

# Online video advertising: how message tone and length persuade the audience

A research on the influence of message tone and the length of video advertisements on advertisement attitude, product attitude, forwarding intention and purchasing intention, with product type as a proposed moderator.

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**Master Thesis Communication Studies**

**Abstract** The purpose of this study concerning online video advertising was to provide insights in several features of online video advertisements and their effect on consumer behaviour. More specifically, by means of a 2x2x2 factorial design, the experiment examined the effect of message tone (humour vs. non-humour) and length (short vs. long) on advertisement attitude, product attitude, forwarding intention and purchase intention, whereby product type (low involvement vs. high involvement) is considered a moderator. A total of 300 respondents, gathered with the use of social media, filled in a questionnaire after watching one out of eight randomly assigned online video advertisements. The findings suggested that video advertisements with a humorous tone create a more positive forwarding intention and purchase intention than video advertisements with a non-humorous tone. Moreover, shorter video advertisements create a more positive forwarding intention and purchase intention than longer video advertisements. Furthermore, short video advertisements concerning a high involvement product create more positive product attitudes and purchase intentions than short video advertisements concerning a low involvement product. The other way around, long video advertisements concerning a low involvement product create more positive product attitudes and purchase intentions than long video advertisements concerning a high involvement product.

**Keywords** online video, advertising, tone, length, involvement, attitudes, intentions

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## 1. Introduction

Advertising is a vivid market that continuously has to adapt to the changes in the world. Since the overall internet use rate in the Netherlands keeps rising, brand and advertising strategies are adapting their business models. These changes lead to an increase in the use of digital strategies (Merks-Benjaminsen, 2015). The overall internet use rate in the Netherlands is a whopping 93% (in 2016, Eurostat, 2017b). Within this rate, the percentage of individuals in the Netherlands who frequently use the internet was 86% in 2016. Frequent use is defined as “every day or almost every day on average within the last 3 months before the survey” (Eurostat, 2017b). According to data gathered by Eurostat (2017b), the age groups between 25 and 34 purchase most online in the Netherlands and in the EU (77% and 61%). When looking at the use of social media, the age group between 16 and 24 are most active in both the Netherlands and in the EU (90% and 88%), followed by the age group between 25 and 34 (81% and 80%, Eurostat, 2017a). Looking at these rates, it is not strange that the field of online advertising is gaining attention and is rapidly growing in popularity. Many companies are using online advertisements such as text banners or video advertisements. In regard to online text banners, scholars have found several results on the use and effects of this advertisement method (Fennis & Stroebe, 2016). Online video advertisements however, are rather new. Television commercials are common ground, but the online world of video is becoming increasingly popular. It is therefore an interesting topic both for marketers and advertisers, as well as for scholars, to investigate the effects of online video advertisements on consumer attitude and behaviour.

Online video advertising is not quite the same as television commercials. Online video advertising is far more interactive, since consumers can usually click through to the website, web shop or search for more information immediately (Flaherty, Weinberger & Gulas, 2004). Besides, online video advertisements are often shorter than television commercials. On average, the length of an online video advertising is about 10 to 15 seconds, whilst the average length for a television commercial is 30 seconds (Hornung, 2014). The tone of a message can often be the same, for online and offline videos, humour is an often-used tone of message (Flaherty et al., 2004). Regularly, a low involvement product is used in combination with a humorous tone, since little elaboration is needed to process a message regarding a low involvement product. Several researchers found a positive relation between low involvement and humour, which suggests that humour works best for a low involvement product (e.g. Flaherty et al., 2004).

Even though several distinctions are made regarding length and message tone in the field of both online and offline video commercials, there is not much research done into the combination of length and message tone, length and product type, message tone and product type or a combination of these three aspects in online video commercials. Therefore, these variables altogether could lead to new, interesting insights regarding the effectiveness of online video advertising. The effect of message tone could depend on the length of a video, since longer videos tend to be more effective for emotional messages (Singh & Cole, 1993). Besides, product type could moderate both message tone and length, since the effectiveness of both depends on the involvement level of the product. High involvement products need more explanation and information, which suits a more informational (non-humorous) and longer approach.

Since the overall internet use, use of social media and online purchasing rates keep rising every year, we expect to see more developments in the years to come according to the online network, online advertisements and online purchasing. Therefore, we need more scientific and practical insights about online behaviour of consumers. Specifically, we will be looking at behaviour of consumers between 18 and 35 years old, since these consumers are most active on social media and in purchasing online. Therefore, they are highly exposed to online video advertising, since these advertisements usually show on social media platforms. This age group is called the "Millennial generation". Since there are multiple definitions for the Millennials (1980-2000), it is difficult to make a distinction in specific age. In the Oxford dictionary, a millennial is referred to as "a person reaching young adulthood in the early 21st century" (Oxford Dictionaries, 2017). Some dictionaries further refer to people born between 1980 and 1990 (Business Dictionary, 2017), whilst other refer to people born around 2000 (Cambridge Dictionary, 2017). Others state that both age groups, ranging from age 16 to 36 pertain to the Millennials (Bump, 2014; Main, 2013; The Urban Dictionary, 2017). The Urban Dictionary (January 8, 2017) states that the Millennial generation can be divided into generation Y and generation Z. Generation Y refers to people born between 1981 and 1991, whereas generation Z refers to people born between 1991 and 2001. This would include everybody between 16 and 36. In this research, we focus on age from 18 to 35, since statistics show that these people purchase most online and are most active on social media (Eurostat, 2017b). Consequently, these consumers are susceptible to the influences of online advertisements, since they are highly exposed to these advertisements on social media.

Gender is included as a demographic variable as well, since this might also play a role in the elaboration of humour. In the study of Petty, Cacioppo and Kasmer (2015), the intensity of humour did not have an effect on male respondents. However, female participants responded the least favourably to high intensity, stating that humour does not affect women as much as men.

This partly supports earlier findings that men appreciate humour in advertising more than women (Butcher & Whissell, 1984; Gorham & Christopher, 1990; Madden & Weinberger, 1982). Chan (2011) also adds that female consumers tend to be persuaded by non-humorous commercials, whereas male consumers tend to be persuaded by humorous commercials.

By using an experimental method, the aim of this study is to examine what the effects of message tone, the product type, and length of video advertisements are on advertisement attitude, product attitude, forwarding intention and purchasing intention. Besides, the goal of this research is to search for successful combinations between the factors of a video advertisements, such as length and message tone. The combination of a short video, which includes a humorous tone could for example suit the Facebook platform the best. One of the goals of this research is to create a framework that marketers can use when designing a video advertisement with a specific goal, for a specific platform and a specific target group. The formulated research questions therefore are as follows:

*RQ1: To what extent does the use of humour in video advertisements and the length of a video advertisement have an effect on the advertisement attitude, product attitude, forwarding intention and purchase intention of consumers?*

*RQ2: To what extent does product type moderate the effect of message tone in video advertisements and the length of a video advertisement on advertisement attitude, product attitude, forwarding intention and purchase intention of consumers?*

*RQ3: To what extent do advertisement attitude and product attitude of consumers mediate the effect of message tone in video advertisements and length of a video advertisement on forwarding intention and purchase intention of consumers?*

## 2. Theoretical framework

Marketing and advertising have changed a lot over the past years, with the spread of online video as one of the most promising platforms for viral marketing (Hsieh, Hsieh & Tang, 2012). Since the growth of video-sharing web sites (e.g. YouTube), online video is becoming increasingly popular. However, since the popularity rises, more and more videos appear online. Not all of these videos are made by professional advertisers, which results in amateurs shooting videos for brands as disguised advertising (Hsieh et al., 2012). The goal of these videos is to share product or brand information through the dissemination of the online videos. It is essential for advertisers to create persuasive videos in order to keep consumers interested and create positive attitudes (Hsieh et al., 2012).

Web advertisements offer great challenges for advertisers, since there is greater flexibility in the design and presentation of advertisements (Wang, Wang & Farn, 2009). Web advertisements do not only consist of text banners, but also pop-up windows, mini-games and floating ads. All these different kinds of advertisements, that are solely built for the Web, are designed to attract consumers' attention, to strengthen their attitudes on the brand, the product and eventually their purchase intention (Wang et al., 2009).

In order to predict advertisement effectiveness, several factors are considered important. First of all, the attitude towards the advertisement is an important factor, according to Lutz, MacKenzie and Belch (1983). Besides, consumer's beliefs and attitude play a major role in predicting advertising effectiveness (Mehta, 2000). Attitudes toward advertisements could even affect brand attitude and purchase intention (Suh & Yi, 2006).

### 2.1 Persuasion in advertising

For advertising to be effective, it is important to be persuasive enough to affect consumers' attitudes. The process of persuasion in advertising is however a complex process for advertisers and marketers. Consumers are often trying to avoid advertisements and when they realize the persuasive aim of the advertisement, this triggers consumers to resist the desired or planned persuasion effort. McCoy, Everard, Polak and Galletta (2007) even state that consumers create more negative intention when exposed to advertisements on web sites. They could for example build the intention to leave the web site or generate a negative attitude towards the brand or the web site. An advertisement that obscures the content of the web site or the disability to close the advert can result in feelings of intrusiveness, which in its turn will lead to irritation, negative attitudes toward the web site and intentions to abandon the web site (McCoy et al., 2007).

Besides, consumers become more aware of the persuasive intent when products or brands are placed prominently in the advertisement. Most online videos therefore try to discretely mention brands or products, so that the persuasive aim stays disguised (Cowley & Barron, 2008). If not, consumers will resist to persuasion and attitudes will not be affected.

## **2.2 Attitudes and intentions**

Advertising might be regarded effective when consumer attitudes are affected (Cowley & Barron, 2008; Hsieh et al., 2012; Wang et al., 2009). In this research, we focus on advertisement attitude, product attitude, forwarding intention and purchase intention.

### *2.2.1 Advertisement attitude*

Scholars define “attitudes” as evaluative responses, directed towards some attitude object, based on cognitive, affective and behavioural information (e.g. Eagly & Chaiken, 2007; Fennis & Stroebe, 2016; Zanna & Rempel, 1988). Attitudes reflect the way people evaluate the world around them, their likes and dislikes. Attitudes are therefore considered major determinants of behaviour by practically all social psychological models of behaviour (Fennis & Stroebe, 2016). The attitude towards an advertisement reflects the likes and dislikes of the consumer toward the online video. Several researches suggest that attitudes towards the advertisements directly influence brand attitudes and purchase intentions (e.g. Homer, 1990; Lutz et al. 1983; MacKenzie, Lutz & Belch, 1986; Mehta, 2000; Mehta & Sivadas, 1995; Mitchell & Olson, 2000; Saadeghvaziri, Dehdashti & Askarabad, 2013; Shimp, 1981; Suh & Yi, 2006).

### *2.2.2 Product attitude*

According to Kotler (1980), a product is defined as any object that can be offered for consumption. A product attitude therefore reflects the liking or disliking of the offered product. According to the Theory of Reasoned Action (Fishbein & Ajzen, 1975; Miniard & Cohen, 1983), consumers form a product attitude consistent with their beliefs and affective responses (Munch, Boller & Swasy, 1993). An important goal of advertising is to create positive product attitudes based on the product claims presented in the advertisement (Fennis & Stroebe, 2016). Positive product attitudes can influence purchase decisions, since attitude towards the product and the brand are powerful predictors of buying decisions. Product-related attribute beliefs predict purchase intention, according to Kim and Chan-Olmsted (2005). People tend to buy products they consider attractive or useful (Fennis & Stroebe, 2016). Besides, advertised product liking enhances positive forwarding intentions (Hsieh et al., 2012).

### *2.2.3 Forwarding intention*

Forwarding intention is defined as the willingness of a person to send a message to relatives through the Internet (Hsieh et al., 2012). According to Phelps, Lewis, Mobilio, Perry and Raman (2004), people enter a four-stage process when receiving an online video: receipt, decision to open, reading the message, and decision to forward. Hsieh et al. (2012) support this statement and suggest that consumers evaluate online videos after they open and view them in order to make a decision on whether to forward it or not. A key motive for consumers to forward a message is the entertainment and their own pleasure of that message (Hsieh et al., 2012). Therefore, the attitude towards the online video affects the intention to forward it. In other words, liking the advertised product or having a positive attitude toward the online video positively influences consumers' forwarding intentions.

