BETWEEN KNOWING AND LIKING A BRAND
AN INVESTIGATION OF THE EFFECTS OF PLEASANT, NEUTRAL AND IRRITATING ADVERTISING

Ankie A. M. Barendregt (S1162667)
University of Twente

OUR AD MAY HAVE BEEN OFFENSIVE, BUT AT LEAST IT GOT PEOPLE TALKING ABOUT OUR BRAND.

TUTORS
M. GALETZKA
J. KARREMAN

INSTITUTION
UNIVERSITY OF TWENTE

DATE
30-11-2016
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>3</td>
</tr>
<tr>
<td>Introduction and problem statement</td>
<td>3</td>
</tr>
<tr>
<td>Theoretical background</td>
<td>6</td>
</tr>
<tr>
<td>Pleasant advertising and its known effects</td>
<td>6</td>
</tr>
<tr>
<td>Irritating advertising and its known effects</td>
<td>11</td>
</tr>
<tr>
<td>Neutral advertising and its known effects</td>
<td>14</td>
</tr>
<tr>
<td>Advertising and product categories</td>
<td>14</td>
</tr>
<tr>
<td>Comparing the effectiveness of pleasant, neutral and irritating advertising</td>
<td>15</td>
</tr>
<tr>
<td>Research gaps</td>
<td>17</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>18</td>
</tr>
<tr>
<td>Methodology</td>
<td>21</td>
</tr>
<tr>
<td>Research design</td>
<td>22</td>
</tr>
<tr>
<td>Participants</td>
<td>22</td>
</tr>
<tr>
<td>Stimulus materials</td>
<td>24</td>
</tr>
<tr>
<td>Procedure</td>
<td>25</td>
</tr>
<tr>
<td>Measures</td>
<td>25</td>
</tr>
<tr>
<td>Analysis of results</td>
<td>27</td>
</tr>
<tr>
<td>Results</td>
<td>28</td>
</tr>
<tr>
<td>Recall</td>
<td>28</td>
</tr>
<tr>
<td>Recognition</td>
<td>30</td>
</tr>
<tr>
<td>Attitude towards the brand (A_{BR})</td>
<td>32</td>
</tr>
<tr>
<td>Attitude towards the ad (A_{AD})</td>
<td>33</td>
</tr>
<tr>
<td>Source credibility</td>
<td>34</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>35</td>
</tr>
<tr>
<td>Conclusion and discussion</td>
<td>39</td>
</tr>
<tr>
<td>Conclusion</td>
<td>39</td>
</tr>
<tr>
<td>Discussion</td>
<td>41</td>
</tr>
<tr>
<td>Practical implications</td>
<td>45</td>
</tr>
<tr>
<td>Limitations and future research</td>
<td>46</td>
</tr>
<tr>
<td>References</td>
<td>48</td>
</tr>
<tr>
<td>Appendix I: Pre-test</td>
<td>56</td>
</tr>
<tr>
<td>Appendix II: Online survey</td>
<td>65</td>
</tr>
<tr>
<td>Appendix III: SPSS Syntax</td>
<td>77</td>
</tr>
</tbody>
</table>
ABSTRACT
This study investigates the effects of pleasant/humorous, neutral and irritating print advertisements for low- and high-involvement products on brand recall, recognition, attitude towards the brand/ad, source credibility and purchase intention. To date, little research has been done on this subject, which may harm the decision-making on promotion campaigns by marketers and advertising agencies, forcing them to rely on past experience and intuition rather than scientific facts (Eisend, 2009; Henderson, 2007). This paper aims to help marketers to choose the right advertisement campaign for their product.

While there is a large consensus among scholars that pleasant advertising works better than neutral overall, opinions vary greatly on irritating advertising but statistical evidence to back up the claims is scarce (Fritz, 1979). This study is conducted through an online survey in the Netherlands, in which respondents had to answer questions about three different print ads (pleasant, neutral and irritating) on the levels of either low-involvement or high-involvement products. The results show that neutral advertising is actually far more useful than previously assumed, and while irritating advertising has its use, it should be used with caution as it is harmful for most of the variables measured. Also, the success of the different communication strategies does depend on the type of product it is used for, showing much higher scores for recall and recognition for low-involvement products, and a stronger negative attitude towards the ad in case of irritating ads with high-involvement products.

Keywords: Advertisement, effect, brand, commercial, pleasant, humour, humor, funny, irritating, annoying, neutral, purchase intention, attitude, recall, recognition, credibility, high-involvement, low-involvement.

