			
32	,219	,406	95,828			
33	,205	,380	96,209			
34	,200	,370	96,579			
35	,183	,340	96,918			
36	,169	,314	97,232			
37	,159	,294	97,526			
38	,150	,279	97,805			
39	,145	,268	98,073			
40	,122	,226	98,299			
41	,115	,213	98,512			
42	,102	,190	98,702			
43	,094	,174	98,876			
44	,085	,157	99,033			
45	,083	,154	99,187			
46	,076	,140	99,327			
47	,068	,126	99,453			
48	,063	,117	99,571			
49	,055	,102	99,673			
50	,045	,083	99,756			
51	,040	,074	99,830			
52	,035	,065	99,895			
53	,031	,058	99,953			
54	,026	,047	100,000			

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

**Component Matrix<sup>a</sup>**

	Component								
	1	2	3	4	5	6	7	8	9
MaterialismImportanceQ1	-,387	,536							
MaterialismImportanceQ2	-,515	,526							
MaterialismImportanceQ3	-,437	,385			,349				
MaterialismImportanceQ4	-,483	,499							
MaterialismImportanceQ5	-,471	,565			-,363				
MaterialismImportanceQ6	-,475	,583							
MaterialismImportanceQ7	-,505	,586							
MaterialismImportanceQ8	-,392	,575							
MaterialismImportanceQ9	-,458	,511				,377			
MaterialismImportanceQ10	-,385	,492				,482	-,359		
MaterialismImportanceQ11	-,401	,400				,475			
MaterialismLikelihoodQ1	-,474	,568							
MaterialismLikelihoodQ2	-,525	,508							
MaterialismLikelihoodQ3	-,592	,405			,404				
MaterialismLikelihoodQ4	-,585	,341							
MaterialismLikelihoodQ5	-,486	,490			-,393		,354		
MaterialismLikelihoodQ6	-,629	,470							
MaterialismLikelihoodQ7	-,602	,363							
MaterialismLikelihoodQ8	-,631	,456						,304	
MaterialismLikelihoodQ9	-,674	,379						,404	
MaterialismLikelihoodQ10	-,562	,396				,347		,325	



PurchaseIntentionsQ1	,632	,479		,305					
PurchaseIntentionsQ2	,678	,498			-,321				
PurchaseInt3REV	,472	,500			-,319				
PurchaseIntentionsQ4	,672	,509							
PurchaseIntentionsQ5	,639	,486			-,304				

Extraction Method: Principal Component Analysis.

a. 9 components extracted.

**Pattern Matrix<sup>a</sup>**

	Component								
	1	2	3	4	5	6	7	8	9
MaterialismImportanceQ1		,596							
MaterialismImportanceQ2		,785							
MaterialismImportanceQ3		,755							
MaterialismImportanceQ4		,759							,314
MaterialismImportanceQ5							,767		
MaterialismImportanceQ6							,598		
MaterialismImportanceQ7							,576		
MaterialismImportanceQ8						,449	,568		
MaterialismImportanceQ9						,684			
MaterialismImportanceQ10						,814			
MaterialismImportanceQ11						,648			
MaterialismLikelihoodQ1		,564						,390	
MaterialismLikelihoodQ2		,630						,387	
MaterialismLikelihoodQ3		,606						,310	
MaterialismLikelihoodQ4		,473						,345	



BrandPerceptionsQ1	,678								
BrandPerceptionsQ2	,727								
BrandPerceptionsQ3	,762								
BrandPerceptionsQ4	,688								
BrandPerceptionsQ5	,583					-,404			
BrandPerceptionsQ6	,496					-,420			
PurchaseIntentionsQ1						-,842			
PurchaseIntentionsQ2						-,840			
PurchaseInt3REV						-,806			
PurchaseIntentionsQ4						-,821			
PurchaseIntentionsQ5						-,880			

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 26 iterations.

**Component Correlation Matrix**

Component	1	2	3	4	5	6	7	8	9
1	1,000	-,094	,030	-,308	-,294	-,096	-,110	-,131	,036
2	-,094	1,000	-,118	,087	,077	,339	,388	,309	-,097
3	,030	-,118	1,000	-,055	-,072	-,157	-,069	-,013	-,063
4	-,308	,087	-,055	1,000	,492	,057	,029	,119	,017
5	-,294	,077	-,072	,492	1,000	,085	-,047	,111	,024
6	-,096	,339	-,157	,057	,085	1,000	,282	,229	-,053
7	-,110	,388	-,069	,029	-,047	,282	1,000	,249	-,119
8	-,131	,309	-,013	,119	,111	,229	,249	1,000	-,059

9	,036	-,097	-,063	,017	,024	-,053	-,119	-,059	1,000
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Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

**B. Factor analysis all items after excluding item ‘PSIQ8’**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,844
Bartlett's Test of Sphericity	Approx. Chi-Square	6281,642
	df	1378
	Sig.	,000

**Communalities**

	Initial	Extraction
MaterialismImportanceQ1	1,000	,661
MaterialismImportanceQ2	1,000	,765
MaterialismImportanceQ3	1,000	,650
MaterialismImportanceQ4	1,000	,788
MaterialismImportanceQ5	1,000	,797
MaterialismImportanceQ6	1,000	,730
MaterialismImportanceQ7	1,000	,719
MaterialismImportanceQ8	1,000	,688
MaterialismImportanceQ9	1,000	,774
MaterialismImportanceQ10	1,000	,809
MaterialismImportanceQ11	1,000	,648

MaterialismLikelihoodQ1	1,000	,756
MaterialismLikelihoodQ2	1,000	,727
MaterialismLikelihoodQ3	1,000	,760
MaterialismLikelihoodQ4	1,000	,651
MaterialismLikelihoodQ5	1,000	,802
MaterialismLikelihoodQ6	1,000	,794
MaterialismLikelihoodQ7	1,000	,705
MaterialismLikelihoodQ8	1,000	,807
MaterialismLikelihoodQ9	1,000	,827
MaterialismLikelihoodQ10	1,000	,827
MaterialismLikelihoodQ11	1,000	,736
ComparisonQ1	1,000	,746
ComparisonQ2	1,000	,716
ComparisonQ3	1,000	,722
ComparisonQ4	1,000	,809
ComparisonQ5	1,000	,634
ComparisonQ6	1,000	,750
ComparisonQ7	1,000	,781
ComparisonQ8	1,000	,732
ComparisonQ9	1,000	,769
ComparisonQ10	1,000	,707
PSIQ1	1,000	,839
PSIQ2	1,000	,867
PSIQ3	1,000	,747
PSIQ4	1,000	,729
PSIQ5	1,000	,727
PSIQ6	1,000	,749
PSIQ7	1,000	,741