### *2.2.4 Purchase intention*

Purchase intention is defined as "a consumer's objective intention toward a product" (Fishbein & Ajzen, 1975). Spears and Singh (2004) define purchase intention as "a consumer's conscious plan or intention to make an effort to purchase a product" (p. 56). In addition, online purchase intention focuses on whether consumers are willing and intending to buy a certain product via online transaction platforms (Pavlou, 2003). Several scholars have found a relationship between brand and advertisement cognitions and purchase intention (Kim & Chan-Olmsted, 2005; MacKenzie et al., 1986). Others stated that the affective and cognitive-based attitudes towards a brand have a direct effect on purchase intentions (Homer & Yoon, 1992; Kim & Chan-Olmsted, 2005).

## **2.3 Message tone: humour vs. non-humour**

Marketers try to use different theories of persuasion in order to persuade consumers into tailoring the negative intention and aiming to get the consumer to purchase their product (Fennis & Stroebe, 2016). One important feature found to significantly affect cognitive and emotional processing of advertisements is the emotional tone of the message (Bolls, Lang & Potter, 2001; Bolls, Meuhling & Yoon, 2003; Norris, Bailey, Bolls & Wise, 2012). There are different types of tone in a commercial, such as positive or negative and rational or emotional (Kotler and Armstrong, 2014; Manrai, Broach & Manrai, 1992). One of the most used emotional tones in advertising is the use of humour (Eisend, 2009; Frazer, Sheehan & Patti, 2002). Videos that include humour or comedy are nowadays even the most frequently viewed types of online videos (Purcell, 2010).



According to Eisend (2009), humour in advertising creates attention and awareness, and humour enhances liking and attitude towards the advertisement. Besides, humour reduces negative cognitions, whereas positive cognitions are enhanced (Eisend, 2009). Humour is also seen as a way of breaking through clutter. Besides, it captures attention for advertisements and it increases advertising recall (Spotts & Weinberger, 1997; Frazer et al., 2002). Speck (1991) also has shown that advertisements using humour draw more attention and induce greater liking than advertisements that do not use humour. Added to that, humorous commercials are shown to score significantly higher on attention than non-humorous commercials (Chan, 2011). Hsieh et al. (2012) add to this that viewers' affective responses are initiated by the use of humour, which attracts more attention to the advertisement.

In this research, to operationalize humour, it is important to have a clear definition of humour. It is difficult to achieve a consistent definition of humour, because of its various forms. The most widely accepted concept uses three types of humour: arousal-safety, disparagement and incongruity (Shabbir & Thwaites, 2007). Incongruity humour provides possibly the most popular strategy for humorous advertisements. When consumers' predictions aren't met, they transform the situation into a humorous, laughable situation (Eisend, 2009). Therefore, this is the type of humour that will be used in this study.

### *2.3.1 Message tone & advertisement attitude*

Hsieh et al. (2012) state that emotion, and especially humour should not only influence attention, but also the attractiveness of online videos. They add to this that humour creates affection and positively influences attitudes toward online videos (Hsieh et al., 2012). Strick, Holland, van Baaren, Knippenberg and Dijksterhuis (2013) enhance these statements by showing that humour also directly increases positive attitudes towards the advertisement. Eisend (2009) adds to this that humour overall enhances advertisement attitude and attention. Cline, Altsech and Kellaris (2003) have also found a direct correlation between advertisement attitude and perceived humour, such that funny advertisements earn the most favour, compared to more informational ones. Besides, humour is found to have a positive effect on persuasion, but only when the level of need for cognition is low (Chan, 2011). Scott, Klein and Bryant (1990) also state that humour in advertising will lead to positive effects when the humour is directly related and integrated with the message of the advertisement. Several other scholars claim that humour positively influences the attention, comprehension, persuasiveness and liking of advertisements (e.g. Cline et al., 2003; Cline & Kellaris, 1999; Eisend, 2009; Galloway, 2009; Geuens & De Pelsmacker, 2002; Norris & Colman, 1996; Tomkovick, Yelkur & Christians, 2001; Unger, 1995; Weinberger, Spotts, Campbell & Parsons, 1995; Weinberger & Gulas, 1992).

According to De Pelsmacker and Geuens (1999), increasing the intensity of humour leads to more positive advertisement attitudes. High intensity should lead to less irritation. Krishnan and Chakravarti (2003) enhance the effect of intensity, by stating that strong humour may attract attention by breaking through advertising clutter.

Based on the empirical research above, the following hypothesis is stated:

H1: Video advertisements with a humorous tone create a more positive advertisement attitude than video advertisements with a non-humorous tone.

### *2.3.2 Message tone & product attitude*

According to Weinberger and Gulas (1992), humour in advertising positively influences several factors, such as product attitude. Polyorat, Alden and Kim (2007) add to this that factual advertisements provide more direct descriptions of product features and benefits. As a result, there is relatively little emphasis on a characteristic story that might connect the consumer with the product, therefore possibly leading to less involvement with the product. In turn, the product attitude will be less affected than with the use of humour.

Based on the empirical research above, the following hypothesis is stated:

H2: Video advertisements with a humorous tone create a more positive product attitude than video advertisements with a non-humorous tone.

### *2.3.3 Message tone & forwarding intention*

Scholars state that perceived humour in online videos has a positive effect on the advertisement attitude, towards the online video (Hsieh et al., 2012). In the current digital world, people tend to share their emotions, deriving from a positive advertisement attitude, with their friends and family (Dobele, Lindgreen, Beverland, Vanhamme & Van Wijk, 2007). Emotion is an important factor in online video marketing, since it is a key motivator for sharing an online video with relatives (Rimé, Corsini & Herbette, 2002). When advertisements are perceived as funny, consumers tend to share their positive emotions or attitude with other online users. Therefore, the use of humour might contribute to the intention to forward an online video (Hsieh et al., 2012).

Based on the empirical research above, the following hypothesis is stated:

H3: Video advertisements with a humorous tone create a more positive forwarding intention than video advertisements with a non-humorous tone.

### *2.3.4 Message tone & purchase intention*

Eisend (2009) claims that humour generally enhances advertisement attitude and brand attitude. He adds to this that humour significantly enhances positive affective reactions, attention, and purchase intention. Chan (2011) also discovered that consumers perceive advertised products to be slightly more positive and were more likely to purchase it when a humorous appeal was used, compared to a non-humorous appeal.

Based on the empirical research above, the following hypothesis is stated:

H4: Video advertisements with a humorous tone results in a higher level of positive purchase intention than video advertisements with a non-humorous tone.

### **2.4 Length**

A number of researchers have studied the effects of message length on advertisement effectiveness. Singh and Cole (1993) suggest that there might be a relationship between the length of an advertisement and the ability of consumers to learn information passed on through the advertisement. They state that longer messages enable repeated information, such as brand specifics or arguments and give consumers more time to process this information than when viewing a shorter message (Singh & Cole, 1993). Other scholars state that longer video advertisements “tend to result in greater recollection of the information contained in advertisements” (Singh & Rothschild, 1983; Mord & Gilson, 1985; Fabian, 1986) and greater recall of brand names or products (Singh & Cole, 1993). An increased message length should also facilitate processing by repeating key points, since repeated information enhances the encoding of information (Pechmann & Stewart, 1988; Rethans, Swasy & Marks, 1986; Singh & Cole, 1993; Singh, Balasubramanian & Chakraborty, 2000). In contrast, shorter messages don't enable consumers to pay attention as much since they are given less time to examine the information (MacKenzie, 1986).

Singh and Cole (1993) also state that brand names are better recalled with emotionally based 30-second-commercials than with 15-second commercials. Although no difference was found in information-based commercials. This might suggest an interaction effect between tone of message and length, see paragraph 2.4.5 (p. 14-15). Other studies suggest that 30s commercials were more effective in general than 15s-commercials anyway (Mord & Gilson, 1985; Patzer, 1991). Newell and Henderson (1998) also found that longer exposure leads to significantly higher brand recall than shorter promotional messages. Overall, previous research suggests that longer advertisements enable more time to process information, which in turn leads to familiarity with the information in the advertisement, such as the brand name or the product (Singh and Cole, 1993).

#### *2.4.1 Length & advertisement attitude*

According to Wells, Leavitt & McConville (1971) a longer commercial increases the opportunity for consumers to elaborate on the message, since it presents more “product usage vignettes”. However, they argue that the longer elaboration leads to a negative attitude toward the advertisement due to counter arguing. Wheatley (1968) however states that commercial length does affect the attitude towards the advertisement in a positive manner, such that longer commercials lead to more positive advertisement attitudes. According to other scholars, longer commercials tend to be more effective in general than shorter advertisements (Mord & Gilson, 1985; Newell & Henderson, 1998; Patzer, 1991). As stated above, longer commercials enable more time to process information given in the advertisements, leading to more positive attitudes towards the advertisement or brand in general (e.g. Newell & Henderson, 1998; Singh & Cole, 1993).

Singh and Cole (1993) additionally found that shorter informational commercials generate more positive affective responses than longer informational commercials. For emotional commercials it is the other way around: longer emotional commercials create more positive advertisement attitudes than shorter ones (Singh & Cole, 1993). As stated before, this could mean that length and tone of a message are interacting (see paragraph 2.4.5, p. 14-15). However, looking at a possible main effect for length on advertisement attitude, most scholars tend to suggest that longer commercials are more effective than shorter commercials in terms of advertisement attitude and brand recall.

Based on the empirical research above, the following hypothesis is stated:

H5: Longer video advertisements create a more positive advertisement attitude than shorter video advertisements.

#### *2.4.2 Length & product attitude*

In the research of Rethans et al. (1986), there were no significant effects found regarding product attitude and length, suggesting that product attitude does not get more positive when the advertisements are shortened or lengthened (Rethans et al., 1986). However, other studies seem to suggest that the more time consumers have to process information, the more familiar they become with the product thus leading to a more positive product attitude (Newell & Henderson, 1998; Singh & Cole, 1993).

Based on the empirical research above, the following hypothesis is stated:

H6: Longer video advertisements create a more positive product attitude than shorter video advertisements.

### *2.4.3 Length & forwarding intention*

No significant research has been found about the effect of message length on forwarding intentions. There are general results found on the effects of message length on advertisement attitude. Longer advertisements lead to more positive advertisement attitudes (e.g. Newell & Henderson, 1998; Singh & Cole, 1993). Positive advertisement attitudes could lead to more positive forwarding intentions. This might suggest that longer advertisements could lead to more positive forwarding intentions. However, this suggests that the effect of length on forwarding intention is mediated by advertisement attitude. There is no suggestion for a main effect of length on forwarding intention, and no previous researches who support the direct link between length and forwarding intention.

Based on the empirical research above, the following hypothesis is stated:

H7: There is no effect of a difference in length in video advertisements on the consumer's forwarding intention.

### *2.4.4 Length & purchase intention*

Singh and Cole (1993) found that longer emotional commercials create more positive purchase intentions than shorter ones (Singh & Cole, 1993). This could be explained by previous findings suggesting that longer exposure leads to significantly higher brand recall than shorter advertisements (MacKenzie, 1986; Newell & Henderson, 1998; Singh & Cole, 1993). A greater brand recall, and thus a higher familiarity with the brand or product, could in turn lead to more positive purchase intentions.

Based on the empirical research above, the following hypothesis is stated:

H8: Longer video advertisements create a more positive purchase intention than shorter video advertisements.

### *2.4.5 Interrelation effects: message tone and length*

Elliott (2005) states that commercials longer than 30 seconds are intended to attract attention by giving marketers more time to tell stories and therefore provide more information. The shorter videos are meant to have a surprise value: they are usually over before you can think about counterarguments. Singh and Cole (1993) also investigated the use of informational and emotional commercials, suggesting that that longer emotional commercials create more positive advertisement attitudes than shorter ones. Stating that, this could also mean that length and tone of a message are interacting. However, no effect was found for the informational commercial. Besides, Singh and Cole (1993) stated that brand names are better recalled with emotionally based long commercials, compared to shorter commercial.

This might suggest a more positive product attitude and purchase intention, since brand recall leads to more familiarity with the product or brand, which in turn leads to more positive attitudes. Therefore, the following hypotheses are stated:

H9a: Longer video advertisements with a humorous message tone create a more positive advertisement attitude than shorter video advertisements with a humorous message tone.

H9b: There is no effect of length in combination with a non-humorous message tone on advertisement attitude.

H9c: Longer video advertisements with a humorous message tone create a more positive product attitude than shorter video advertisements with a humorous message tone.

H9d: There is no effect of length in combination with a non-humorous message tone on product attitude.

H9e: There is no interaction effect of length and message tone on forwarding intention.

H9f: Longer video advertisements with a humorous message tone create a more positive purchase intention than shorter video advertisements with a humorous message tone.

H9g: There is no effect of length in combination with a non-humorous message tone on purchase intention.