INTRODUCTION AND PROBLEM STATEMENT
Ergerlijke Mr. Internet hakt pad voor Strato. It is the title of an article in MarketingTribune, one of the largest professional marketing magazines in the Netherlands, dated October 2015. The article describes the decision-making and the results for the advertising campaign of
webhosting provider Strato, which used a long-term humorous advertising campaign with only a disappointing, short-term result. After changing the campaign strategy to irritating in September 2014, against all advice, results exceeded the expectancy with more than triple the amount, which lasted long after the campaign had ended (Graus, 2015). This example shows the underdog in the world of advertising: irritation. For years scholars have argued that irritation in advertisements (hereafter ad) is something that harms the effectiveness of the ad and therefore should be avoided (Aaker & Bruzzone, 1985; De Pelsmacker & Van den Bergh, 1998; Geuens & De Pelsmacker, 1998; Greyser, 1973; Speck 1987; Thota & Biswas, 2009), but none of them have truly examined the effects of irritating ads statistically. Surprisingly, the very few scholars that have, come up with a different result: irritating ads are more effective than neutral ads (Fritz, 1979; Moore & Hutchinson, 1983; Silk & Vavra, 1974). Why do scholars disagree on this? The reason is the lack of research on the subject. One of the key obstacles is that an irritating campaign is less easily defined, making it much harder to study, because the emotion irritation can be caused by various aspects of the ad: sensitive product, an unbelievable situation, a put-down person, a threatened relationship, a graphic portrayal of physical discomfort, tension, an unattractive or unsympathetic character, a suggestive scene, poor casting, repetition and even humour itself (Aaker & Bruzzone, 1985; De Pelsmacker & Van den Bergh, 1998; Sawyer, 1981). Depending on the intended effect, irritating advertising could be beneficial or harmful to the campaign, but without evidence to explain the effects of irritating advertising this would be an educated guess at best.

Strato found itself on these crossroads as well, and originally went with a humorous campaign. So why was this campaign a failure? After all, a multitude of scholars have concluded that pleasant advertising (mostly through the means of humour), is also more effective than neutral advertising on various aspects (Aaker et al., 1986; Aaker & Bruzzone, 1981; Aaker & Stayman, 1989; Chung & Zhao, 2011; Cline & Kellaris, 2007; De Pelsmacker & Van den Bergh, 1998; Eisend, 2009; Fritz, 1979; Geuens & De Pelsmacker, 1998; Speck, 1987; Thota & Biswas, 2009). But, as with irritating advertising, in some cases it can be less effective (Cline & Kellaris, 2007; Eisend, 2009; Hatzithomas et al., 2011; Strick et al., 2009).
Even though this end of the spectrum is far more researched than irritating ads, again not all of the possible effects have been studied, and several results are ambiguous (Eisend, 2009). Since both irritating and pleasant advertising seem to be better than neutral advertising, this suggests marketers have to make a choice between either strategy. But is neutral advertising really that useless? Without sufficient data to compare all the three strategies for different communication goals such as increased recall, recognition, attitude towards the brand/ad, source credibility or even purchase intention, it is unclear what would work better in different situations. Moreover, it is argued by some scholars that the effects are moderated by product category (low- or high-involvement products), but even less data is available on this subject (Dens & De Pelsmacker, 2010; Eisend, 2009; Strick et al., 2009).

The solution to this problem is a study that investigates each of the commonly used communication effects for each type of ad, moderated by product category. As stated earlier, it is difficult to compare the three types to one another, as irritating advertising does not have a clear definition; instead it has a list of possible causes. Even pleasant advertising is not one of a kind, De Pelsmacker & Geuens (1996) defined pleasant ads as either warm, erotic or humorous ads. Humorous ads seem to have better results when compared to other pleasant ads (De Pelsmacker & Geuens, 1996; Geuens & De Pelsmacker, 1998), and is defined through the use of a joke (Cline & Kellaris, 2007; Hsieh et al., 2010; Speck, 1987).

However, as two scholars demonstrated, it is still possible to compare them by moving beyond the causes of irritation or pleasance of the ad, by using a pre-test which measures the levels of irritation or pleasance per type of ad (Aaker & Bruzzone, 1985; Fritz, 1979). This study aims to do exactly that, in order to give a more representative view of the effects of pleasant advertising, neutral advertising and irritating advertising, so that marketers can make a proper choice on what strategy they should pursue. The problem statement for this study is:

*What advertising strategy (pleasant, neutral or irritating) works best for several different communication effects (recall, recognition, attitude towards the brand/ad, source credibility and purchase intention) for low- and high-involvement products?*
THEORETICAL BACKGROUND

In spite of the literature on this subject being scarce and limited, the existing literature does provide clues as to the effects that the different types of advertisements have. To provide a clear view of the theoretical background, each type of advertising as well as the moderating role of low- and high-involvement products will be discussed below.

PLEASANT ADVERTISING AND ITS KNOWN EFFECTS

Pleasant advertising is defined through the different (positive) feelings evoked. Geuens & De Pelsmacker (1998) researched the spectrum of positive feelings that can be evoked by advertising. They argue that the main positive feelings are active, adventurous, alive, amused, carefree, excited, good, happy, interested and cheerfulness as well as the positive feelings more closely related to ‘warm’: affectionate, calm, concerned, touched and warm-hearted. They use three different types of ads that are generally considered as ‘pleasant’, such as warm, erotic, humorous, which they describe as ‘emotional ads’, which they compared to the neutral non-emotional print ad, to compare the evoked feelings and measure the cognitive effects on the advertising (Geuens & De Pelsmacker, 1998).