PSIQ9	1,000	,692
PSIQ10	1,000	,633
PSIQ11	1,000	,726
BrandPerceptionsQ1	1,000	,796
BrandPerceptionsQ2	1,000	,856
BrandPerceptionsQ3	1,000	,831
BrandPerceptionsQ4	1,000	,670
BrandPerceptionsQ5	1,000	,821
BrandPerceptionsQ6	1,000	,736
PurchaseIntentionsQ1	1,000	,852
PurchaseIntentionsQ2	1,000	,911
PurchaseInt3REV	1,000	,697
PurchaseIntentionsQ4	1,000	,890
PurchaseIntentionsQ5	1,000	,891

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	14,551	27,455	27,455	14,551	27,455	27,455	6,230
2	9,473	17,874	45,329	9,473	17,874	45,329	7,822
3	6,061	11,436	56,766	6,061	11,436	56,766	6,741
4	2,645	4,990	61,755	2,645	4,990	61,755	9,890
5	2,128	4,015	65,770	2,128	4,015	65,770	8,703
6	1,538	2,902	68,672	1,538	2,902	68,672	5,465
7	1,468	2,770	71,442	1,468	2,770	71,442	6,943

8	1,285	2,425	73,867	1,285	2,425	73,867	5,686
9	1,038	1,958	75,825	1,038	1,958	75,825	1,508
10	,972	1,833	77,658				
11	,918	1,731	79,390				
12	,777	1,467	80,856				
13	,745	1,406	82,263				
14	,674	1,272	83,535				
15	,620	1,170	84,705				
16	,567	1,069	85,774				
17	,549	1,036	86,810				
18	,501	,945	87,755				
19	,463	,873	88,628				
20	,444	,839	89,467				
21	,396	,748	90,214				
22	,360	,679	90,893				
23	,350	,660	91,553				
24	,341	,643	92,197				
25	,318	,599	92,796				
26	,292	,551	93,347				
27	,272	,513	93,860				
28	,264	,499	94,358				
29	,256	,482	94,841				
30	,239	,452	95,292				
31	,220	,414	95,707				
32	,205	,388	96,094				
33	,200	,377	96,472				
34	,183	,346	96,818				
35	,174	,329	97,147				

36	,160	,301	97,448				
37	,151	,285	97,733				
38	,145	,273	98,006				
39	,124	,234	98,240				
40	,120	,226	98,466				
41	,105	,199	98,665				
42	,094	,178	98,843				
43	,085	,160	99,003				
44	,084	,159	99,162				
45	,077	,146	99,308				
46	,068	,129	99,437				
47	,064	,121	99,558				
48	,057	,108	99,666				
49	,045	,084	99,750				
50	,040	,075	99,825				
51	,035	,067	99,892				
52	,032	,060	99,952				
53	,026	,048	100,000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

**Component Matrix<sup>a</sup>**

	Component								
	1	2	3	4	5	6	7	8	9
MaterialismImportanceQ1	-,395	,530							
MaterialismImportanceQ2	-,525	,516							

MaterialismImportanceQ3	-,446	,375		,350			
MaterialismImportanceQ4	-,493	,488					
MaterialismImportanceQ5	-,479	,557		-,359			
MaterialismImportanceQ6	-,486	,573					
MaterialismImportanceQ7	-,517	,575					
MaterialismImportanceQ8	-,403	,568			,302		
MaterialismImportanceQ9	-,470	,501			,382		
MaterialismImportanceQ10	-,397	,483			,483	-,369	
MaterialismImportanceQ11	-,413	,389			,475		
MaterialismLikelihoodQ1	-,484	,559					
MaterialismLikelihoodQ2	-,537	,496					
MaterialismLikelihoodQ3	-,602	,391		,399			
MaterialismLikelihoodQ4	-,594	,327					
MaterialismLikelihoodQ5	-,495	,481		-,395		,355	
MaterialismLikelihoodQ6	-,637	,458					
MaterialismLikelihoodQ7	-,611	,349					
MaterialismLikelihoodQ8	-,642	,442					,317
MaterialismLikelihoodQ9	-,685	,363					,409
MaterialismLikelihoodQ10	-,573	,382			,337		,353
MaterialismLikelihoodQ11	-,543	,301					-,400
ComparisonQ1		-,347	,723				
ComparisonQ2		-,350	,734				
ComparisonQ3			,746				
ComparisonQ4			,837				
ComparisonQ5	,342	,307	,527				
ComparisonQ6			,764				
ComparisonQ7		-,326	,768				
ComparisonQ8			,766				

ComparisonQ9	,369		,762					
ComparisonQ10			,760					
PSIQ1	,544	,485		-,472				
PSIQ2	,599	,475		-,465				
PSIQ3	,558	,536						
PSIQ4	,539	,530						
PSIQ5	,640	,301		-,416				
PSIQ6	,622	,477		-,353				
PSIQ7	,578	,493						
PSIQ9	,538	,565						
PSIQ10	,562	,340			,321			
PSIQ11	,581	,466		-,322				
BrandPerceptionsQ1	,700			,410				
BrandPerceptionsQ2	,706			,419				
BrandPerceptionsQ3	,633			,401	,402			
BrandPerceptionsQ4	,586			,391				
BrandPerceptionsQ5	,689	,391		,354				
BrandPerceptionsQ6	,687	,374						
PurchaseIntentionsQ1	,624	,494						
PurchaseIntentionsQ2	,669	,513			-,326			
PurchaseInt3REV	,464	,511			-,320			
PurchaseIntentionsQ4	,662	,523						
PurchaseIntentionsQ5	,631	,501			-,310			

Extraction Method: Principal Component Analysis.

a. 9 components extracted.