## 2.5 Product type

During the creation of online video advertisements, the type of product may play a role in the marketing approach. Usually, products are classified and divided into two categories: high involvement/risk and low involvement/risk (Aurifeille, Quester, Lockshin & Spawton, 2002; Barber, Ismail & Dodd, 2008; Celsi & Olson, 1988; Flaherty et al., 2004; Rossiter, Percy & Donovan, 1991; Vaughn, 1980, 1986; Weinberger et al., 1995).

These categories suggest a difference in decision making. Low involvement/risk products usually involve (purchase) decisions that are less important, routinely made or involve a lower price category. High involvement/risk products involve more difficult purchase decisions, costing more time and effort, since these products are often more expensive and/or more important for the consumer (Barber et al., 2008; Flaherty et al., 2004). Product involvement is an important factor to take into account, since it influences several factors, such as purchase intention (Hoonsopon & Puriwat, 2016; Quester & Smart, 1998).

### *2.5.1 Product type and message tone*

As stated above, product type influences several consumer behaviours, such as purchase intention (Quester & Smart, 1998). In regard to the use of humour, several researches have been done on the effect of product type. According to Flaherty et al. (2004) low involvement/risk products are more suitable for the use of humour than high involvement/risk products. Petty, Cacioppo and Schumann (1983) add to this that lower decision-making has a major relation to peripheral cues, such as music and humour. Others also add that humour in advertising seems to be more effective in regard to low involvement/risk products (Leonidas, Christina & Yorgos, 2009; Spotts, Weinberger & Parsons, 1997; Toncar, 2001; Weinberger & Spotts, 1989). Notably, the consumer market segments that most frequently employ humour in advertisements are non-durable, low-involvement products such as snack foods, soft drinks, and beer (Madden & Weinberger, 1984; Weinberger & Campbell, 1991). As stated earlier, advertising is scored as effective when consumer attitudes, such as advertisement attitude, product attitude and/or purchase intention are affected (Cowley & Barron, 2008; Hsieh et al., 2012; Lutz et al., 1983; Mehta, 2000; Wang et al., 2009; Suh & Yi, 2006).

Based on the empirical research above, the following hypotheses are stated:

H10a: Product type moderates the effect of message tone on advertisement attitude, suggesting that low involvement products lead to more positive advertisement attitudes when humour is used, but not when non-humour is used. The other way around, high involvement products lead to more positive advertisement attitudes when non-humour is used, but not when humour is used as message tone.

H10b: Product type moderates the effect of message tone on product attitude, suggesting that low involvement products lead to more positive product attitudes when humour is used, but not when non-humour is used. The other way around, high involvement products lead to more positive product attitudes when non-humour is used, but not when humour is used as message tone.

H10c: Product type does not moderate the effect of message tone on forwarding intention.

H10d: Product type moderates the effect of message tone on purchase intention, suggesting that low involvement products lead to more positive purchase intentions when humour is used, but not when non-humour is used. The other way around, high involvement products lead to more positive purchase intentions when non-humour is used, but not when humour is used as message tone.

### *2.5.2 Product type and length*

As mentioned earlier, several scholars state that longer messages enable repeated information and give consumers more time to process this information, compared to a shorter message (Fabian, 1986; MacKenzie, 1986; Mord & Gilson, 1985; Pechmann & Stewart, 1988; Rethans et al., 1986; Singh et al., 2000; Singh & Cole, 1993; Singh & Rothschild, 1983). Regarding product type, high involvement products often require a high level of knowledge regarding the product (Grunert & Grunert, 1995). Therefore, this might suggest that longer video advertisements work best for high involvement products, whereas shorter advertisements might work best for low involvement products, since they involve fewer attributes. The data structure and content for low involvement products are less complex and therefore easily made based upon emotions instead of high knowledge (Bech-Larsen & Nielsen, 1999). Elliott (2005) adds to this that commercials longer than 30 seconds are intended to provide more information, whereas shorter commercials are meant to have a surprise value, since they are over before the consumers realizes it.

As stated earlier, advertising is scored as effective when consumer attitudes, such as advertisement attitude, product attitude and/or purchase intention are affected (Cowley & Barron, 2008; Hsieh et al., 2012; Lutz et al., 1983; Mehta, 2000; Wang et al., 2009; Suh & Yi, 2006). Therefore, the following hypotheses are stated:

H11a: Product type moderates the effect of length on advertisement attitude, suggesting that low involvement products lead to more positive advertisement attitudes when a short video is used, but not when a long video is used. The other way around, high involvement products lead to more positive advertisement attitudes when a long video is used, but not when a short video is used.

H11b: Product type moderates the effect of length on product attitude, suggesting that low involvement products lead to more positive product attitudes when a short video is used, but not when a long video is used. The other way around, high involvement products lead to more positive product attitudes when a long video is used, but not when a short video is used.

H11c: Product type does not moderate the effect of length on forwarding intention.

H11d: Product type moderates the effect of length on purchase intention, suggesting that low involvement products lead to more positive purchase intentions when a short video is used, but not when a long video is used. The other way around, high involvement products lead to more positive purchase intentions when a long video is used, but not when a short video is used.



## 2.6 Mediation effects

This research proposes that two factors determine advertisement attitude (H1, H5) and we have found that advertisement attitude is positively associated with forwarding intention (Hsieh et al., 2012). Besides, research has shown that advertisement attitude is positively associated with purchase intention as well (e.g. Homer, 1990; Lutz et al., 1983; MacKenzie et al., 1986; Mehta, 2000; Mehta & Sivadas, 1995; Mitchell & Olson, 2000; Saadeghvaziri et al., 2013; Shimp, 1981; Suh & Yi, 2006). Therefore, it is reasonable to treat advertisement attitude as a mediator.

Based on the empirical research above, the following hypotheses are stated:

H12a: Advertisement attitude mediates the effect of message tone on forwarding intention.

H12b: Advertisement attitude mediates the effect of length on forwarding intention.

H12c: Advertisement attitude mediates the effect of message tone on purchase intention.

H12d: Advertisement attitude mediates the effect of length on purchase intention.

Besides advertisement attitude, two factors are hypothesized to determine product attitude as well (H2, H6). Research has shown that product attitude is positively associated with forwarding intention (Hsieh et al., 2012). Added to that, product attitude positively relates to purchase intention as well (Fennis & Stroebe, 2016; Kim & Chan-Olmsted, 2005; MacKenzie et al., 1986). Therefore, product attitude is also treated as a mediator.

Based on the empirical research above, the following hypotheses are stated:

H13a: Product attitude mediates the effect of message tone on forwarding intention.

H13b: Product attitude mediates the effect of length on forwarding intention.

H13c: Product attitude mediates the effect of message tone on purchase intention.

H13d: Product attitude mediates the effect of length on purchase intention.

## 2.7 Research question

Based on the literature above, the following research questions are formulated:

*RQ1: To what extent does the use of humour in video advertisements and the length of a video advertisement have an effect on the advertisement attitude, product attitude, forwarding intention and purchase intention of consumers?*

RQ2: To what extent does product type moderate the effect of message tone in video advertisements and the length of a video advertisement on advertisement attitude, product attitude, forwarding intention and purchase intention of consumers?

RQ3: To what extent do advertisement attitude and product attitude of consumers mediate the effect of message tone in video advertisements and length of a video advertisement on forwarding intention and purchase intention of consumers?

**2.8 Research model**

Based on the literature above, a research model including all the possible relations between the independent variables, proposed moderators and mediators, and dependent variables is created. The model is illustrated in figure 1 below.

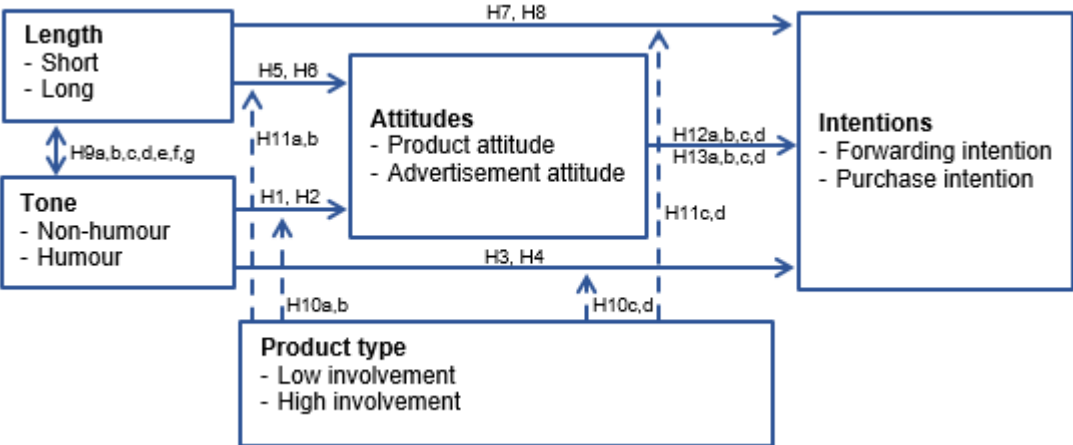


Figure 1. Research model as proposed by means of the theoretical framework

## 3. Methods

The main purpose of this study was to examine whether the differences in message tone, the length of a video advertisement and the product type influence advertisement attitude, product attitude, forwarding intention and purchase intention. With this research, the causal relationship between independent factors (message tone and length of advertisement) and dependent factors (advertisement attitude, product attitude, forwarding intention and purchase intention), as well as the moderator effect of product type, as proposed in the hypotheses was examined. An experimental method was used to manipulate the independent factors and to measure the dependent factors.

### 3.1 Experimental design

This study used an experiment, with a 2 (product type: low involvement/high involvement) x 2 (message tone: non-humour/humour) x 2 (length: short/long) factorial design.

#### 3.1.1 Preliminary study

In order to select a suitable low involvement product and a suitable high involvement product, a preliminary study was conducted amongst 25 participants. The participants were asked to rate several products based on the degree of product involvement along a 7-point Likert scale, ranging from 1 (totally disagree) to 7 (totally agree). The preliminary study included 20 products to represent low product involvement (shampoo, detergent, soda, magazines, sunscreen, pizza, razors, candybars, beer, cd's and dvd's) and high product involvement (watch, laptop, mobile phone, air travel, tablet, photo camera, go pro camera, city trip, vacuum cleaner) based on previous research (Akbari, 2015; Bech-Larsen & Nielsen, 1999; Dahlén, Ekborn & Mörner, 2000; Hoonsopon & Puriwat, 2016). The items that had to be scored included statements such as: "This product is important to me" and "I need this product" (Hoonsopon & Puriwat, 2016). All items can be found in Appendix 11.2 (Table 11, p. 57).

After removing two questions, the findings showed that CDs were rated the lowest ( $\bar{X}$  = 1.98;  $\alpha$  = 0.919), followed by DVDs ( $\bar{X}$  = 2.14;  $\alpha$  = 0.935), magazines ( $\bar{X}$  = 2.70;  $\alpha$  = 0.953), soda ( $\bar{X}$  = 2.73;  $\alpha$  = 0.912), Go Pro camera ( $\bar{X}$  = 2.94;  $\alpha$  = 0.962), photo camera ( $\bar{X}$  = 3.46;  $\alpha$  = 0.978), candy bar ( $\bar{X}$  = 3.49;  $\alpha$  = 0.919), pizza ( $\bar{X}$  = 3.58;  $\alpha$  = 0.946), tablet ( $\bar{X}$  = 4.05;  $\alpha$  = 0.937), watch ( $\bar{X}$  = 4.06;  $\alpha$  = 0.965), beer ( $\bar{X}$  = 4.34;  $\alpha$  = 0.951), shampoo ( $\bar{X}$  = 4.53;  $\alpha$  = 0.921), vacuum cleaner ( $\bar{X}$  = 4.63;  $\alpha$  = 0.890), air travel ( $\bar{X}$  = 4.64;  $\alpha$  = 0.894), detergent ( $\bar{X}$  = 4.72;  $\alpha$  = 0.876), razors ( $\bar{X}$  = 4.77;  $\alpha$  = 0.934), sunscreen ( $\bar{X}$  = 4.93;  $\alpha$  = 0.855), city trip ( $\bar{X}$  = 4.97;  $\alpha$  = 0.851), laptop ( $\bar{X}$  = 6.08;  $\alpha$  = 0.934), and smartphone ( $\bar{X}$  = 6.16;  $\alpha$  = 0.779).

Since CDs, DVDs and magazines are no common subjects for online video advertisements, we chose to use soda as the low involvement product. Smartphone showed the greatest product involvement, therefore, soda and smartphone were selected to represent the low involvement and high involvement product type, respectively.