Types of pleasant ads

Erotic appeals are ads that use nudity on different levels, such as how many clothes the person is still wearing. They evoke more positive feelings than a neutral ad, but at the same time debilitate recall, attitudes and purchase intention (Geuens & De Pelsmacker, 1998; Latour & Henthorne, 1994; Peterson & Kerin, 1977; Severn et al., 1990; Steadman, 1969). Many studies have shown that erotic appeals have more effect on men than on women (Alexander & Judd, 1979; Latour, 1990; Latour et al., 1990; Latour & Henthorne, 1994).

Warmth (depicting a cosy, friendly atmosphere) is believed to improve overall advertising results (Aaker et al., 1986; Aaker & Bruzzone, 1981; Aaker & Stayman, 1989), but while the net result is just positive, it gives both positive and negative results at the same time (Geuens & De Pelsmacker, 1998, p. 5). It appears to evoke more positive feelings than a neutral ad, but
at the same time ad and brand recognition are not significantly influenced by warm stimuli (Geuens & De Pelsmacker, 1998). Studies on the effectiveness of warm ads found that they work better for women than for men (Aaker & Stayman, 1989; De Pelsmacker & Geuens, 1996; Geuens & De Pelsmacker, 1998).

_Humorous ads_ yield the strongest positive feelings as well as the strongest cognitive effects when compared to erotic and warm ads, but this difference was not statistically significant (Geuens & De Pelsmacker, 1998). Aaker _et al._ (1986) also found that humorous ads overall receive more positive ratings than warm ads. Furthermore, humour in advertisements yields different results based on the strength of humour (Cline & Kellaris, 2007), with a difference between high strength and low strength (which is how much humour is used in the ad).

Geuens & De Pelsmacker (1998) noted that the correlation between ad-evoked feelings and cognitive reactions is limited, however they found that “positive feelings, especially interest, cheerfulness, and lack of irritation, are associated with higher ad and brand recognition scores. Especially in the case of humorous ads, ad and brand recognition seems to be influenced by ad-evoked feelings. On the contrary, in the case of warm ads the degree of ad-evoked feelings does not influence ad and brand recognition.” (Geuens & De Pelsmacker, 1998, p. 2). They also found that humorous ads outperformed all the other pleasant ads in recognition, attitude towards the ad and purchase intention (De Pelsmacker & Geuens, 1996). Humour in ads leads to significantly more interest in the brand than the product. In contrast, both warm and erotic appeals scored worse than neutral ads in ad and brand recognition. They also argue that the effects of warm and erotic ads wear off faster than both humorous and neutral ads (Geuens & De Pelsmacker, 1998). Even though De Pelsmacker & Geuens (1996) state that the three pleasant ad types cannot be considered a homogeneous group either due to very different emotional stimuli and effects, two years later they stated that there is no significant difference between them (Geuens & De Pelsmacker, 1998).

Considering humorous ads seem to be the most pleasant ads overall, and lead to the strongest (and unambiguous) effects while not significantly different from other pleasant ads, from this point only the effects of humorous advertising will be discussed.
What is humour? A summary of all different types used in advertising.
An ad becomes humorous if it contains a certain joke, but is it not as easily classified as other pleasant ad types as there are several types of humorous ads. Speck (1987, 1991) is the leading authority on this field, being cited by almost 270 scholars. He argued that there are three different types of humour: arousal-safety, incongruity and disparagement. Arousal-safety humour releases its audience from a certain pressure or anxiety (Speck, 1991; Spotts et al., 1997). Incongruity humour generally entrails revolving cognitive uncertainty when the subject faces two incongruent events (Alden et al., 2000; Speck, 1991), such as puns, punch lines or a humorous comparison. Disparagement humour refers to expression that uses the elements of denigration, detraction, or scorn of a given target to produce amusement (Speck, 1991; Hsieh et al., 2010, p. 4). Based on those three types, Speck (1987, 1991) argues that five different types of humorous ads can be made: comic wit, satire, full comedy, sentimental humour and sentimental comedy. Comic wit, involving only the incongruity resolution process, is a mind-game that leads to a humorous interpretation. Sentimental humour is based only on the arousal-safety process and constitutes an emotional way to engender humour. Satire combines incongruity resolution and humorous disparagement processes. Sentimental comedy is the product of cooperation between incongruity resolution and the arousal-safety processes. Full comedy is based on the combination of all three humour processes. He also found that the different types of humour also had a different effect on comprehension (Speck, 1987, 1991; Hatzithomas et al., 2011, p. 61). Speck (1987, 1991) also debates that there are three levels in which humour is related to an ad: pragmatic, thematic and structural. Pragmatic relatedness refers to the hierarchy of the humour-message relationship (i.e., humour-dominant or non-humorous). Thematic (semantic) relatedness describes the relationship between the humour and the product. Structural (syntactic) relatedness refers to the syntactic placement within the ad, that is, whether the humour is meaningful to the message or not (Speck 1987, 1991; Cline & Kellaris, 2007, p. 56).