**Pattern Matrix<sup>a</sup>**

	Component								
	1	2	3	4	5	6	7	8	9
MaterialismImportanceQ1		,577							
MaterialismImportanceQ2		,785							
MaterialismImportanceQ3		,755							
MaterialismImportanceQ4		,768							
MaterialismImportanceQ5							,769		
MaterialismImportanceQ6							,600		
MaterialismImportanceQ7							,583		
MaterialismImportanceQ8						,449	,564		
MaterialismImportanceQ9						,681			
MaterialismImportanceQ10						,808			
MaterialismImportanceQ11						,635			
MaterialismLikelihoodQ1		,549						,411	
MaterialismLikelihoodQ2		,632						,380	
MaterialismLikelihoodQ3		,609							
MaterialismLikelihoodQ4		,489						,308	
MaterialismLikelihoodQ5							,824		
MaterialismLikelihoodQ6							,500	,471	
MaterialismLikelihoodQ7							,510	,471	
MaterialismLikelihoodQ8							,348	,586	
MaterialismLikelihoodQ9								,665	
MaterialismLikelihoodQ10						,578		,557	
MaterialismLikelihoodQ11									-,488
ComparisonQ1			,838						
ComparisonQ2			,799						
ComparisonQ3			,812						

ComparisonQ4			,872				
ComparisonQ5			,435			,313	
ComparisonQ6			,823				
ComparisonQ7			,863				
ComparisonQ8			,825				
ComparisonQ9			,779				
ComparisonQ10			,734				
PSIQ1							
PSIQ2							
PSIQ3							
PSIQ4							
PSIQ5							
PSIQ6							
PSIQ7							
PSIQ9							
PSIQ10							
PSIQ11							
BrandPerceptionsQ1	,679						
BrandPerceptionsQ2	,729						
BrandPerceptionsQ3	,767						
BrandPerceptionsQ4	,689						
BrandPerceptionsQ5	,576						
BrandPerceptionsQ6	,497						
PurchaseIntentionsQ1							
PurchaseIntentionsQ2							
PurchaseInt3REV							
PurchaseIntentionsQ4							
PurchaseIntentionsQ5							

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 27 iterations.

**Component Correlation Matrix**

Component	1	2	3	4	5	6	7	8	9
1	1,000	-,087	,026	-,296	-,289	-,096	-,101	-,153	,029
2	-,087	1,000	-,117	,077	,073	,331	,388	,324	-,105
3	,026	-,117	1,000	-,047	-,070	-,158	-,065	-,021	-,058
4	-,296	,077	-,047	1,000	,489	,055	,015	,133	,023
5	-,289	,073	-,070	,489	1,000	,083	-,050	,122	,028
6	-,096	,331	-,158	,055	,083	1,000	,282	,220	-,058
7	-,101	,388	-,065	,015	-,050	,282	1,000	,274	-,125
8	-,153	,324	-,021	,133	,122	,220	,274	1,000	-,066
9	,029	-,105	-,058	,023	,028	-,058	-,125	-,066	1,000

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

### C. Factor analysis construct materialism

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,892
Bartlett's Test of Sphericity	Approx. Chi-Square
	2118,476
	df
	231
	Sig.
	,000

**Communalities**

	Initial	Extraction
MaterialismImportanceQ1	1,000	,666
MaterialismImportanceQ2	1,000	,766
MaterialismImportanceQ3	1,000	,618
MaterialismImportanceQ4	1,000	,692
MaterialismImportanceQ5	1,000	,789
MaterialismImportanceQ6	1,000	,726
MaterialismImportanceQ7	1,000	,679
MaterialismImportanceQ8	1,000	,655
MaterialismImportanceQ9	1,000	,779
MaterialismImportanceQ10	1,000	,846
MaterialismImportanceQ11	1,000	,767
MaterialismLikelihoodQ1	1,000	,702
MaterialismLikelihoodQ2	1,000	,729
MaterialismLikelihoodQ3	1,000	,806
MaterialismLikelihoodQ4	1,000	,663
MaterialismLikelihoodQ5	1,000	,817
MaterialismLikelihoodQ6	1,000	,812
MaterialismLikelihoodQ7	1,000	,705
MaterialismLikelihoodQ8	1,000	,809
MaterialismLikelihoodQ9	1,000	,855
MaterialismLikelihoodQ10	1,000	,825
MaterialismLikelihoodQ11	1,000	,734

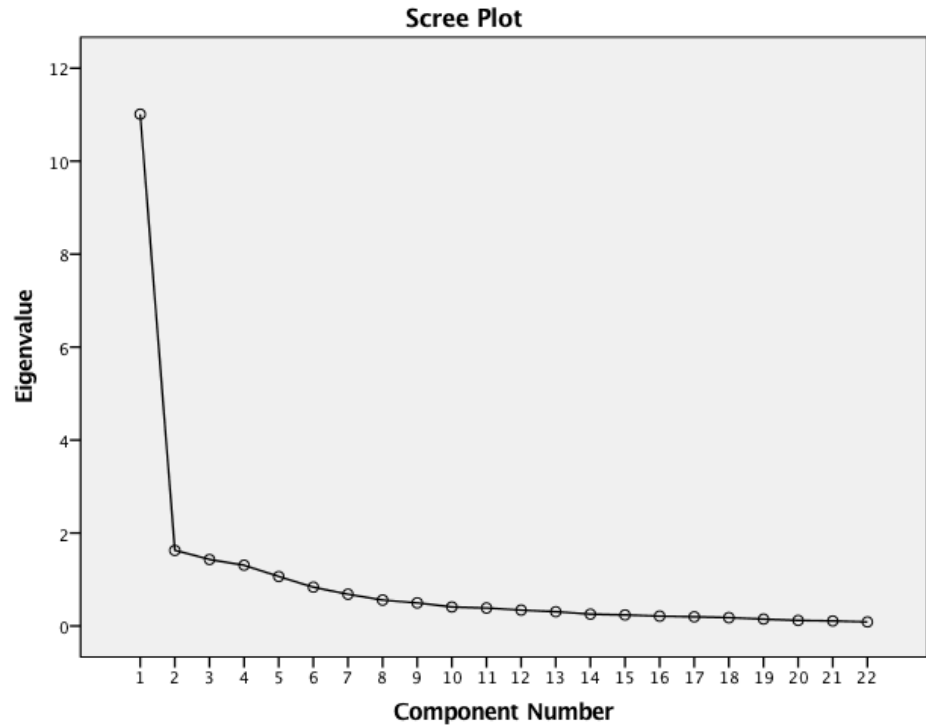
Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	11,011	50,048	50,048	11,011	50,048	50,048	7,597
2	1,627	7,394	57,442	1,627	7,394	57,442	7,961
3	1,431	6,505	63,947	1,431	6,505	63,947	4,809
4	1,308	5,944	69,891	1,308	5,944	69,891	4,599
5	1,065	4,840	74,731	1,065	4,840	74,731	2,784
6	,836	3,798	78,529				
7	,683	3,105	81,633				
8	,558	2,536	84,170				
9	,497	2,258	86,428				
10	,409	1,860	88,288				
11	,386	1,755	90,043				
12	,342	1,553	91,596				
13	,307	1,395	92,991				
14	,255	1,159	94,151				
15	,237	1,076	95,227				
16	,211	,960	96,187				
17	,197	,898	97,085				
18	,179	,812	97,897				
19	,148	,673	98,570				
20	,119	,540	99,110				
21	,109	,494	99,604				
22	,087	,396	100,000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.