### 3.1.2 Manipulations

After performing the preliminary study on product involvement, the experimental videos were created by filming four commercials; one commercial including a smartphone for the high involvement product type, and one commercial including soda for the low involvement product type. Both commercials were created in a humorous version and a non-humorous version.

For the smartphone advertisement, the non-humorous video showed images of the smartphone, showing off all the features of the product. The voice-over tells a story about the features of the phone and why you should buy it. The humorous video for the smartphone advertisement showed features of the smartphone in a non-usual manner, such as using the smartphone as a cutting board or using the camera as a magnifying glass. The voice-over tells the same story about the features of the phone and why you should buy it.

For the soda advertisement, the non-humorous video showed an athlete who goes running in the park and drinks the soda to regain energy. The voice-over tells a story about the advantages of drinking this soda and why you should buy it. The humorous video for the soda brand showed a girl in the supermarket. She can't reach the highest shelf, and a boy shows up to grab the product for her. However, he decides to take the soda home himself. The voice-over tells the same story about the features of the soda brand and why you should buy it.

After manipulating humour in both the smartphone advertisement and the soda advertisement, every video was edited into a short and long version. The original video was kept as the long version, which lasted for 45 seconds, whereas the short video was edited into a 15 second video, based on previous research (Hornung, 2014; Jeong, 2007; Rethans et al., 1986; Singh & Cole, 1993). Table 1 below (p. 21) shows the manipulations of the different video versions.

**Table 1**  
*Video advertisement manipulations*

	<b>Product type</b>	<b>Message tone</b>	<b>Length</b>
<b>Video 1</b>	Low (soda)	Humour	Short (15 sec)
<b>Video 2</b>	Low (soda)	Non-humour	Short (15 sec)
<b>Video 3</b>	Low (soda)	Humour	Long (45 sec)
<b>Video 4</b>	Low (soda)	Non-humour	Long (45 sec)
<b>Video 5</b>	High (smartphone)	Humour	Short (15 sec)
<b>Video 6</b>	High (smartphone)	Non-humour	Short (15 sec)
<b>Video 7</b>	High (smartphone)	Humour	Long (45 sec)
<b>Video 8</b>	High (smartphone)	Non-humour	Long (45 sec)

### 3.1.3 Pretest

After creating the eight videos for each condition, a pretest was designed to measure validity of the online video in terms of perceived humour and length. A total of 8 participants were randomly assigned to one of the eight conditions, shown in table 1 (p. 20). Each participant viewed one online video and completed a pretest questionnaire. The pretest questionnaire included 2 items that measured perceived length, 3 items that measured perceived humour and 7 items that measured product involvement, based on previous research (Bloch, 1981; Bruwer & Buller, 2013; Hochgraefe, Faulk & Vieregge, 2012; Hollebeek, Jaeger, Brodie & Balemi, 2007; Hoonsopon & Puriwat, 2016; Hsieh et al., 2012; Mittal & Lee, 1989; Suh & Yi, 2006) and the preliminary study. The measurement items are found in Appendix 11.2 (Table 12, p. 57).

After conducting a successful factor analysis, the findings regarding length showed that the short, non-humorous soda commercial was rated the lowest ( $\bar{X} = 1.00$ ), just like the short non-humorous smartphone commercial ( $\bar{X} = 1.00$ ), and the short humorous smartphone commercial ( $\bar{X} = 1.00$ ). These three videos were followed by the short humorous soda commercial ( $\bar{X} = 4.00$ ) and the long non-humorous soda commercial ( $\bar{X} = 4.00$ ). The highest scores were given to the long humorous soda commercial ( $\bar{X} = 4.50$ ), the long humorous smartphone commercial ( $\bar{X} = 4.50$ ), and the long non-humorous smartphone commercial ( $\bar{X} = 5.00$ ). Therefore, the manipulations for the variable length were accepted. Regarding the variable of message tone, all four non-humorous videos scored the lowest, with the long non-humorous soda commercial at the bottom ( $\bar{X} = 2.00$ ), followed by the short non-humorous smartphone commercial ( $\bar{X} = 3.00$ ), the long non-humorous smartphone commercial ( $\bar{X} = 3.00$ ), and the short non-humorous soda commercial ( $\bar{X} = 3.33$ ). All four humorous videos gained the highest scores, starting with the short humorous soda commercial ( $\bar{X} = 3.67$ ), followed by the short humorous smartphone commercial ( $\bar{X} = 4.00$ ), the long humorous smartphone commercial ( $\bar{X} = 4.00$ ), and the long humorous soda commercial ( $\bar{X} = 4.33$ ). Therefore, the manipulations for message tone were accepted as well.

Finally, regarding the product type manipulations, all four low involvement videos scored the lowest, starting with the long non-humorous soda commercial ( $\bar{X} = 1.00$ ), followed by the long humorous soda commercial ( $\bar{X} = 1.14$ ), the short non-humorous soda commercial ( $\bar{X} = 2.57$ ), and the short humorous soda commercial ( $\bar{X} = 2.71$ ). All four high involvement videos scored the highest, starting with the short non-humorous smartphone commercial ( $\bar{X} = 4.00$ ), followed by the long humorous smartphone commercial ( $\bar{X} = 4.57$ ), the long non-humorous smartphone commercial ( $\bar{X} = 4.71$ ), and the short humorous smartphone commercial ( $\bar{X} = 5.00$ ). Therefore, the manipulations for product type were also accepted. Consequently, all manipulations were accepted in order to conduct the experiment.

### 3.2 Experimental procedure

A simulated web site was created for this study, with the look of a social network website, since most online videos are shown and forwarded through social networks (see figure 2 below, p. 23). The online approach provided an efficient means of identifying and reaching online users, and is the best manner to simulate an online experience for the respondents. Participants were approached through the social network, Facebook. Before showing the online video, participants were shown an introduction text with instructions. Participants were asked to fill in the questionnaire in an honest manner, and were told that no wrong answers are possible. Besides, they were ensured that the answers remain confidential and for academic purposes only. After receiving these instructions, participants were asked a series of questions about demographics. After that, they viewed one of the randomly assigned online videos, after which they answered a series of control questions, mixed with the survey questions. The experiment was conducted amongst Dutch citizens. Therefore, the introduction texts, questionnaires and video samples are designed in Dutch language. All participants voluntarily joined this experiment, without any incentive. They did have a chance of winning a cake when entering their e-mail address after finishing the questionnaire. Besides, they could fill in their e-mail address if they wanted to be updated on the outcomes of this study. The cover story, including instruction texts, is found in Appendix 11.1 (p. 56).



Figure 2. Preview of simulated website

### 3.2.1 Measures

All questionnaires consisted out of the same questions, including several questions about the independent variables advertisement attitude, product attitude, forwarding intention and purchase intention. Additionally, control questions regarding length, perceived humour, product involvement, forwarding worries, and experience with forwarding messages through the Internet were included. Demographics included in this questionnaire were gender, age and education.

To measure advertisement attitude, 6 items were used adapted from previous research on online video (Homer, 1990; Hsieh et al., 2012; MacKenzie & Lutz, 1989).

An example question would be “This video is pleasant”.

To measure product attitude, 5 items were used adapted from previous research (Batra & Ray, 1986; Chae & Hoegg, 2013; Kamins & Marks, 1987; Pang & Qiu, 2016). An example question would be “I think the product has beneficial purposes for me”.

To measure forwarding intention, 3 items were used adapted from previous research (Chiu, Hsieh, Kao & Lee, 2007; Hsieh et al., 2012). An example question would be “I think this video is worth sharing with others”.

To measure purchase intention, 5 items were used adapted from previous research (Bian & Forsythe, 2012; Dodds, Monroe & Grewal, 1991; Jiang, Chan, Tan & Chua, 2010; Lu, Chang & Chang, 2014; Saadeghvaziri et al., 2013; Spears & Singh, 2004). An example question would be “I would purchase the product presented in the video”.

Respondents rated their agreement with the items on a five-point Likert scale, ranging from 1 (disagree) to 5 (agree), based on comments from participants in the pretest, who mentioned that a 7-point Likert was too much. All measurement items are found in Appendix 11.2 (Table 13, p. 58).

Several demographic factors, such as age, education, and gender were included, as well as control variables. To control perceived length and perceived humour, the same questions as used in the preliminary test were embedded in the questionnaire. To control product involvement, 3 out of 9 questions as used in the preliminary test were embedded, supplemented by four new questions, such as “I use this product often” and “I need time to think about buying this product”.

In addition, to control external factors influencing forwarding intentions, two questions were included, such as “This video is too large to attach in an e-mail” (Hsieh et al., 2012). Besides, respondents were asked about their prior experience with forwarding messages through the Internet, stating “I often forward received messages to my friends and family through the Internet”. All control questions for perceived length, perceived humour, product involvement, forwarding worries and forwarding experience were rated on a five-point Likert scale, ranging from 1 (disagree) to 5 (agree).

To control individual differences, participants were randomly shown one of the eight different video samples. Besides, to control for prior familiarity or preference for a specific brand, the video samples used a non-existent smartphone brand, and an unknown soda brand. All measurement items for demographics and control questions are found in Appendix 11.2 (Table 14 and 15, p. 58-59).

### 3.2.2 Validity

After gathering data, a Factor Analysis was performed to identify components for the independent and dependent variables. A Varimax rotation was conducted, where loadings less than .40 were excluded in the analysis.

#### 3.2.2a Dependent variables

The analysis for the independent variables categorized the 10 items into 3 components. Not all items were classified according to the pre-formed constructs for the variable product involvements. The items “I look for more information before buying this product” and “I need time to think about buying this product” were removed after conducting the factor analysis. The new results are shown in table 2 (p. 25). The Cronbach’s alpha for the construct of length is .950, which shows a high reliability. The Cronbach’s alpha for the construct of tone is .888, which shows a high reliability. The removal of the item “This video is amusing” would lead to a higher Cronbach’s alpha ( $\alpha = .918$ ), however since this is not a significantly higher score, no items were removed. The Cronbach’s alpha for the construct of product involvement is .861, which shows a high reliability. The removal of the item “I need this product” would lead to a higher Cronbach’s alpha ( $\alpha = .863$ ), however since this is not a significantly higher score, no items were removed.

**Table 2**

*Results of the Factor Analysis for the constructs used as manipulation checks*

Construct	Item	Component		
		1	2	3
Length ( $\alpha = .950$ )	This is a long video (R)			.975
	This video is long			.973
Tone ( $\alpha = .888$ )	This video is funny		.933	
	This video is humoristic		.926	
	This video is amusing		.846	
Product involvement ( $\alpha = .861$ )	This product is important to me	.892		
	I am interested in this product	.818		
	I need this product (R)	.685		
	I am willing to spend a lot of money on buying this product	.768		
	I use this product often	.837		

Principal Component Analysis with Varimax rotation, Kaiser Normalization of the items for independent variables.

\* Items with an absolute value below .40 are suppressed.

(R) reverse coded item



### 3.2.2b Dependent variables

The analysis for the dependent variables categorized the 14 items into 4 components. Not all items were classified according to the pre-formed constructs for the variable advertisement attitude. The items “This video is interesting”, “This video is attractive” and “This video is good” were removed after conducting the factor analysis. For the variable product attitude, the items “This is a good product” and “This product is reliable” were removed. The new results are shown in table 3 (p. 26).

The Cronbach’s alpha for the construct of advertisement attitude is .721, which shows a marginal reliability. The removal of any items would lead to a lower Cronbach’s alpha; therefore no items were removed. The Cronbach’s alpha for the construct of product attitude is .892, which shows a high reliability. The removal of any items would lead to a lower Cronbach’s alpha; therefore no items were removed. The Cronbach’s alpha for the construct of forwarding intention is .740, which shows a marginal reliability. The removal of any items would lead to a lower Cronbach’s alpha; therefore no items were removed. The Cronbach’s alpha for the construct of purchase intention is .939, which shows a high reliability. The removal of the item “I will definitely buy this product” would lead to a higher Cronbach’s alpha ( $\alpha = .946$ ), however since this is not a significantly higher score, no items were removed.

**Table 3**  
*Results of the Factor Analysis for dependent variable items*

Construct	Item	Component			
		1	2	3	4
Advertisement attitude ( $\alpha = .721$ )	This video is to be understood				.625
	This video is pleasant (R)				.844
	This video gives me a positive feeling (R)				.826
Product attitude ( $\alpha = .892$ )	This product is effective			.840	
	I like this product			.781	
	This product is attractive			.746	
Forwarding intention ( $\alpha = .740$ )	This video is worth sharing with others		.838		
	I would share this video with my friends via Facebook		.815		
	I would recommend this video to others (R)		.736		
Purchase intention ( $\alpha = .939$ )	I would buy this product	.775			
	I would consider buying this product	.880			
	I am interested in buying this product	.884			
	The chance that I will buy this product is very big (R)	.866			
	I will definitely buy this product (R)	.770			

Principal Component Analysis with Varimax rotation, Kaiser Normalization of the items for independent variables.