Effects of humorous ads
Chung & Zhao (2011) found that humorous ads are more effective than non-humorous (neutral) ads. They found positive relationships between the humorous ad, memory and attitude towards the ad (hereafter A_AD). They also found significant positive effects on both A_AD and attitude towards the brand (hereafter A_BR) for both familiar and unfamiliar brands, but the effect was stronger for unfamiliar brands. Oddly, Strick et al. (2009) had a completely different outcome on A_BR, as their result was that brands with non-humorous ads are liked as much as brands with humorous ads, and that brand choice is only affected by humour by mere association (implicit attitude change), which could help for spontaneous consumer purchases (low-involvement products). Fritz (1979) found that in the case of claim recall, pleasant ads are always better than neutral ads, and the more pleasant an ad is, the greater the effect on claim recall. This is confirmed by Cline & Kellaris (2007) with a similar construct, they found
that the greater the humour in an ad, the stronger the effect. This is moderated by whether or not the humour is related to the message: if either the humour strength or the humour-message relatedness is high, it leads to higher brand claims recall. However, if the humour is low, regardless of the humour-message relatedness, it does not aid brand claims recall at all.

**Humour with a negative effect**

Noteworthy is that it is widely accepted that humour generally reduces the level or irritation, but when humour is stupid or exaggerated like satire or sexually aggressive it actually increases levels of irritation (De Pelsmacker & Van den Bergh, 1998; Geuens, 1996; Lammers, 1991; Smith, 1993; Zhang & Zinkhan, 1991). Duncan & Nelson (1985) found that a humorous radio ad was perceived as irritating by the respondents that also rated the same ad as low on humour. They argue that the respondents ‘did not get the joke’ and thus were experiencing some irritation. They also found that the so-called ‘irritating humour’ leads to lower scores on attention paid, number of selling points recalled, positive product beliefs, liking the commercial and liking the brand. Therefore it is advised to avoid humour can cause irritation (Duncan & Nelson, 1985).

Overall, the findings suggest that humour in advertising creates a favourable effect, but it is still ambiguous what is affected and what is not. Furthermore, a few authors warn that humour unrelated to the message actually distracts the attention from the brand, which harms recall, or that the positive effect is moderated by the product group it is used for (Cline & Kellaris, 2007; Eisend, 2009; Strick et al., 2009).

**Summary**

With so many different cognitive effects as well as so few papers that discuss or compare more than few, Eisend (2009) has performed a statistical meta-analysis, in order to statistically compare all the different researches into one list with simple positive and negative effects on the different variables, as seen in Table 1. Many of the 0’s in the table are due to mixed findings in many different researches, leading to a non-conclusive outcome in Eisend’s
(2009) statistical analysis. The table however, is unique in that it compares all existing research and exposes the gaps or ambiguous results so far. Many variables show positive influences. Humour not only positively influences the attitude of the audience towards the ad itself and the brand, it also seems to positively influence purchase intention. However, negative affect (which includes the full spectrum of negative emotions), is negatively influenced by humour. This means that humour increases already existent negative feelings, and therefore creates irritation amongst the audience. This is supported by Cline & Kellaris (2007), who concluded that ‘mood’ is a variable that significantly influences the effect an ad has. In other words, a respondent in a bad mood can become irritated by humorous ads. Eisend (2009) also shows that humour seems to harm credibility. Other variables, such as comprehension, purchase behaviour, recall and recognition remain ambiguous, and more research is required to explain the effect of humour in ads on them.

<table>
<thead>
<tr>
<th>Outcome variables</th>
<th>Eisend, 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards the ad ($A_{AD}$)</td>
<td>+</td>
</tr>
<tr>
<td>Attitude towards the brand ($A_{BR}$)</td>
<td>+</td>
</tr>
<tr>
<td>Affect, positive</td>
<td>+</td>
</tr>
<tr>
<td>Affect, negative</td>
<td>-</td>
</tr>
<tr>
<td>Attention</td>
<td>+</td>
</tr>
<tr>
<td>Attitude towards the advertiser</td>
<td>0</td>
</tr>
<tr>
<td>Cognitive responses, positive</td>
<td>0</td>
</tr>
<tr>
<td>Cognitive responses, negative</td>
<td>0</td>
</tr>
<tr>
<td>Comprehension</td>
<td>0</td>
</tr>
<tr>
<td>Credibility</td>
<td>-</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>+</td>
</tr>
<tr>
<td>Purchase behaviour</td>
<td>0</td>
</tr>
<tr>
<td>Recall</td>
<td>0</td>
</tr>
<tr>
<td>Recognition</td>
<td>0</td>
</tr>
</tbody>
</table>

*Table 1. Assumed effects of the impact of humour in advertising (Eisend, 2009). + is a positive effect; - is a negative effect; 0 is no findings.*
IRRITATING ADVERTISING AND ITS KNOWN EFFECTS

In contrast to pleasant ads, there is not a clear description available as to what an irritating ad is. As discussed earlier, irritation can be caused by a multitude of variables, whereas pleasant ads are limited to a small number of categories and more importantly, out of which one ‘example’ category can be picked. Irritation in advertising is far less researched and defined. Fritz (1979) named feelings associated with ads that are considered to be irritating: ugly, unpleasant, awful, unappealing, irritating, depressing, painful, uninteresting, unattractive, regressive, negative and vulgar.