Component Matrix<sup>a</sup>

	Component				
	1	2	3	4	5
MaterialismImportanceQ1	,635			,408	-,303
MaterialismImportanceQ2	,747			,355	
MaterialismImportanceQ3	,595	,411			

MaterialismImportanceQ4	,699	,346			
MaterialismImportanceQ5	,731	-,395			
MaterialismImportanceQ6	,741	-,307			
MaterialismImportanceQ7	,764				
MaterialismImportanceQ8	,686	-,310			
MaterialismImportanceQ9	,698		,485		
MaterialismImportanceQ10	,603		,661		
MaterialismImportanceQ11	,547		,451		,511
MaterialismLikelihoodQ1	,740				
MaterialismLikelihoodQ2	,752	,381			
MaterialismLikelihoodQ3	,746	,405			
MaterialismLikelihoodQ4	,675	,315			
MaterialismLikelihoodQ5	,702	-,487			
MaterialismLikelihoodQ6	,811				
MaterialismLikelihoodQ7	,697				
MaterialismLikelihoodQ8	,811			-,332	
MaterialismLikelihoodQ9	,777			-,445	
MaterialismLikelihoodQ10	,695		,347	-,375	
MaterialismLikelihoodQ11	,640				,478

Extraction Method: Principal Component Analysis.

a. 5 components extracted.

**Pattern Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
MaterialismImportanceQ1		,586			-,349
MaterialismImportanceQ2		,795			
MaterialismImportanceQ3		,801			

MaterialismImportanceQ4		,789			
MaterialismImportanceQ5	,852				
MaterialismImportanceQ6	,724				
MaterialismImportanceQ7	,646				
MaterialismImportanceQ8	,611		,324		
MaterialismImportanceQ9	,319		,689		
MaterialismImportanceQ10			,887		
MaterialismImportanceQ11			,383		,657
MaterialismLikelihoodQ1		,621			
MaterialismLikelihoodQ2		,701			
MaterialismLikelihoodQ3		,655			,386
MaterialismLikelihoodQ4		,545			,336
MaterialismLikelihoodQ5	,901				
MaterialismLikelihoodQ6	,541			-,492	
MaterialismLikelihoodQ7	,473			-,565	
MaterialismLikelihoodQ8	,314			-,596	
MaterialismLikelihoodQ9				-,698	
MaterialismLikelihoodQ10			,642	-,526	
MaterialismLikelihoodQ11					,665

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 25 iterations.

#### D. Factor analysis construct materialism forced into one factor

##### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,892
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Bartlett's Test of Sphericity	Approx. Chi-Square	2118,476
	df	231
	Sig.	,000

**Communalities**

	Initial	Extraction
MaterialismImportanceQ1	1,000	,403
MaterialismImportanceQ2	1,000	,559
MaterialismImportanceQ3	1,000	,354
MaterialismImportanceQ4	1,000	,488
MaterialismImportanceQ5	1,000	,535
MaterialismImportanceQ6	1,000	,550
MaterialismImportanceQ7	1,000	,584
MaterialismImportanceQ8	1,000	,470
MaterialismImportanceQ9	1,000	,488
MaterialismImportanceQ10	1,000	,364
MaterialismImportanceQ11	1,000	,300
MaterialismLikelihoodQ1	1,000	,548
MaterialismLikelihoodQ2	1,000	,566
MaterialismLikelihoodQ3	1,000	,556
MaterialismLikelihoodQ4	1,000	,456
MaterialismLikelihoodQ5	1,000	,493
MaterialismLikelihoodQ6	1,000	,658
MaterialismLikelihoodQ7	1,000	,486
MaterialismLikelihoodQ8	1,000	,657
MaterialismLikelihoodQ9	1,000	,603
MaterialismLikelihoodQ10	1,000	,483

MaterialismLikelihoodQ11	1,000	,410
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Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11,011	50,048	50,048	11,011	50,048	50,048
2	1,627	7,394	57,442			
3	1,431	6,505	63,947			
4	1,308	5,944	69,891			
5	1,065	4,840	74,731			
6	,836	3,798	78,529			
7	,683	3,105	81,633			
8	,558	2,536	84,170			
9	,497	2,258	86,428			
10	,409	1,860	88,288			
11	,386	1,755	90,043			
12	,342	1,553	91,596			
13	,307	1,395	92,991			
14	,255	1,159	94,151			
15	,237	1,076	95,227			
16	,211	,960	96,187			
17	,197	,898	97,085			
18	,179	,812	97,897			
19	,148	,673	98,570			
20	,119	,540	99,110			

21	,109	,494	99,604		
22	,087	,396	100,000		

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component
	1
MaterialismImportanceQ1	,635
MaterialismImportanceQ2	,747
MaterialismImportanceQ3	,595
MaterialismImportanceQ4	,699
MaterialismImportanceQ5	,731
MaterialismImportanceQ6	,741
MaterialismImportanceQ7	,764
MaterialismImportanceQ8	,686
MaterialismImportanceQ9	,698
MaterialismImportanceQ10	,603
MaterialismImportanceQ11	,547
MaterialismLikelihoodQ1	,740
MaterialismLikelihoodQ2	,752
MaterialismLikelihoodQ3	,746
MaterialismLikelihoodQ4	,675
MaterialismLikelihoodQ5	,702
MaterialismLikelihoodQ6	,811
MaterialismLikelihoodQ7	,697
MaterialismLikelihoodQ8	,811

MaterialismLikelihoodQ9	,777
MaterialismLikelihoodQ10	,695
MaterialismLikelihoodQ11	,640

Extraction Method: Principal Component

Analysis.

a. 1 components extracted.