\* Items with an absolute value below .40 are suppressed.

(R) reverse coded item

### *3.2.3 Manipulation check*

In order to perform a manipulation check for the main study, a t-test was conducted.

First, all participants that did not indicate the correct framing they were deleted from the data set. This happened when they judged a short video as a long video or vice versa, a humorous video as non-humorous or vice versa, or when they judged the low involvement product as high involvement or vice versa. However, this would mean that 125 respondents would have to be deleted. Secondly, the manipulations were changed, in the way that all respondents who scored the video as humorous were labelled as “humour”, instead of keeping the labels invented by the researcher. The reason for this procedure was to ensure that the framing was measured correctly. A respondent who viewed a humorous video, but did not label that as humorous, would not fit the humour frame properly. After all, the perception of the respondent decides the framing and not the pre-invented framing by the researchers.

In total, 318 surveys have been collected, from which 300 remained after cleaning the data and excluding respondents that did not fit the age group between 18 and 35. The remaining data set was tested for normality, using an independent samples t-test. The results now showed a significant difference for all three constructs. For the construct of length, participants significantly scored the short version as shorter ( $M = 1.43$ ,  $SD = .493$ ) than the long version ( $M = 4.31$ ,  $SD = .507$ ),  $t(278) = -46.66$ ,  $p < .001$ . For the construct of tone, participants significantly scored the humorous version as more humorous ( $M = 3.91$ ,  $SD = .458$ ) than the non-humorous version ( $M = 1.72$ ,  $SD = .598$ ),  $t(274) = 34.47$ ,  $p < .001$ . For the construct of product involvement, participants significantly scored the low involvement product as lower ( $M = 1.60$ ,  $SD = .579$ ) than the high involvement product ( $M = 3.77$ ,  $SD = .474$ ),  $t(281) = -34.18$ ,  $p < .001$ . In summary, it can be determined that the manipulation checks for length, tone and product type in the main study were successful.

### *3.2.4 Respondents*

As mentioned above, a total of 318 respondents voluntarily participated in this research. However, after removing respondents that did not meet the age group between 18 and 35, 300 respondents remained. Out of those respondents 27% were male, whilst the majority of 73% were female. All of them range in age from 18 to 35 ( $M = 24.95$ ,  $SD = 4.235$ ). The majority was highly educated, with 32% of respondents with a higher professional education (HBO) and 32% with an academic education (WO). Table 4 (p. 28) shows the complete demographic information of all respondents, divided by age, gender and education level. Respondents were randomly divided into the eight conditions, equally distributed. However, since some respondents did not perceive the frame as intended, the distribution changed. Fortunately, the distribution is still moderately equal, only the majority of respondents perceived their video as low involvement, non-humorous and short, as shown in table 5 (p. 28).

**Table 4***Demographic information about respondents, divided by age, gender and education level*

<b>Demographic variables</b>	<b>n</b>	<b>%</b>	<b>M</b>	<b>SD</b>
<b>Age</b>			24.95	4.235
<b>Gender</b>				
Male	81	27.0		
Female	219	73.0		
<b>Education level</b>				
Preparatory secondary vocational education (VMBO)	4	1.3		
Senior general secondary school (HAVO)	23	7.7		
Pre-university education (VWO)	35	11.7		
Secondary vocational education (MBO)	46	15.3		
Higher professional education (HBO)	96	32.0		
Academic/university education (WO)	96	32.0		

**Table 5***Distribution of respondents per condition*

<b>Product type</b>	<b>Tone</b>	<b>Length</b>	<b>n</b>
Low involvement	Humour	Short	34
		Long	23
	Non-humour	Short	69
		Long	28
High involvement	Humour	Short	26
		Long	19
	Non-humour	Short	24
		Long	21

## 4. Results

This study intended to test the effect of length and message tone on advertisement attitude, product attitude, forwarding intention and purchase intention, test the interaction effect of these variables and test a moderator effect for product type.

### 4.1 Main effects

After conducting a MANOVA, several main effects for the independent variables on the dependent variables were found.

#### 4.1.1 Main effects of Tone

Findings showed that there was a significant effect of the variable tone on the combined dependent variables ( $F(4, 233) = 8.74, p < .001$ ). Descriptive statistics for the effect of message tone can be found in table 6 below (p. 29). Analysis of the dependent variables individually showed no effects for the advertisement attitude and product attitude variables. However, the forwarding intention variable was statistically significant ( $F(1, 236) = 29.57, p < .001$ ). This means that participants in the humorous version scored significantly higher (i.e. more positive) on forwarding intention ( $M = 2.10, SD = .078$ ) than in the non-humorous version ( $M = 1.52, SD = .072$ ). Besides, the purchase intention variable was statistically significant as well ( $F(1, 236) = 7.80, p = .006$ ). This means that participants in the humorous version scored significantly higher (i.e. more positive) on purchase intention ( $M = 2.73, SD = 0.94$ ) than in the non-humorous version ( $M = 2.37, SD = .087$ ). Consequently, H3 and H4 are supported, as there is a statistically significant effect for message tone on forwarding intention and purchase intention. Hypotheses 1 and 2 are not supported.

**Table 6**

*Descriptive statistics for the effect of message tone*

<b>Dependent variables</b>	<b>Humour</b>	<b>Non-humour</b>
	<i>M (SD)</i>	<i>M (SD)</i>
Advertisement attitude	4.01 (.094)	3.86 (.086)
Product attitude	3.23 (.078)	3.21 (.072)
Forwarding intention	2.10 (.078)	1.52 (.072)
Purchase intention	2.73 (.094)	2.37 (.087)

#### 4.1.2 Main effects of Length

Findings showed that there was a significant effect of the variable length on the combined dependent variables ( $F(4, 233) = 2.53, p = .041$ ). Descriptive statistics for the effect of length can be found in table 7 below (p. 30). Analysis of the dependent variables individually showed no effects for the advertisement attitude and product attitude variables. However, the forwarding intention variable was statistically significant ( $F(1, 236) = 5.71, p = .018$ ). This means that participants in the short version scored significantly higher (i.e. more positive) on forwarding intention ( $M = 1.94, SD = .068$ ) than in the long version ( $M = 1.69, SD = .082$ ). Besides, the purchase intention variable was statistically significant as well ( $F(1, 236) = 5.71, p = .018$ ). This means that participants in the short version scored significantly higher (i.e. more positive) on purchase intention ( $M = 2.71, SD = 0.82$ ) than in the long version ( $M = 2.40, SD = .099$ ). Consequently, H7 is rejected and H8 is supported, as there is a statistically significant effect for length on forwarding intention and purchase intention. Hypotheses 5 and 6 are not supported.

**Table 7**

*Descriptive statistics for the effect of length*

<b>Dependent variables</b>	<b>Short</b>	<b>Long</b>
	<i>M (SD)</i>	<i>M (SD)</i>
Advertisement attitude	4.08 (.081)	3.80 (.098)
Product attitude	3.29 (.068)	3.16 (.082)
Forwarding intention	1.94 (.068)	1.69 (.082)
Purchase intention	2.71 (.082)	2.40 (.099)

#### 4.2 Interaction effects

Besides the main effect, a surprising interaction effect was found as well. No interaction effect for message tone and length, as proposed in the hypotheses (H9a, b, c, d, e, f, g) was found. However, there was an interaction found between length and product type, described in further detail in paragraph 4.3, Moderator effects, below. Since there are no interaction effects found for length and message tone, hypotheses H9a, H9b, H9c, H9d, H9e, H9f and H9g are not supported.

#### 4.3 Moderator effects

Several moderator effects for product type were found. First, the moderator effect for product type on the effect of message tone on the dependent variables is discussed. Subsequently, the moderator effect for product type on the effect of length on the dependent variables is discussed.

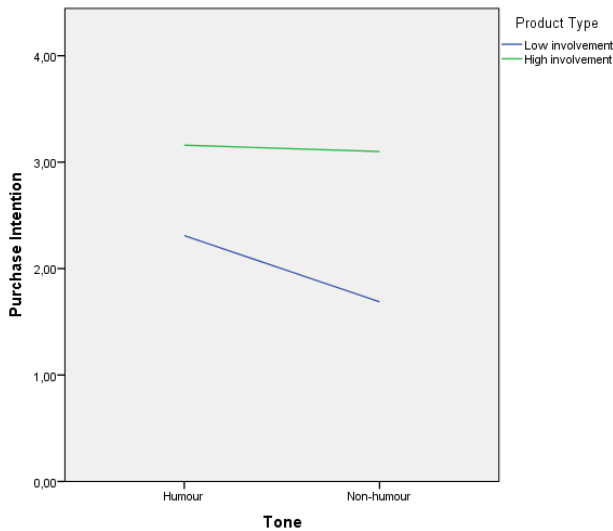
#### 4.3.1 Moderator effects on Message Tone

Descriptive statistics for the effect of message tone and product type can be found in table 8 (p. 31). Findings showed that there was no significant effect of the combination of message tone and product type on the combined dependent variables. However, analysis of the dependent variables individually showed a significant effect for the purchase intention variable ( $F(1, 236) = 4.95, p = .027$ ). This means that participants in the humorous version scored statistically lower (i.e. less positive) on purchase intention, when a low involvement product is used ( $M = 2.29, SD = .126$ ) than when a high involvement product is used ( $M = 3.18, SD = .141$ ). Surprisingly, this is the same for the non-humorous version. Participants in the non-humorous version also scored statistically lower (i.e. less positive) on purchase intention, when a low involvement product is used ( $M = 1.64, SD = .104$ ) than when a high involvement product is used ( $M = 3.10, SD = .139$ ). Thus, this interaction effect indicated that the effect of message tone on purchase intention depends on the product type. The nature of this interaction is illustrated in Figure 3 below (p. 32), showing a non-parallel linear graph, indicating that the purchase intention of a low involvement product increases when using a humorous video, whereas the purchase intention of a high involvement product will decrease when using a humorous video. These findings support the proposed moderator effect, stated in H10d. Since there are no significant indications for product type as a moderator for the effect of message tone on advertisement attitude, product attitude and forwarding intention, hypotheses H10a, H10b and H10c are not supported.

**Table 8**

*Descriptive statistics for the interaction effect of product type and message tone*

Dependent variables	Low involvement		High involvement	
	Humorous	Non-humorous	Humorous	Non-humorous
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Advertisement attitude	3.86 (.125)	3.71 (.104)	4.16 (.140)	4.01 (.138)
Product attitude	2.77 (.105)	2.64 (.087)	3.69 (.117)	3.78 (.116)
Forwarding intention	2.14 (.104)	1.44 (.086)	2.06 (.116)	1.61 (.115)
Purchase intention	2.29 (.126)	1.64 (.104)	3.18 (.141)	3.10 (.139)



**Figure 3.** Graph for the interaction effect between product type and message tone on purchase intention

#### 4.3.2 Moderator effects on Length

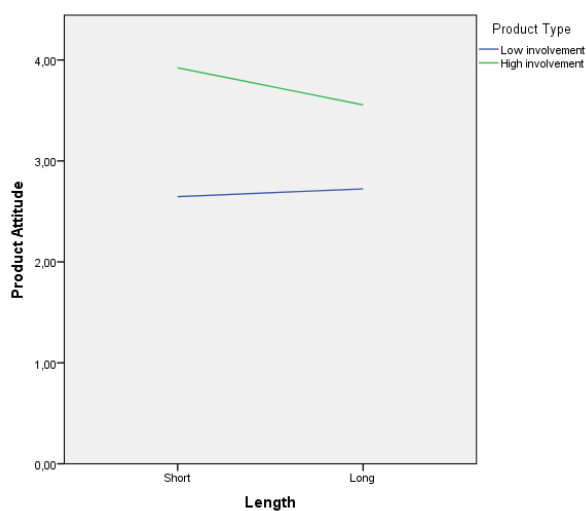
Findings showed that there was a significant effect of the combination of length and product type on the combined dependent variables ( $F(4, 233) = 2.73, p = .030$ ). Descriptive statistics for the effect of length and product type can be found in table 9 (p. 33). Analysis of the dependent variables individually showed no effects for the advertisement attitude and forwarding intention variables. However, the product attitude variable was marginally significant ( $F(1, 236) = 3.16, p = .077$ ). This means that participants in the short version scored marginally lower (i.e. less positive) on product attitude, when a low involvement product is used ( $M = 2.68, SD = .081$ ) than when a high involvement product is used ( $M = 3.90, SD = .110$ ). Surprisingly, this is the same for the long version. Participants in the long version also scored marginally lower (i.e. less positive) on product attitude, when a low involvement product is used ( $M = 2.73, SD = .109$ ) than when a high involvement product is used ( $M = 3.58, SD = .123$ ). Thus, this interaction effect indicated that the effect of length on product attitude depends on the product type. The nature of this interaction is illustrated in Figure 4 (p. 33), showing a non-parallel linear graph, indicating that the product attitude of a low involvement product increases when using a longer video, whereas the product attitude of a high involvement product will decrease when using a longer video. These findings support the proposed moderator effect, stated in H11b.