Causes of irritation

Aaker & Bruzzone (1985) explained many variables that cause an ad to become irritating. Firstly, they argue that irritation is stronger than dislike, because it causes displeasure. They found that ads lead to increased levels of irritation when an ad emphasizes: a sensitive product, an unbelievable situation, a put-down person, a threatened relationship, a graphic portrayal of physical discomfort, tension, an unattractive or unsympathetic character, a suggestive scene, or poor casting. De Pelsmacker & Van den Bergh (1998) and Sawyer (1981) found that repetition or frequent exposure is named as one of the main reasons for irritation of ads. Thota & Biswas (2009) argue that the level of irritation also depends on the personal variable ‘need of evaluation’. This means the innate need for individuals to evaluate information they process, which means they think about it or even form an opinion about it (Jarvis & Petty, 1996). Thota & Biswas (2009) found that increased levels for irritation can be found among people with a high need for evaluation. They also found that the frequently used marketing strategy to offer (un)related side-products in the same offer will also increase irritation (Thota & Biswas, 2009). As noted before, it is widely accepted that humour generally reduces irritation, unless the humour is stupid or exaggerated like satire or sexually aggressive. In those cases it actually increases levels of irritation (De Pelsmacker & Van den Bergh, 1998; Geuens, 1996; Lammers, 1991; Smith, 1993; Zhang & Zinkhan, 1991).
Effects of irritating advertising

While the causes of irritating ads are somewhat explained by scholars, the effects of the use of irritating advertisements are barely researched. De Pelsmacker & Van den Bergh (1998) argue that irritation levels are harmful in general and must be kept at an absolute minimum. Other research however, supports that this point of view is too limited. Aaker & Bruzzone (1985) found that irritating commercials were better remembered than a neutral ad. Also, irritating commercials stimulated more psychological activity, and a higher attentiveness in combination with negative emotions. Credibility is generally harmed by irritation, which is supported by several other scholars (Aaker & Bruzzone, 1985; Greyser, 1973; Pollay & Mittal, 1993). One of the few scholars who studies the effects based on levels of irritation rather than the cause, is Fritz (1979). The outcome regarding irritation is that claim recall is at its best at the highest levels of irritation, whereas the more neutral the ad is, the lower the claim recall is.

From a practitioner’s perspective, more information is available on the effects. Henderson (2007), wrote that the best remembered ads are those that are unpleasant, loud and brash (thus irritating), but discomfort is translated into not liking the product or the brand. Graus (2015), the current marketing manager of webhosting provider Strato, gave a long interview in which he describes in great detail how the use of an irritating campaign has resulted in an immense growth in purchases, as well as that the brand rose from brand awareness position four to one almost instantly. It is clear that the effects of irritating campaigns have not been extensively researched, so far scholars have been mostly trying to identifying the reason why an ad is annoying, rather than studying the effects, thus making a review of the effects challenging. To date, there is no meta-analysis on the effects of irritating ads.

Summary

Table 2 is based on the table of effects of humorous advertising by Eisend (2009), used instead for the effects of irritating advertising. Please note that Eisend (2009) used a vast statistical analysis for his table, but there is no meta-analysis existent for the effects of
irritating ads. The effects in Table 2 are therefore assumptions based on the existing literature. In contrast to the table with the effects of humorous ads, irritating ads show more negative effects, especially to the attitude towards the ad and the brand, and irritating ads seem to increase negative feelings. However, several scholars argue that it has a positive effect on recall (Aaker & Bruzzone, 1985; Fritz, 1979; Greyser, 1973). Noteworthy is the fact that many cells are still empty, thus making the overall effect very ambiguous. Moreover, it is also argued that in the long run irritating advertising is very effective. It is suggested that the relationship between the attitude towards the ad and the brand is J-shaped, meaning that a positive $A_{AD}$ leads to a very positive $A_{BR}$, but a negative $A_{AD}$ also leads to a positive $A_{BR}$ (Moore & Hutchinson, 1983; Silk & Vavra, 1974). This relates to the so-called the sleeper effect, meaning that in time irritating ads lead to an increased brand familiarity, and eventually even liking the brand as the ad becomes disassociated with the brand (Aaker & Bruzzone, 1985; De Pelsmacker & Van den Bergh, 1998; Moore & Hutchinson, 1983). Little is known about this effect and the estimated time needed for respondents to disassociate the irritating ad with the brand, but Henderson (2007) notes multiple times from a practitioner’s

<table>
<thead>
<tr>
<th>Outcome variables</th>
<th>Assumed effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards the ad (AAD)</td>
<td>-</td>
</tr>
<tr>
<td>Attitude towards the brand (ABR)</td>
<td>-</td>
</tr>
<tr>
<td>Affect, positive</td>
<td>+</td>
</tr>
<tr>
<td>Affect, negative</td>
<td>-</td>
</tr>
<tr>
<td>Attention</td>
<td>+</td>
</tr>
<tr>
<td>Attitude towards the advertiser</td>
<td>-</td>
</tr>
<tr>
<td>Cognitive responses, positive</td>
<td>+</td>
</tr>
<tr>
<td>Cognitive responses, negative</td>
<td>-</td>
</tr>
<tr>
<td>Comprehension</td>
<td>+</td>
</tr>
<tr>
<td>Credibility</td>
<td>-</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>?</td>
</tr>
<tr>
<td>Purchase behaviour</td>
<td>?</td>
</tr>
<tr>
<td>Recall</td>
<td>+</td>
</tr>
<tr>
<td>Recognition</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 2. Assumed effects of the impact of irritation in advertising. + is a positive effect; - is a negative effect; ? is mixed findings, empty cell is no information
view it works well, demonstrating several cases from the USA how people in a certain area still remember an irritating radio ad after 60 years, without hard feelings to the brand whatsoever. Most cases that she describes are irritating ads for low-involvement products, that are still remembered even by consumers not part of the target audience.