### E. Factor analysis construct social comparison

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,912
Bartlett's Test of Sphericity	Approx. Chi-Square
	886,830
	df
	45
	Sig.
	,000

#### Communalities

	Initial	Extraction
ComparisonQ1	1,000	,791
ComparisonQ2	1,000	,717
ComparisonQ3	1,000	,651
ComparisonQ4	1,000	,794
ComparisonQ5	1,000	,840
ComparisonQ6	1,000	,699
ComparisonQ7	1,000	,807
ComparisonQ8	1,000	,699
ComparisonQ9	1,000	,736
ComparisonQ10	1,000	,617

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component	
	1	2
ComparisonQ1	,809	-,370
ComparisonQ2	,812	
ComparisonQ3	,797	
ComparisonQ4	,878	
ComparisonQ5	,518	,756
ComparisonQ6	,806	
ComparisonQ7	,837	-,326
ComparisonQ8	,836	
ComparisonQ9	,827	
ComparisonQ10	,769	

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Pattern Matrix<sup>a</sup>**

	Component	
	1	2
ComparisonQ1	,951	
ComparisonQ2	,873	

ComparisonQ3	,632	,313
ComparisonQ4	,691	,354
ComparisonQ5		,919
ComparisonQ6	,856	
ComparisonQ7	,948	
ComparisonQ8	,735	
ComparisonQ9	,597	,426
ComparisonQ10	,587	,340

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser

Normalization.

a. Rotation converged in 8 iterations.

### F. Factor analysis construct social comparison after deleting item 'ComparisonQ5'

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,908
Bartlett's Test of Sphericity	Approx. Chi-Square	835,290
	df	36
	Sig.	,000

#### Communalities

	Initial	Extraction
ComparisonQ1	1,000	,681

ComparisonQ2	1,000	,676
ComparisonQ3	1,000	,625
ComparisonQ4	1,000	,760
ComparisonQ6	1,000	,662
ComparisonQ7	1,000	,728
ComparisonQ8	1,000	,697
ComparisonQ9	1,000	,668
ComparisonQ10	1,000	,581

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,078	67,533	67,533	6,078	67,533	67,533
2	,671	7,452	74,985			
3	,585	6,504	81,489			
4	,462	5,136	86,625			
5	,354	3,933	90,558			
6	,274	3,049	93,608			
7	,236	2,626	96,234			
8	,197	2,190	98,424			
9	,142	1,576	100,000			

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component
	1
ComparisonQ1	,825
ComparisonQ2	,822
ComparisonQ3	,791
ComparisonQ4	,872
ComparisonQ6	,814
ComparisonQ7	,853
ComparisonQ8	,835
ComparisonQ9	,817
ComparisonQ10	,762

Extraction Method: Principal

Component Analysis.

a. 1 components extracted.

### **G. Factor analysis construct PSI**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,901	
Bartlett's Test of Sphericity	Approx. Chi-Square	1105,436
	df	45
	Sig.	,000

### **Communalities**

	Initial	Extraction
PSIQ1	1,000	,727
PSIQ2	1,000	,777
PSIQ3	1,000	,711
PSIQ4	1,000	,648
PSIQ5	1,000	,644
PSIQ6	1,000	,715
PSIQ7	1,000	,680
PSIQ9	1,000	,620
PSIQ10	1,000	,522
PSIQ11	1,000	,692

Extraction Method: Principal  
Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,737	67,366	67,366	6,737	67,366	67,366
2	,817	8,167	75,533			
3	,613	6,131	81,664			
4	,470	4,696	86,360			
5	,432	4,316	90,676			
6	,327	3,266	93,942			
7	,218	2,177	96,119			
8	,209	2,087	98,206			
9	,109	1,092	99,298			

10	,070	,702	100,000		
----	------	------	---------	--	--

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component
	1
PSIQ1	,852
PSIQ2	,882
PSIQ3	,843
PSIQ4	,805
PSIQ5	,803
PSIQ6	,846
PSIQ7	,824
PSIQ9	,787
PSIQ10	,723
PSIQ11	,832

Extraction Method:

Principal Component

Analysis.

a. 1 components

extracted.

**H. Factor analysis construct Brand Perceptions**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,871
--	------

Bartlett's Test of Sphericity	Approx. Chi-Square	675,443
	df	15
	Sig.	,000

**Communalities**

	Initial	Extraction
BrandPerceptionsQ1	1,000	,793
BrandPerceptionsQ2	1,000	,844
BrandPerceptionsQ3	1,000	,794
BrandPerceptionsQ4	1,000	,657
BrandPerceptionsQ5	1,000	,782
BrandPerceptionsQ6	1,000	,702

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,570	76,167	76,167	4,570	76,167	76,167
2	,620	10,328	86,495			
3	,330	5,504	91,999			
4	,231	3,842	95,841			
5	,142	2,364	98,206			
6	,108	1,794	100,000			

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component
	1
BrandPerceptionsQ1	,890
BrandPerceptionsQ2	,918
BrandPerceptionsQ3	,891
BrandPerceptionsQ4	,810
BrandPerceptionsQ5	,884
BrandPerceptionsQ6	,838

Extraction Method: Principal

Component Analysis.

a. 1 components extracted.

## **I. Factor analysis construct Purchase Intentions**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,911	
Bartlett's Test of Sphericity	Approx. Chi-Square	777,273
	df	10
	Sig.	,000

**Communalities**

	Initial	Extraction
PurchaseIntentionsQ1	1,000	,897

PurchaseIntentionsQ2	1,000	,915
PurchaseInt3REV	1,000	,677
PurchaseIntentionsQ4	1,000	,922
PurchaseIntentionsQ5	1,000	,915

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,326	86,519	86,519	4,326	86,519	86,519
2	,387	7,738	94,257			
3	,112	2,233	96,490			
4	,099	1,971	98,462			
5	,077	1,538	100,000			

Extraction Method: Principal Component Analysis.

**Component Matrix<sup>a</sup>**

	Component
	1
PurchaseIntentionsQ1	,947
PurchaseIntentionsQ2	,957
PurchaseInt3REV	,823
PurchaseIntentionsQ4	,960
PurchaseIntentionsQ5	,957

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

## Appendix 11. Reliability analysis

### A. Construct Materialism

**Case Processing Summary**

		N	%
Cases	Valid	122	100,0
	Excluded <sup>a</sup>	0	,0
	Total	122	100,0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
,951	22

### B. Construct Social Comparison

**Case Processing Summary**

		N	%
Cases	Valid	120	98,4
	Excluded <sup>a</sup>	2	1,6

Total	122	100,0
-------	-----	-------

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
,939	9

**C. Construct PSI**

**Case Processing Summary**

		N	%
Cases	Valid	122	100,0
	Excluded <sup>a</sup>	0	,0
	Total	122	100,0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
,945	10

**D. Construct Brand Perceptions**

**Case Processing Summary**

		N	%
Cases	Valid	122	100,0
	Excluded <sup>a</sup>	0	,0
	Total	122	100,0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
,935	6

**E. Construct Purchase Intentions**

**Case Processing Summary**

		N	%
Cases	Valid	122	100,0
	Excluded <sup>a</sup>	0	,0
	Total	122	100,0

a. Listwise deletion based on all variables in the procedure.