Besides product attitude, the purchase intention variable was statistically significant ( $F(1, 236) = 4.98, p = .027$ ). This means that participants in the short version scored statistically lower (i.e. less positive) on purchase intention, when a low involvement product is used ( $M = 1.98, SD = .098$ ) than when a high involvement product is used ( $M = 3.44, SD = .132$ ). Surprisingly, this is the same for the long version. Participants in the long version also scored statistically lower (i.e. less positive) on purchase intention, when a low involvement product is used ( $M = 1.96, SD = .131$ ) than when a high involvement product is used ( $M = 2.84, SD = .147$ ). Thus, this interaction effect indicated that the effect of length on purchase intention depends on the product type. The nature of this interaction is illustrated in Figure 5 (p. 34), showing a non-parallel linear graph, indicating that the purchase intention of a low involvement product increases when using a longer video, whereas the purchase intention of a high involvement product will decrease when using a longer video. These findings support the proposed moderator effect, stated in H11d. No significant results were found for product type as a moderator for the effect of length on advertisement attitude and forwarding intention. Therefore, hypotheses H11a and H11c are not supported.

**Table 9**

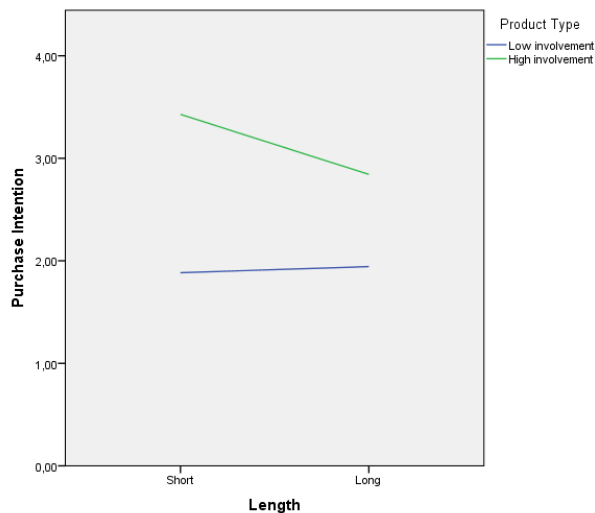
*Descriptive statistics for the interaction effect of product type and length*

Dependent variables	Low involvement		High involvement	
	Short	Long	Short	Long
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Advertisement attitude	4.00 (.097)	3.57 (.130)	4.15 (.131)	4.02 (.147)
Product attitude	2.68 (.081)	2.73 (.109)	3.90 (.110)	3.58 (.123)
Forwarding intention	1.83 (.082)	1.75 (.109)	2.05 (.109)	1.62 (.122)
Purchase intention	1.98 (.098)	1.96 (.131)	3.44 (.132)	2.84 (.147)



**Figure 4.** Graph for the interaction effect between product type and length on product attitude





**Figure 5.** Graph for the interaction effect between product type and length on purchase intention

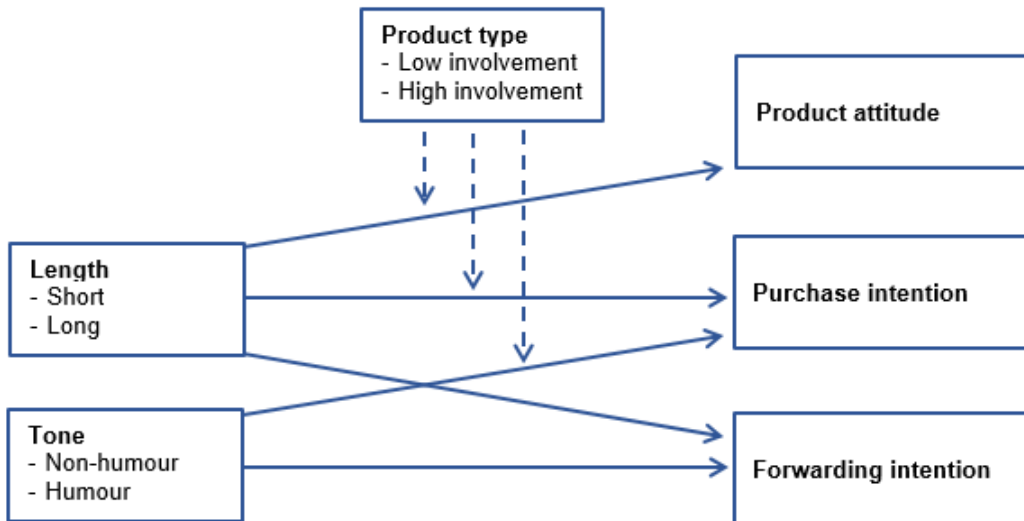
#### 4.4 Mediation effects

Several mediation effects were hypothesized. In order to test for mediation, the Hayes PROCESS method was used. By identifying kappa-squared, the strength of the model can be tested. However, Wen and Fan (2015) showed that the derivation of the maximum possible indirect effect described in the article that introduced kappa-squared (Preacher & Kelley, 2011) contains a mathematical error. As the computations in Preacher and Kelley (2011) were used to code kappa-squared in PROCESS, it seemed prudent to eliminate kappa-squared from PROCESS until this problem is fixed (Hayes, 2016). The latest version of PROCESS however has not found a solution for this problem, therefore kappa-squared cannot be used and no mediation analysis was performed.

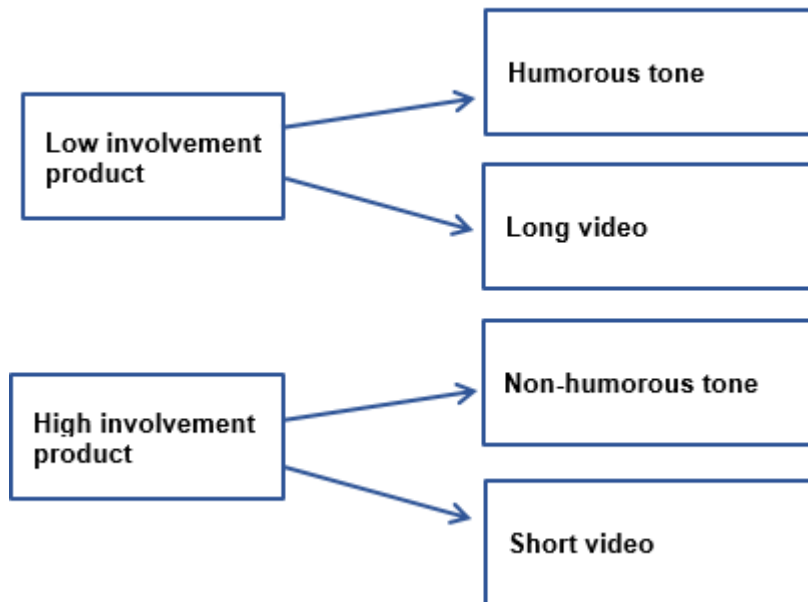
#### 4.5 Overall results

Table 10 (p. 35-37) shows an overview of all hypothesis that are supported and not supported. Based on the results found, a new model is proposed, including the independent variables, mediator, and dependent variables. The model is illustrated in figure 6 below (p. 35).

Figure 7 shows a possible framework for positive combinations of factors (p. 35).



**Figure 6.** Research model as proposed by means of the results found in this study



**Figure 7.** Positive combinations by means of the results found in this study

**Table 10**

*Summary of supported and not supported hypotheses and other results found*

<b>Hypothesis</b>	<b>Effect</b>	<b>Supported</b>
H1: Video advertisements with a humorous tone create a more positive advertisement attitude than video advertisements with a non-humorous tone.	Main: message tone → advertisement attitude	<i>Not supported</i>
H2: Video advertisements with a humorous tone create a more positive product attitude than video advertisements with a non-humorous tone.	Main: message tone → product attitude	<i>Not supported</i>
H3: Video advertisements with a humorous tone create a more positive forwarding intention than video advertisements with a non-humorous tone.	Main: message tone → forwarding intention	<b>Supported</b>
H4: Video advertisements with a humorous tone create a more positive purchase intention than video advertisements with a non-humorous tone.	Main: message tone → purchase intention	<b>Supported</b>
H5: Longer video advertisements create a more positive advertisement attitude than shorter video advertisements.	Main: length → advertisement attitude	<i>Not supported</i>
H6: Longer video advertisements create a more positive product attitude than shorter video advertisements.	Main: length → product attitude	<i>Not supported</i>
H7: Longer video advertisements create a more positive forwarding intention than shorter video advertisements.	Main: length → forwarding intention	<b>Rejected</b>
H8: Longer video advertisements create a more positive purchase intention than shorter video advertisements.	Main: length → purchase intention	<b>Supported</b>
H9a: Longer video advertisements with a humorous message tone create a more positive advertisement attitude than shorter video advertisements with a humorous message tone.	Interaction: length + message tone (humorous) → advertisement attitude	<i>Not supported</i>
H9b: There is no effect of length in combination with a non-humorous message tone on advertisement attitude.	Interaction: length + message tone (non-humorous) → advertisement attitude	<i>Not supported</i>
H9c: Longer video advertisements with a humorous message tone create a more positive product attitude than shorter video advertisements with a humorous message tone.	Interaction: length + message tone (humorous) → product attitude	<i>Not supported</i>
H9d: There is no effect of length in combination with a non-humorous message tone on product attitude.	Interaction: length + message tone (non-humorous) → product attitude	<i>Not supported</i>
H9e: There is no interaction effect of length and message tone on forwarding intention.	Interaction: length + message tone → forwarding intention	<i>Not supported</i>

H9f: Longer video advertisements with a humorous message tone create a more positive purchase intention than shorter video advertisements with a humorous message tone.	Interaction: length + message tone (humorous) → purchase intention	<i>Not supported</i>
H9g: There is no effect of length in combination with a non-humorous message tone on purchase intention.	Interaction: length + message tone (non-humorous) → purchase intention	<i>Not supported</i>
H10a: Product type moderates the effect of message tone on advertisement attitude.	Moderation: product type → message tone → advertisement attitude	<i>Not supported</i>
H10b: Product type moderates the effect of message tone on product attitude.	Moderation: product type → message tone → product attitude	<i>Not supported</i>
H10c: Product type moderates the effect of message tone on forwarding intention.	Moderation: product type → message tone → forwarding intention	<i>Not supported</i>
H10d: Product type moderates the effect of message tone on purchase intention.	Moderation: product type → message tone → purchase intention	<b>Supported</b>
H11a: Product type moderates the effect of length on advertisement attitude.	Moderation: product type → length → advertisement attitude	<i>Not supported</i>
H11b: Product type moderates the effect of length on product attitude.	Moderation: product type → length → product attitude	<b>Supported</b>
H11c: Product type moderates the effect of length on forwarding intention.	Moderation: product type → length → forwarding intention	<i>Not supported</i>
H11d: Product type moderates the effect of length on purchase intention.	Moderation: product type → length → purchase intention	<b>Supported</b>
H12a: Advertisement attitude mediates the effect of message tone on forwarding intention.	Mediation: message tone → advertisement attitude → forwarding intention	<i>Not supported</i>
H12b: Advertisement attitude mediates the effect of length on forwarding intention.	Mediation: length → advertisement attitude → forwarding intention	<i>Not supported</i>
H12c: Advertisement attitude mediates the effect of message tone on purchase intention.	Mediation: message tone → advertisement attitude → purchase intention	<i>Not supported</i>
H12d: Advertisement attitude mediates the effect of length on purchase intention.	Mediation: length → advertisement attitude → purchase intention	<i>Not supported</i>

H13a: Product attitude mediates the effect of message tone on forwarding intention.	Mediation: message tone → product attitude → forwarding intention	<i>Not supported</i>
H13b: Product attitude mediates the effect of length on forwarding intention.	Mediation: length → product attitude → forwarding intention	<i>Not supported</i>
H13c: Product attitude mediates the effect of message tone on purchase intention.	Mediation: message tone → product attitude → purchase intention	<i>Not supported</i>
H13d: Product attitude mediates the effect of length on purchase intention.	Mediation: length → product attitude → purchase intention	<i>Not supported</i>

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## 5. Discussion

The aim of this study regarding online video advertising was to give insights into the effects of message tone and length on advertisement attitude, product attitude, forwarding intention and purchase intention, with product type as a proposed moderator. Since the combination of the independent variables had not been researched yet within the field of online video advertising, main effects and interrelation effects were hypothesized, supplemented with a hypothesized moderator and mediation effects. Several analyses revealed a number of significant results. However, not all hypotheses were supported. First, the main effects will be discussed in more detail, followed by interaction effects, moderator effects and mediation effects. Implications can be found in section 6, "Implications" (p. 44), followed by a discussion of limitations and directions for future research in section 7, "Limitations" (p. 46). Eventually, the general conclusion will be presented in section 9, "Conclusion" (p. 48).