**NEUTRAL ADVERTISING AND ITS KNOWN EFFECTS**

The neutral advertisement is used in many studies, but it is rarely defined. Several scholars have a test-group rate ads before their research, and ads that score low on any kind of emotional effect are considered to be ‘neutral’ (Aaker & Bruzzone, 1985; Fritz, 1979; Geuens & De Pelsmacker, 1998). Geuens & De Pelsmacker (1998) describe the neutral ad specifically as a *non-emotional* ad. In their research they compare advertisements that are mostly associated with pleasant advertising, as well as the non-emotional advertisement. They found that *interest, lack of irritation, and cheerfulness* have a positive influence on ad and brand recognition. Non-emotional ads lead to the least favourable affective reactions in their research: people feel less carefree, less cheerful, less interested, more insulted and more irritated than any of the other pleasant ads, and as such the neutral ads scored less in almost all cases than the pleasant ads (Geuens & De Pelsmacker, 1998). Fritz (1979) classifies these ads as neither pleasant nor irritating. She found similar results, claim recall was much better at the both ends of the spectrum (either pleasant or irritating) but closer to the mean (closer to the middle, neutral point of the spectrum) claim recall was significantly much lower. For source credibility, it seems that neutral ads score higher than both pleasant ads (Eisend, 2009), and irritating ads (Aaker & Bruzzone, 1985; Greyser, 1973; Pollay & Mittal, 1993).

**ADVERTISING AND PRODUCT CATEGORIES**

Apart from the fact that the existing research for both pleasant and irritating advertising is incomplete, Eisend (2009) states that the category product used (low-involvement versus high-involvement) determines how actively the consumer processes the ad, and therefore it influences the effectiveness of humour on $A_{BR}$. He describes what humorous strategy should
be used for each type of product: white products (high-involvement/risk, functional products), yellow products (high-involvement/risk, hedonic products), blue products (low-involvement/risk, functional products) and red products (low-involvement/risk, hedonic products). He argues that humour can be used for all, but for white products only if the humour is related to the product (Eisend, 2009). He also states that the positive effect of humour on A_{BR} is weaker for functional and low-involvement products, as it distracts people from processing the information in the ad (Eisend, 2009). Dens & De Pelsmacker (2010) found a significant effect for involvement for both positive and negative ads on A_{AD}, with a stronger effect for high-involvement products. Strick et al. (2009) argue that brand choice is only affected by humour by mere association (implicit attitude change), which could help for spontaneous consumer purchases (low-involvement products). Geuens & De Pelsmacker (1998) confirm the idea that product type moderates effectiveness of pleasant advertising, but provide no further explanation as to the relation. Scientific sources for effects of irritating ads on product categories are scarce, but Henderson (2007) specifically names low-involvement products in the USA that were advertised with irritating ads, which are still remembered.

**COMPARING THE EFFECTIVENESS OF PLEASANT, NEUTRAL AND IRRITATING ADVERTISING**

To this day, no conclusive comparison can be made between the different types. Overall, pleasant advertising, as achieved through humorous advertising, seems to have a more favourable effect than irritating advertising, especially on A_{AD}, A_{BR}, positive affect, attention and purchase intention, thus making it tempting to conclude that pleasant advertisements are a better tool to use. This view is supported by a multitude of scholars (Aaker & Bruzzone, 1985; De Pelsmacker & Van den Bergh, 1998; Geuens & De Pelsmacker, 1998; Greyser, 1973; Speck, 1987; Thota & Biswas, 2009), but this image may be biased. All papers used neutral ads for comparison, while other studies concluded that using irritating ad is also better than using a neutral one (Fritz, 1979; Moore & Hutchinson, 1983; Silk & Vavra, 1974), most noteworthy on claim recall, recall, recognition and possibly purchase intention too.
Although Aaker & Bruzzone (1985), Aaker et al. (1986) and De Pelsmacker & Van den Bergh (1998) mention both types from a strategy perspective, currently there is only one scholar who has attempted to compare the effects of pleasant advertising vs. irritating advertising, with neutral advertising in the middle (Fritz, 1979). She focuses primarily on claim recall and how effective the different types are in the spectrum. Figure 1 shows her sketch model.