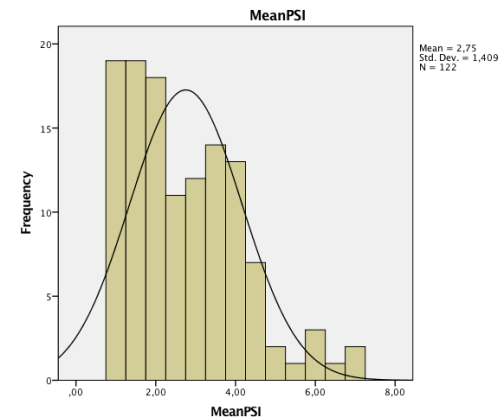
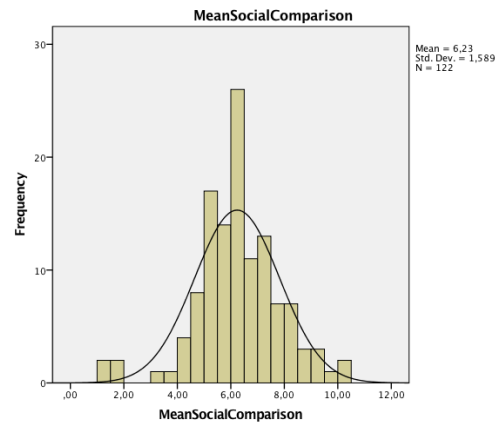
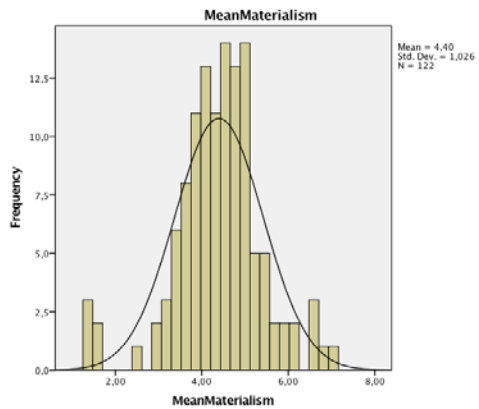
**Reliability Statistics**

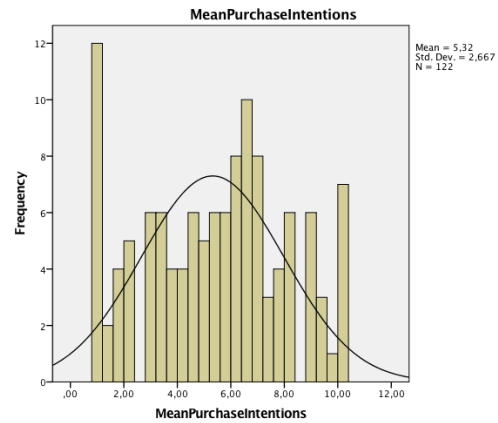
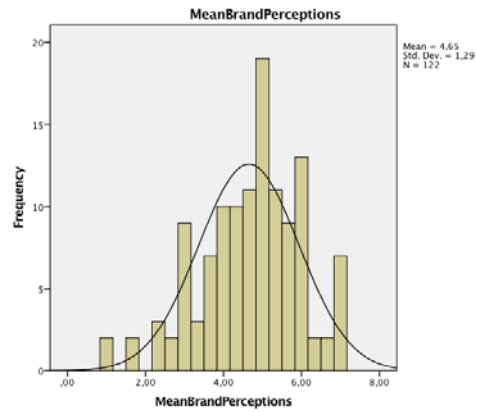
Cronbach's Alpha	N of Items

## Appendix 12. Data analyses

### Statistics

	MeanMaterialis m	MeanSocialCo mparison	MeanPSI	MeanBrandPer ceptions	MeanPurchaseI ntentions
N Valid	122	122	122	122	122
Missing	0	0	0	0	0
Mean	4,3953	6,2343	2,7525	4,6516	5,3197
Median	4,4773	6,1111	2,5000	4,8333	5,6000
Mode	5,05	6,00 <sup>a</sup>	1,20	5,00	1,00
Std. Deviation	1,02632	1,58928	1,40937	1,28993	2,66742
Variance	1,053	2,526	1,986	1,664	7,115
Skewness	-,483	-,404	,816	-,454	-,034
Std. Error of Skewness	,219	,219	,219	,219	,219
Kurtosis	1,638	1,485	,214	,192	-,950
Std. Error of Kurtosis	,435	,435	,435	,435	,435
Minimum	1,36	1,22	1,00	1,00	1,00
Maximum	7,00	10,00	6,90	7,00	10,00





### Appendix 13. Hypothesis 1 – One-Way ANOVA

#### Descriptives

MeanPSI

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
LowMaterialism	61	2,9721	1,59051	,20364	2,5648	3,3795	1,00	6,90
HighMaterialism	61	2,5328	1,17384	,15030	2,2322	2,8334	1,00	4,80
Total	122	2,7525	1,40937	,12760	2,4998	3,0051	1,00	6,90

### Test of Homogeneity of Variances

MeanPSI

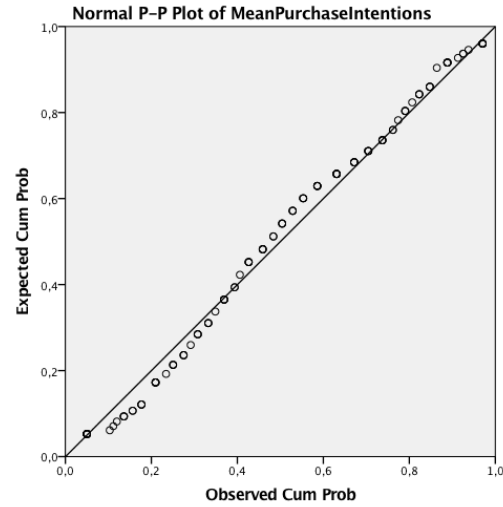
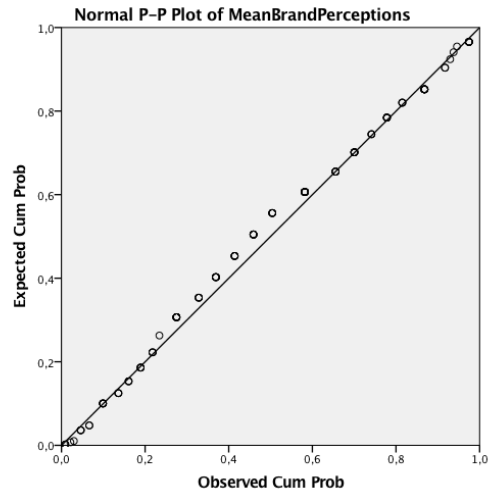
Levene Statistic	df1	df2	Sig.
2,530	1	120	,114