### 5.1 Main effects

In this study, several main effects for the independent variables on the dependent variables were found. However, some hypothesized effects were not supported by the analyses.

#### 5.1.1 Main effects of Tone

Findings showed that there was no significant effect of the variable tone on advertisement attitude, whilst previous research found several indications for the effect of humour on video attractiveness, affection, and positive advertisement attitude (Cline et al., 2003; Eisend, 2009; Hsieh et al., 2012; Scott et al., 1990; Strick et al., 2013). Others have stated that humour positively influences the attention, comprehension, persuasiveness, and liking of advertisements (e.g. Cline et al., 2003; Cline & Kellaris, 1999; Eisend, 2009; Galloway, 2009; Geuens & De Pelsmacker, 2002; Norris & Colman, 1996; Tomkovick et al., 2001; Unger, 1995; Weinberger et al., 1995; Weinberger & Gulas, 1992). Furthermore, no significant effect was found for the variable tone on product attitude, whilst previous research did find significant effects (Polyorat et al., 2007; Weinberger & Gulas, 1992).

One of the hypothesis (H3) was supported by the analysis: Video advertisements with a humorous tone create a more positive forwarding intention than video advertisements with a non-humorous tone. This contributes to and is backed by previous research by Dobele et al. (2007), who stated that people tend to share their positive emotions with friends and family. Besides, Rimé et al. (2002) also suggested that emotion is a key motivator for sharing an online video with relatives. The finding that forwarding intention is influenced by tone could be explained by the ease of sharing a video.

Forwarding any message via social media does not cost the consumer any money, there is relatively little time involved and not very much effort needed. Therefore, forwarding intention is a lot easier to generate than purchase intention, for example. Consumers do not have to like the product or the brand, and definitely do not have to think about buying the product. It is easy to share a video on social media without having any further responsibility or expectations. Besides, consumers tend to share positive emotions, such as laughter caused by a joke or funny story. A serious tone could be perceived as boring, which would make it less attractive to share with friends and relatives. A funny story is often worth sharing, which leads to higher forwarding intentions.

Subsequently, another hypothesis was supported as well (H4): Video advertisements with a humorous tone create a more positive purchase intention than video advertisements with a non-humorous tone. This contributes to and is backed by previous research by Eisend (2009), who stated that humour enhances positive affective reactions and purchase intention. Besides, Chan (2011) also suggested that consumers were more likely to purchase a product when a humorous appeal was used, compared to a non-humorous appeal. The finding that purchase intention is influenced by message tone, since positive emotions lead to positive attitudes and intentions. A serious tone could be perceived as less interesting, which would not lead to awareness, attitudes and in the end purchase intentions. Purchase intention is a difficult process, involving multiple steps. The consumer has to like the product, the advertisement, the price of the product, the brand, and so on, in order to generate a positive purchase intention. Therefore, tone may be important in order to create awareness, gain attention, create positive attitudes and finally in order to generate a positive purchase intention.

### *5.1.2 Main effects of Length*

Findings showed that there was no significant effect of the variable length on advertisement attitude, whilst previous studies did find effects (e.g. Mord & Gilson, 1985; Newell & Henderson, 1998; Patzer, 1991; Singh & Cole, 1993; Wheatley, 1968). This could possibly be caused by a lack of interest. Possibly, the message itself and the tone of the message could be more important than the length of an advertisement. Often, consumers remember specific parts of a message, such as the story or the specific product, but not whether the advertisements was long or short. Therefore, the length could be less important than other factors such as tone or message goal, which could explain why no effects were found here. Besides, no effect was found for an effect of the variable length on product attitude, whilst previous research found some indications for the effect of length on product attitude, stating that more time to process leads to more familiarity, which in turn leads to a more positive product attitude (Newell & Henderson, 1998; Singh & Cole, 1993).

However, in the research of Rethans et al. (1986), there were also no significant effects found regarding length and product attitude.

One of the hypothesis (H7) was rejected by the analysis: There is no effect of a difference in length in video advertisements on the consumer's forwarding intention. There was no suggestion found in previous literature for an effect of length on forwarding intention. However, the finding that forwarding intention is influenced by length could be explained by the ease of sharing a video. Often, consumers share videos that are either funny, interesting, or easy to watch. When an advertisement is too long, it makes it more difficult to watch, since the consumer has to pay attention for a longer amount of time. Since this increases the consumer's effort, it is less likely that the consumer will share the video. Shorter videos, that cost less effort, are therefore more likely to be forwarded since it is easier to watch and therefore could be perceived as more fun to watch.

Subsequently, another hypothesis was supported as well (H8): Longer video advertisements create a more positive purchase intention than shorter video advertisements. In previous research, no direct links between length and purchase intention were known yet. However, longer exposure leads to higher brand recall, which in turn leads to more positive intentions (e.g. MacKenzie, 1986; Newell & Henderson, 1998; Singh & Cole, 1993). Therefore, the finding that longer video advertisements lead to higher purchase intentions, could be explained by the increase of elaboration. As stated above, purchase intention is a difficult process, involving multiple steps. These steps demand a higher elaboration. A longer video enables more time and more options for elaboration, which could in turn lead to a higher purchase intention, since the consumers took more effort to understand the product and the brand.

## **5.2 Interaction effects**

No effect was found for an interaction between message tone and length, while this effect was partly supported in previous research (Elliott, 2005; Singh & Cole, 1993). However, the research of Singh and Cole (1993) used a distinction between emotional and informational tone. In this study, humour and non-humour was operationalized, whilst an emotional tone can also be non-humorous. This could explain why there is no effect found in this study. Besides, the tone of a message could be more important than length, since the tone creates the story and therefore the main part of the advertisement. Consumers tend to be attracted by emotion, and therefore tone, instead of by the length of a video advertisement. If the advertisement is liked, consumers will not mind if the advertisement lasts for 20 or 40 seconds. Therefore, length could be less important than message tone, resulting in no interaction effect between the two.



### 5.3 Moderator effects

A few moderator effects for product type were found, discussed in this section.

#### 5.3.1 Moderator effects of Product Type on Message Tone

No moderator effect was found for product type as a moderator on the independent variable message tone and advertisement attitude, product attitude and forwarding intention, even though several scholars have been researching the relation between humour and product type. This can be explained by the absence of a significance relation between humour and advertisement attitude and product attitude at all. Reasonably, when no relation exists, it is impossible for a moderator to influence that relationship. Surprisingly, there was a main effect for tone of message and forwarding intention, backed by previous research by Hsieh et al. (2012). However, no previous studies are known combining these two variables and product type. In this study, no results were found for a moderation effect either.

One of the hypotheses (H10d) was supported by the analysis: Product type moderates the effect of message tone on purchase intention, suggesting that low involvement products lead to more positive purchase intentions when humour is used, but not when non-humour is used. The other way around, high involvement products lead to more positive purchase intentions when non-humour is used, but not when humour is used as message tone. This is partly backed by previous researchers, who found a direct (interaction) effect for product type and humour (Flaherty et al. 2004; Leonidas et al., 2009; Petty et al. 1983; Spotts et al., 1997; Toncar, 2001; Weinberger & Spotts, 1989). Product type on itself also influences several consumer behaviours, such as purchase intention (Quester & Smart, 1998). The finding that the effect of message tone on purchase intention is moderated by product type, could be explained by the fact that humour is often used for less serious message. Humour therefore is best used in combination with a low involvement product. The other way around, a high involvement product often needs more elaboration, more effort and more attention. Usually, a more serious product and message is involved. Therefore, it is logical that product type moderates the effect of message tone, since not every product type is suitable for every type of message tone.

#### 5.3.2 Moderator effects of Product Type on Message Tone

Besides message tone, length was also hypothesized to be moderated by product type. These hypotheses were partly supported. This can also be explained by the absence of a main effect of length on advertisement attitude. Without a main effect, there is no possible moderator effect.

One of the significant moderator effects of product type in this research is for the effect of length on product type (H11b): Product type moderates the effect of length on product attitude, suggesting that low involvement products lead to more positive product attitudes when a short video is used, but not when a long video is used. The other way around, high involvement products lead to more positive product attitudes when a long video is used, but not when a short video is used. The other significant effect found was for hypothesis H11d: Product type moderates the effect of length on purchase intention, suggesting that low involvement products lead to more positive purchase intentions when a short video is used, but not when a long video is used. The other way around, high involvement products lead to more positive purchase intentions when a long video is used, but not when a short video is used. These findings somehow contradict previous findings about information processing. Several scholars state that longer messages enable repeated information, resulting in greater recall of brand names or products, and more time to process this information (e.g. Fabian, 1986; MacKenzie, 1986; Mord & Gilson, 1985; Pechmann & Stewart, 1988; Rethans et al., 1986; Singh et al., 2000; Singh & Cole, 1993; Singh & Rothschild, 1983). High involvement products should require a high level of knowledge, which in turn is more likely to be reached by a longer elaboration, this a longer video advertisement (Bech-Larsen & Nielsen, 1999; Elliott, 2005; Grunert & Grunert, 1995). Surprisingly, the results in this study state the contrary. This could be explained by the fact that possibly both versions are too short to elaborate information thoroughly, since 45 seconds is still not very long. Besides, a longer video might enable the consumer to empathize with an emotional story, therefore being more effective for a low involvement product than a shorter video. Possibly, a longer video that provides mainly information might be too monotonous and tiresome for consumers, resulting in distraction instead of information processing. Therefore, a video that is too long might not be effective for a high involvement product.

## 6. Implications

The results of this study might have several implications, both for researchers in the field of online advertising, as for marketers and consumers.

### 6.1 Theoretical implications

The main purpose of this study was to investigate the effects of message tone and video advertisement length on consumer attitudes and intentions. This present study provides new insights on the effects of humour in online video advertising on forwarding intention, which had not been researched before. The use of humour should lead to a positive forwarding intention, which contributes to previous research by Rimé et al. (2002), who stated that emotion is a key motivator for sharing an online video. Besides, these results contribute to previous research by Hsieh et al. (2012), who also suggested that the use of humour could contribute to the intention to forward an online video. That suggestion is backed by the findings in this study.

Finally, a new view is presented regarding the moderator effect of product type on the effect of online video length on product attitude. No moderator effect of product type was found before, suggesting new options for future research. Besides, since no prior research had been done regarding the combination of the dependent and independent variables used in this study, this might lead to new suggestions and further research questions.

Consequently, due to partly conflicting results with the hypotheses and prior research, along with several unsupported hypotheses, further elaboration on all three independent variables, whether combined or not, is needed in order to expand the scientific field regarding online video advertising.

### 6.2 Managerial implications

The results suggested in this study could help marketers and online advertisers to understand how the manipulation of length, humour and product type will impact consumer attitudes and intentions. Essential for marketers is to create a clear image of the product advertised, and the target group that is addressed. If the combination of several features of online video is not matched to each other, the advertisement will lose its persuasiveness, resulting in a loss of consumers. The findings in this study could provide a framework for possible combinations for “genres”, combining length, message tone and platform.

Even though not a lot of results are found in this study, the findings could provide some insights for online marketers. First of all, forwarding intention could be improved by using humour in advertisements. By creating a higher forwarding intention, a product or brand will create more publicity and awareness. Awareness is the first thing to achieve in the process of the customer journey. Furthermore, when advertising a low involvement product, a short video could lead to positive product attitude, whereas an advertisement for a high involvement product could generate more positive product attitudes using a longer video. A positive product attitude will lead to more positive purchase intentions, which eventually could lead to actually buying the product.

Notably, it is important to consider that these findings have to be implemented consciously, since there are differences in consumer that have not been researched. For example a difference in gender has not been studied. Therefore, future research is definitely needed, in order to improve the effects of online video advertising on consumer behaviour.