She suggests that the effectiveness is U-shaped, according to the ‘Law of Extremes’, with the peaks at pleasant advertising and irritating advertising, reaching its lowest point at the neutral advertising point. One of the major differences between this research and all other research on irritating advertising is that she does not focus on the causes of irritation, but instead has a jury rate the different commercials on levels of irritation. Her results proved her model: claims in advertisements representing the extreme ends of the continuum were better recalled than claims in those commercials positioned closer to the mean, both in an immediate test case and after a 48 hour lapse. Although her study is more focused on the effect of irritating advertising, she uses humorous ads as tools for pleasant advertising and is therefore the only scholar to date to compare both ends of the spectrum (Fritz, 1979).

In spite of this research, the question remains unanswered. Although Fritz (1979) tested specifically on claim recall, she also measures brand recall and recognition but does not elaborate much on those results. Also, her 7 commercials were scattered across the spectrum in her model, and thus the results to compare the effectiveness of pleasant advertising vs. irritating advertising cannot be directly compared, apart from that both of them score much higher than neutral advertising. Two studies have results that would match this view; Geuens & De Pelsmacker (1998) found that non-emotional ads scored a lot lower on effectiveness
compared to the warm, erotic and humorous ads, while the respondents felt more irritated and
more insulted. Duncan & Nelson (1985) found that humorous ads that were not perceived as
humorous also lead to increased levels of irritation, with lower scores on many variables.
Moreover, few scholars have looked into the possibility that the use of humour or irritation
has a different effect for different product groups. Eisend (2009) shows there are different
effects for humour on high-involvement and low-involvement products, with different
outcomes in effectiveness. Whether or not this is also the case for irritating advertisements,
has never been researched.

**Research Gaps**

This brings us down to the actual research gaps. Overall, the available data on the difference
in effects (as a result of using pleasant, neutral or irritating ads) is insufficient for a proper
comparison. Research on the effectiveness of pleasant advertising shows that while there are
no significant differences in effects between humorous, warm and erotic ads; warm and erotic
ads seem to yield less positive and far more ambiguous results than humorous ads (Geuens &
De Pelsmacker, 1998). In spite of the large quantity of research done for humorous ads, not all
effects have been properly studied according to Eisend (2009), thus the overall effectiveness
of humorous ads cannot established. Most studies focus on one or a few effects of humour,
compared to neutral ads, and often provide very general conclusions. The effects of irritating
ads are barely researched at all. Scholars focused only on the causes of irritation so far, and
often state it should be avoided under any circumstances, but without statistical evidence of
the assumed negative effects. The little research available shows it can work, especially for
recall and recognition, and it seems have more effect than a neutral ad. But with only a few
variables investigated, the assumed advantage and disadvantage of irritating ads remain
ambiguous. The final problem is that the effects also differ on product basis, as Eisend (2009)
shows for humorous advertising, so the effects of the use of humour for one product category
may not yield the same effects for another, which is confirmed by Strick *et al.* (2009). The
difference in effect for irritating ads based on product groups is never researched.
HYPOTHESES

Based on the research gaps, that show there is a lack of data for several variables, 18 hypotheses have been formulated for the variables recall, recognition, A_BR, A_AD, source credibility and purchase intention. The first two hypotheses for each variable assume the overall difference in scores for all ads, while the third hypothesis for each variable states that the assumed effects of the previous two hypotheses are stronger for a certain product type.

Recall

According to several scholars (Aaker & Bruzzone, 1985; Fritz, 1979; Greyser, 1973) irritating ads seem to have a considerable advantage over neutral ads for recall. Pleasant ads have ambiguous results and in some cases can be harmful to recall, although Fritz (1979) strongly argues that pleasant ads work better than neutral ads for claim recall. Thus we expect the highest score for irritating ads, followed by pleasant ads, and neutral ads scoring the lowest. While the literature does not explain the relation between irritating ads and low- and high-involvement products, from a practitioner’s view it seems that irritating ads are more beneficial for recall for low-involvement products (Henderson, 2007). Eisend (2009) suggests that the use of humour for low-involvement products is less effective, which means that the difference in scores of each type of ad could be stronger for low-involvement products.

H1_a: The recall of the brand is significantly higher with the use of an irritating ad, than with a pleasant ad or a neutral ad.

H1_b: The recall of the brand is significantly higher with the use of a pleasant ad, than with a neutral ad, but significantly lower than with an irritating ad.

H1_c: The difference in scores in recall of the brand for each type of ad is significantly stronger for low-involvement products than for high-involvement products.

Recognition

In the scientific literature there is no clear advantage of any type of ad for recognition, however Henderson (2007) states that there is a benefit for the use of irritating ads on
recognition, so a higher score on recognition for irritating ads compared to pleasant and neutral is assumed. In the case of pleasant ads, the results are ambiguous, but since recall and recognition are closely related we assume that pleasant ads score higher than neutral ads, but not as high as irritating ads. The literature does not describe the effect of low- or high-involvement products on recognition. However, since for recall the effect is assumed to be stronger for low-involvement products, we may assume that for recognition the difference in scores is also stronger for low-involvement products.

\[ H2_a: \text{The recognition of the brand is significantly higher with the use of an irritating ad, than with a pleasant ad or a neutral ad.} \]

\[ H2_b: \text{The recognition of the brand is significantly higher with the use of a pleasant ad, than with a neutral ad, but significantly lower than with an irritating ad.} \]

\[ H2_c: \text{The difference in scores in recognition of the brand for each type of ad is significantly stronger for low-involvement products than for high-involvement products.} \]