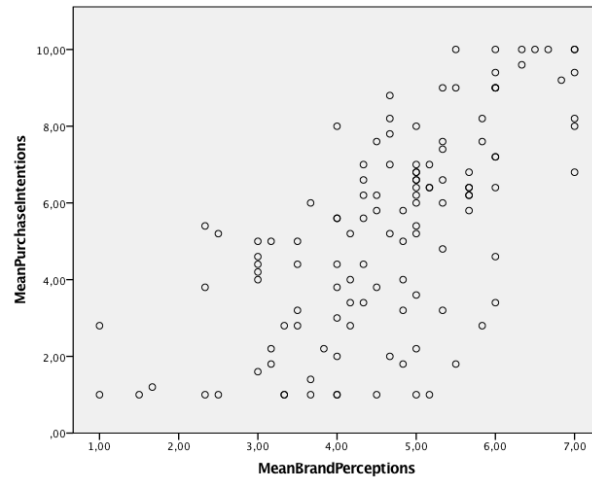
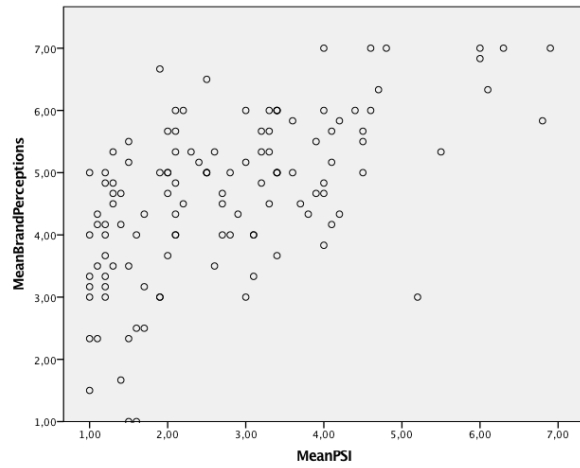
### ANOVA

MeanPSI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,887	1	5,887	3,013	,085
Within Groups	234,457	120	1,954		
Total	240,344	121			

## Appendix 14. Regression assumptions





### Appendix 15. Hypothesis 2A – Linear Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	MeanPSI <sup>b</sup>	.	Enter

a. Dependent Variable: MeanBrandPerceptions

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,593 <sup>a</sup>	,351	,346	1,04319	,351	65,009	1	120	,000

a. Predictors: (Constant), MeanPSI

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70,745	1	70,745	65,009	,000 <sup>b</sup>
	Residual	130,589	120	1,088		
	Total	201,334	121			

a. Dependent Variable: MeanBrandPerceptions

b. Predictors: (Constant), MeanPSI

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,158	,208		15,191	,000
	MeanPSI	,543	,067	,593	8,063	,000

a. Dependent Variable: MeanBrandPerceptions

## Appendix 16. Hypothesis 2B – Linear Regression

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method

1	MeanBrandPerceptions <sup>b</sup>	.	Enter
---	-----------------------------------	---	-------

a. Dependent Variable: MeanPurchaseIntentions

b. All requested variables entered.

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,668 <sup>a</sup>	,446	,441	1,99416	,446	96,495	1	120	,000

a. Predictors: (Constant), MeanBrandPerceptions

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	383,730	1	383,730	96,495	,000 <sup>b</sup>
	Residual	477,203	120	3,977		
	Total	860,933	121			

a. Dependent Variable: MeanPurchaseIntentions

b. Predictors: (Constant), MeanBrandPerceptions

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,102	,678		-1,625	,107
	MeanBrandPerceptions	1,381	,141	,668	9,823	,000

a. Dependent Variable: MeanPurchaseIntentions

## Appendix 17. Hypothesis 3 – Two-way ANOVA

### A. Between-Subjects factors

Between-Subjects Factors

		Value Label	N
SocialComparisonGroups	,00	DownwardCom parison	59
	1,00	UpwardCompar ison	63
MaterialismGroups	,00	LowMaterialis m	61
	1,00	HighMaterialis m	61

Descriptive Statistics

Dependent Variable: MeanPSITRANSF

SocialComparisonGroups	MaterialismGroups	Mean	Std. Deviation	N
DownwardComparison	LowMaterialism	1,7917	,48082	25
	HighMaterialism	1,5264	,36847	34
	Total	1,6388	,43634	59
UpwardComparison	LowMaterialism	1,5779	,40962	36
	HighMaterialism	1,5738	,38841	27
	Total	1,5761	,39748	63
Total	LowMaterialism	1,6655	,44899	61
	HighMaterialism	1,5474	,37498	61

Total	1,6064	,41618	122
-------	--------	--------	-----

### Levene's Test of Equality of Error Variances<sup>a</sup>

Dependent Variable: MeanPSITRANSF

F	df1	df2	Sig.
,923	3	118	,432

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + SocialComparisonGroups + MaterialismGroups + SocialComparisonGroups \* MaterialismGroups

### Tests of Between-Subjects Effects

Dependent Variable: MeanPSITRANSF

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	1,133 <sup>a</sup>	3	,378	2,249	,086	,054	6,747	,557
Intercept	311,847	1	311,847	1856,196	,000	,940	1856,196	1,000
SocialComparisonGroups	,206	1	,206	1,228	,270	,010	1,228	,196
MaterialismGroups	,540	1	,540	3,215	,076	,027	3,215	,428
SocialComparisonGroups * MaterialismGroups	,508	1	,508	3,026	,085	,025	3,026	,407
Error	19,824	118	,168					
Total	335,800	122						
Corrected Total	20,958	121						

a. R Squared = ,054 (Adjusted R Squared = ,030)

b. Computed using alpha = ,05

### B. Estimated marginal means – Social comparison

#### Estimates

Dependent Variable: MeanPSITRANSF

SocialComparisonGroups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
DownwardComparison	1,659	,054	1,552	1,766
UpwardComparison	1,576	,052	1,473	1,679

#### Pairwise Comparisons

Dependent Variable: MeanPSITRANSF

(I) SocialComparisonGroups	(J) SocialComparisonGroups	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
DownwardComparison	UpwardComparison	,083	,075	,270	-,065	,232
UpwardComparison	DownwardComparison	-,083	,075	,270	-,232	,065