## 7. Limitations

The results of this study can be contributed to several limitations. One limitation of this study was the manipulation of message tone, by means of a humorous appeal. The incongruity type of humour was chosen as a result of previous research (Eisend, 2009; Shabbir & Thwaites, 2007) and as a result of the pretest. However, it is possible that participants would react differently to a certain kind of humour. For some people, incongruity humour may be perceived as funny, whilst others do not perceive this type of humour as humorous. As a result, multiple respondents had to be removed from the data set, since they did not meet the manipulation for message tone. Further studies with different types of humour could give insights into the effect of message tone on attitudes and intentions. Another comparable limitation of this study is the use of length. Length was manipulated based on previous research and as a result of the pretest, however perceived length is a very personal view, which differs for every person. This might explain why several respondents perceived the short video as a long video, or the other way around. In future research, the distinction between short and long could be made clearer, for example by using a 15 second video opposing a 1- or 2-minute video. Furthermore, even after a preliminary study and a pretest for the manipulation of product type, some respondents did not meet the manipulations. This might be caused due to the product categories. For example, a sportier person is more likely to engage in higher involvement with a sport soda than a less sporty person. Besides, the discrepancy in results can be explained by the use of fictitious brands. Non-existent brands were used to avoid any familiarity or previous experiences. However, participants might have a hard time relating to the brand or product. For example, the smartphone commercial did not show any brand name, whilst nowadays many people consider the brand of a smartphone one of the main reasons for purchasing.

Another limitation could be the sampling of the surveys in this study. Participants were reached through the social media platform of the researcher, resulting in many students and highly educated respondents. Participants who are highly educated might be more capable of processing information compared to lower educated participants, which could result in a higher likability for both advertisement attitude and product attitude. Moreover, the majority of respondents were female, with a distribution of 73% against a small 27% male. Unfortunately, this makes it impossible to use gender as a covariate. However, it would be interesting to see whether there is a difference in behaviour regarding gender, since earlier findings do suggest an effect of humour on female respondents (e.g. Chan, 2011; Petty et al., 2015).

Besides gender, the age group might be an interesting topic for future research as well. According to the Urban Dictionary (January 8, 2017), the Millennial age group (between 18 and 35) could be split up in generation Y (born between 1981 and 1991) and generation Z (born between 1991 and 2004). In order to find out whether there is a difference in behaviour amongst these two sub-generations, it might be interesting to research the effect of age as a covariate. In this study, there was no equal distribution, as 73,7% of all respondents contributed to generation Z (n = 129), opposing only a small 26,3% of generation Y (n = 46). Therefore, age could unfortunately not be used as a covariate in this research. It might be interesting in future research to focus on the difference between generation Z and generation Y. The combination of these demographic limitations makes it hard to generalize results of this study among age group, gender and education level. Further studies would be needed to test whether the results differ when more diverse participants are taking part. Besides, respondents were asked to fill in the questionnaire online. There was no control for attention, which means that respondents might not have been fully focused while performing the task. In future research, it might be wise to conduct a live experiment, to make sure that respondent perform this task only and are not performing other tasks while filling in the questionnaire. Moreover, this study only focused on the platform Facebook, whilst other platforms might result in different effects. Besides, the message goal could differ for effects of length or message tone. In future research, different goals could be researched, such as the goal to create awareness or to create a purchase intention.

Besides, a total of 300 is not large enough to generalize for the entire community. A larger number of participants might show clearer results or possibly other main or interaction effects. Especially, when adding gender, age and/or education level, the effects might differ significantly from the results found in this study.

Moreover, the respondents were all Dutch citizens, resulting in a cultural frame that cannot be generalized among other nationalities or cultures. It might be interesting to examine whether a distinction in culture, religion, or nationality would play a role on the effects of online video advertising. Furthermore, in this study, only attitudes and behavioural intentions are examined. However, intentions will not always lead to actual behaviour. Therefore, future research could focus on actual behaviour measurements instead of only attitudes and intentions.

Consequently, it can be stated that this study was a good starting point in researching various features of online video advertising on consumer behaviour. Future studies can use the results and limitations of this study for further research in the field of online video advertising and consumer behaviour.

## 8. Conclusion

Concluded can be that online video advertising is not a simple trick to perform on consumers. The effectiveness is very dependent on a whole lot of personal characteristics. The main effect for message tone on forwarding intention and purchase intention suggests that video advertisements with a humorous tone create a more positive forwarding intention and purchase intention than video advertisements with a non-humorous tone. However, it is of great importance to keep in mind that sense of humour differs for every consumer. Besides, even though the findings suggest that short video advertisements including a high involvement product create more positive product attitudes than short video advertisements with a low involvement product, and the contrary applies to long video advertisements; it is important to keep notice of personal characteristics of consumers.

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## 11. Appendix

### 11.1 Cover story (in Dutch)

Hallo!

In opdracht van de Universiteit Twente voer ik een onderzoek uit naar online video advertenties. Ben jij tussen de 18 en 35 jaar en ben je wel eens in aanraking geweest met een online video advertentie, dan zou ik je vriendelijk willen vragen om deze enquête in te vullen. Dit kost slechts 5 minuten en het wordt zeer gewaardeerd als je mij verder zou willen helpen met mijn onderzoek. De vragenlijst wordt volledig anoniem ingevuld en antwoorden worden enkel voor academische doeleinden gebruikt.

Dankjewel!

Marlyn de Kroon  
MSc Communication Studies  
Universiteit Twente

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In nieuw bericht:

Je kunt nu beginnen met de enquête! Allereerst krijg je een korte video advertentie te zien, waarna je doorgestuurd wordt naar een vragenlijst. De vragenlijst bestaat uit een aantal stellingen, waarbij je dient te beoordelen in welke mate je het eens bent met de stelling.

Je hebt de keuze uit vijf verschillende opties:

- 1) Volledig mee oneens
- 2) Een beetje mee oneens
- 3) Neutraal / niet van toepassing
- 4) Een beetje mee eens
- 5) Volledig mee eens

## 11.2 Item variables and survey questions

**Table 11**

*Variables and question items for preliminary test*

<b>Variable</b>	<b>Question item</b>	<b>Dutch translation</b>
Product involvement	Piv1. This product is important to me.	Piv1. Dit is een belangrijk product voor mij.
	Piv2. I can relate to this product.*	Piv2. Ik heb een duidelijke voorstelling van dit product.*
	Piv3. This product is beneficial to me.	Piv3. Dit product is gunstig voor mij.
	Piv4. I am interested in this product.	Piv4. Ik ben geïnteresseerd in dit product.
	Piv5. For me, this product is exciting.*	Piv5. Ik vind dit een opwindend product.*
	Piv6. This product is necessary for me.	Piv6. Dit product is noodzakelijk voor mij.
	Piv7. I need this product.	Piv7. Ik heb dit product nodig.
	Piv8. I think this is an intriguing product.	Piv8. Ik vind dit een interessant en boeiend product.
	Piv9. This product means a lot to me.	Piv9. Dit product betekent veel voor mij.

\* These questions were left out after a factor analysis and reliability analysis.

**Table 12**

*Variables and question items for pretest*

<b>Variable</b>	<b>Question item</b>	<b>Dutch translations</b>
Perceived Length	PI1. This video is short.	PI1. Dit is een korte video.
	PI2. This video is long.	PI2. Deze video is lang.
Perceived Humour	Ph1. This video is funny.	Ph1. Deze video is grappig.
	Ph2. This video is humorous.	Ph2. Deze video is humoristisch.
	Ph3. This video is amusing.	Ph3. Deze video is vermakelijk.
Product involvement	Piv1. This product is important to me.	Piv1. Dit is een belangrijk product voor mij.
	Piv2. I am interested in this product.	Piv2. Ik ben geïnteresseerd in dit product.
	Piv3. I need this product.	Piv3. Ik heb dit product nodig.
	Piv4. I search for information before buying this product.	Piv4. Ik zoek eerst meer informatie voordat ik dit product ga kopen.
	Piv5. I need time to think about buying this product.	Piv5. Ik heb tijd nodig om na te denken over het kopen van dit product.
	Piv6. I am willing to spend a lot of money on buying this product.	Piv6. Ik heb er veel geld voor over om dit product te kopen.
	Piv7. I use this product regularly.	Piv7. Ik gebruik dit product vaak.



**Table 13***Variables and question items for the main study*

<b>Variable</b>	<b>Question item</b>	<b>Dutch translation</b>
Advertisement	Aa1. This video is appealing.	Aa1. Deze video is aantrekkelijk.*
Attitude	Aa2. This video is to be understood.	Aa2. Deze video is begrijpelijk.
	Aa3. This video is pleasant.	Aa3. Deze video is aangenaam (R).
	Aa4. This video is interesting.	Aa4. Deze video is interessant.*
	Aa5. This video gives me a positive feeling.	Aa5. Deze video geeft me een positief gevoel (R).
	Aa6. This video is good.	Aa6. Dit is een goede video (R).*
	Product	Pa1. This product is effective.
Attitude	Pa2. This product is appealing.	Pa2. Dit product is aantrekkelijk.
	Pa3. I like this product.	Pa3. Ik vind dit een leuk product.
	Pa4. This product is good.	Pa4. Dit is een goed product (R).*
	Pa5. This product is reliable.	Pa5. Dit product is betrouwbaar.*
Forwarding intention	Fi1. I think this video is worth sharing with others.	Fi1. Ik denk dat deze video de moeite waard is om te delen met anderen.
	Fi2. I will recommend this video to others.	Fi2. Ik zou deze video aanbevelen aan anderen (R).
	Fi3. I will share this video with my friends through Facebook.	Fi3. Ik zou deze video delen met mijn vrienden via Facebook.
Purchase Intention	Pi1. I would purchase this product.	Pi1. Ik zou dit product kopen.
	Pi2. I have a high interest in purchasing this product.	Pi2. Ik heb interesse om dit product te kopen.
	Pi3. I would consider buying the product presented in the video.	Pi3. Ik zou overwegen om dit product te kopen.
	Pi4. The likelihood I would purchase this product is very high.	Pi4. De kans dat ik dit product zou kopen is erg groot (R).
	Pi5. I will definitely buy this product.	Pi5. Ik zal dit product zeker kopen (R).

(R) is recoded into reversed formulation in the questionnaire

\* these items were removed after performing a factor analysis

**Table 14***Demographic items*

<b>Variable</b>	<b>Question item</b>	<b>Answer option</b>
Age	D1. What is your age?	Open
Education	D2. What is your highest education?	- preparatory secondary vocational education (VMBO)
		- senior general secondary school (HAVO)
		- pre-university education (VWO)
		- secondary vocational education (MBO)
		- higher professional education (HBO)
Gender	D3. What is your gender?	- academic/university education (WO)
		- Male
		- Female

**Table 15***Control question items*

<b>Variable</b>	<b>Question item</b>	<b>Dutch translations</b>
Perceived Length	PI1. This video is not short.	PI1. Dit is geen korte video. (R)
	PI2. This video is long.	PI2. Deze video is lang.
Perceived Humour	Ph1. This video is funny.	Ph1. Deze video is grappig.
	Ph2. This video is humorous.	Ph2. Deze video is humoristisch.
	Ph3. This video is amusing.	Ph3. Deze video is vermakelijk.
Product involvement	Piv1. This product is important to me.	Piv1. Dit is een belangrijk product voor mij.
	Piv2. I am interested in this product.	Piv2. Ik ben geïnteresseerd in dit product.
	Piv3. I need this product.	Piv3. Ik heb dit product nodig. (R)
	Piv4. I search for information before buying this product.	Piv4. Ik zoek eerst meer informatie voordat ik dit product ga kopen.*
	Piv5. I need time to think about buying this product.	Piv5. Ik heb tijd nodig om na te denken over het kopen van dit product.*
	Piv6. I am willing to spend a lot of money on buying this product.	Piv6. Ik heb er veel geld voor over om dit product te kopen.
	Piv7. I use this product regularly.	Piv7. Ik gebruik dit product vaak.
Forwarding worries	Fw1. This video is too large to attach to an e-mail.	Fw1. Deze video is te groot om mee te sturen met een e-mail.
	Fw2. This video is improper to forward due to its large file size.	Fw2. Deze video is ongeschikt om door te sturen door het grote formaat.
Forwarding experience	Fe1. I often forward received messages to my friends and family through the Internet (Facebook).	Fe1. Ik stuur vaak berichten door naar vrienden en familie via internet (Facebook)

(R) is recoded into reversed formulation in the questionnaire

\* these items were removed after performing a factor analysis