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

### C. Estimated marginal means – Materialism

#### Estimates

Dependent Variable: MeanPSITRANSF

MaterialismGroups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
LowMaterialism	1,685	,053	1,579	1,790
HighMaterialism	1,550	,053	1,446	1,655

#### Pairwise Comparisons

Dependent Variable: MeanPSITRANSF

(I) MaterialismGroups	(J) MaterialismGroups	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
LowMaterialism	HighMaterialism	,135	,075	,076	-,014	,283
HighMaterialism	LowMaterialism	-,135	,075	,076	-,283	,014

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

#### D. Pairwise comparisons

#### Estimates

Dependent Variable: MeanPSITRANSF

SocialComparisonGroups	MaterialismGroups	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
DownwardComparison	LowMaterialism	1,792	,082	1,629	1,954
	HighMaterialism	1,526	,070	1,387	1,666
UpwardComparison	LowMaterialism	1,578	,068	1,443	1,713
	HighMaterialism	1,574	,079	1,418	1,730

### Pairwise Comparisons

Dependent Variable: MeanPSITRANSF

SocialComparisonGroups	(I) MaterialismGroups	(J) MaterialismGroups	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
						Lower Bound	Upper Bound
DownwardComparison	LowMaterialism	HighMaterialism	,265*	,108	,015	,051	,479
	HighMaterialism	LowMaterialism	-,265*	,108	,015	-,479	-,051
UpwardComparison	LowMaterialism	HighMaterialism	,004	,104	,969	-,203	,211
	HighMaterialism	LowMaterialism	-,004	,104	,969	-,211	,203

Based on estimated marginal means

\*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

### Univariate Tests

Dependent Variable: MeanPSITRANSF

SocialComparisonGroups		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>
DownwardComparison	Contrast	1,014	1	1,014	6,033	,015	,049	6,033	,683
	Error	19,824	118	,168					
UpwardComparison	Contrast	,000	1	,000	,001	,969	,000	,001	,050
	Error	19,824	118	,168					

Each F tests the simple effects of MaterialismGroups within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = ,05

### Estimates

Dependent Variable: MeanPSITRANSF

SocialComparisonGroups	MaterialismGroups	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
DownwardComparison	LowMaterialism	1,792	,082	1,629	1,954
	HighMaterialism	1,526	,070	1,387	1,666
UpwardComparison	LowMaterialism	1,578	,068	1,443	1,713
	HighMaterialism	1,574	,079	1,418	1,730

### Pairwise Comparisons

Dependent Variable: MeanPSITRANSF

MaterialismGroups	(I) SocialComparisonGroups	(J) SocialComparisonGroups	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
						Lower Bound	Upper Bound
LowMaterialism	DownwardComparison	UpwardComparison	,214*	,107	,047	,002	,425
	UpwardComparison	DownwardComparison	-,214*	,107	,047	-,425	-,002
HighMaterialism	DownwardComparison	UpwardComparison	-,047	,106	,655	-,257	,162
	UpwardComparison	DownwardComparison	,047	,106	,655	-,162	,257

Based on estimated marginal means

\*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

### Univariate Tests

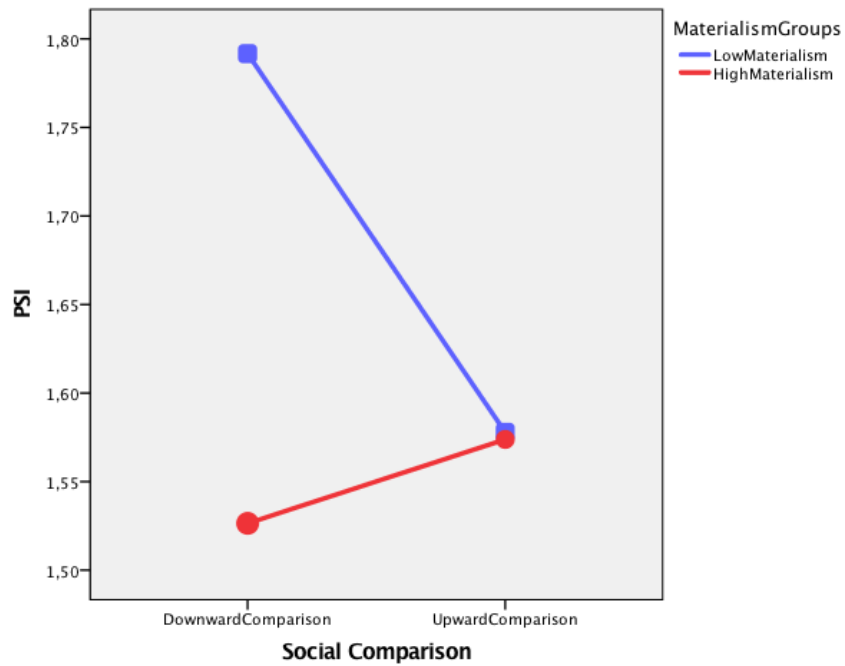
Dependent Variable: MeanPSITRANSF

MaterialismGroups	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>a</sup>
LowMaterialism Contrast	,674	1	,674	4,014	,047	,033	4,014	,511

	Error	19,824	118	,168					
HighMaterialism	Contrast	,034	1	,034	,201	,655	,002	,201	,073
	Error	19,824	118	,168					

Each F tests the simple effects of SocialComparisonGroups within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = ,05



## Appendix 18. Control variables

### Tests of Between-Subjects Effects

Dependent Variable: MeanPSITRANSF

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	2,041 <sup>a</sup>	16	,128	,708	,780	,097	11,331	,449
Intercept	44,330	1	44,330	246,067	,000	,701	246,067	1,000
PlaceOfResidence	,006	1	,006	,031	,860	,000	,031	,054
IncomeLevel	,090	2	,045	,249	,780	,005	,498	,088
age	1,028	6	,171	,951	,462	,052	5,708	,362
PlaceOfResidence *	,021	1	,021	,116	,735	,001	,116	,063
IncomeLevel								
PlaceOfResidence * age	,000	1	,000	,001	,972	,000	,001	,050
IncomeLevel * age	,206	4	,052	,287	,886	,011	1,146	,111
PlaceOfResidence *	,066	1	,066	,367	,546	,003	,367	,092
IncomeLevel * age								
Error	18,916	105	,180					
Total	335,800	122						
Corrected Total	20,958	121						

a. R Squared = ,097 (Adjusted R Squared = -,040)

b. Computed using alpha = ,05