**Attitude towards the brand (A\textsubscript{BR})**

Irritating ads seem to be very harmful to A\textsubscript{BR} in general as shown in the theoretical background, while pleasant ads score higher than neutral ads (Eisend, 2009). Thus we expect that irritating ads score much lower than both pleasant and neutral, while pleasant is expected to score the highest. Eisend (2009) found a significant effect for product type and A\textsubscript{BR}, showing that the type of product determines how actively an ad is processed, with a higher involvement leading to a stronger attitude change for humorous ads. The literature does not explain this relation for irritating ads.

\[ H3_a: \text{The attitude towards the brand (A\textsubscript{BR}) is significantly lower with the use of an irritating ad, than with a pleasant ad or a neutral ad.} \]

\[ H3_b: \text{The attitude towards the brand (A\textsubscript{BR}) is significantly higher with the use of a pleasant ad, than with a neutral ad or an irritating ad.} \]

\[ H3_c: \text{The difference in scores in attitude towards the brand (A\textsubscript{BR}) for each type of ad is significantly stronger for high-involvement products than for low-involvement products.} \]
Attitude towards the ad (A<sub>AD</sub>)

As with A<sub>BR</sub>, A<sub>AD</sub> is also expected to be much lower for all irritating ads, than for neutral or pleasant ads. Eisend (2009) states that pleasant ads score higher than neutral ads. Dens & De Pelsmacker (2010) found a significant effect for involvement on both positive and negative ads, with a stronger effect on A<sub>AD</sub> for high-involvement products. Although Eisend (2009) does not investigate this effect, he states that A<sub>AD</sub> and A<sub>BR</sub> are closely correlated, which might also be a clue that high-involvement products also moderate the effects on A<sub>AD</sub>.

H4<sub>a</sub>: The attitude towards the advertisement (A<sub>AD</sub>) is significantly lower with the use of an irritating ad, than with a pleasant ad or a neutral ad.

H4<sub>b</sub>: The attitude towards the advertisement (A<sub>AD</sub>) is significantly higher with the use of a pleasant ad, than with a neutral ad or an irritating ad.

H4<sub>c</sub>: The difference in scores in attitude towards the ad (A<sub>AD</sub>) for each type of ad is significantly stronger for high-involvement products than for low-involvement products.

Source credibility

Based on the literature, it appears that both irritating and pleasant ads result in negative scores for source credibility, when compared to neutral ads. While the literature is ambiguous on the exact scores, it is assumed that irritating ads are more harmful to source credibility than any of the other ads, while neutral ads score the highest of all types. The effect of product type is not explained in the literature for any type of ad and any product type. We suggest that the evaluation whether or not the source is deemed credible, may relate to how actively the ad is processed, suggesting a stronger effect for high-involvement products.

H5<sub>a</sub>: The source credibility is significantly lower with the use of an irritating ad, than with a pleasant ad or a neutral ad.

H5<sub>b</sub>: The source credibility is significantly higher with the use of a neutral ad, than with a pleasant ad or an irritating ad.

H5<sub>c</sub>: The difference in scores in source credibility for each type of ad is significantly stronger for high-involvement products than for low-involvement products.
Purchase intention

Based on the literature, it appears that purchase intention is slightly better for pleasant ads compared to neutral ads, but in the case of irritating ads the literature suggests it can be both better and worse. In this study it is assumed that irritating ads lead to a more negative purchase intention compared to pleasant and neutral ads. This relation is not explained in the literature for any type of ad and product type. Strick et al. (2009) state that the use of humorous ads can lead to more spontaneous consumer purchase (purchase behaviour). Although spontaneous consumer purchases are not the same as purchase intention, perhaps considering the low risk of low-involvement products the effect on purchase intention is stronger for low-involvement products.

\( H_{6a} \): The purchase intention is significantly lower with the use of an irritating ad, than with a pleasant ad or a neutral ad.

\( H_{6b} \): The purchase intention is significantly higher with the use of a pleasant ad, than with a neutral ad or an irritating ad.

\( H_{6c} \): The difference in scores in purchase intention for each type of ad is significantly stronger for low-involvement products than for high-involvement products.

**Methodology**

In order to test these hypotheses, a study was required that compares the effects of pleasant ads, neutral ads and irritating ads, on the levels of both low-involvement products and high-involvement products. All independent variables (low-involvement/high-involvement products and pleasant/neutral/irritating ads) are referred to as factors in a 2 x 3 research design. This study focuses on the effects most often used in research in this field: recall, recognition, attitude towards the brand, attitude towards the ad, source credibility and purchase intention.

Note that prior to this study two pre-tests (one for high-involvement and one for low-involvement, both with \( N = 30 \)) have been conducted, in order to select the final tools for this study. The methodology and the results of those pre-tests can be found in Appendix I.
RESEARCH DESIGN

The research design for the main study is best explained by Table 3. As the table shows, the research design is a 2 x 3 design, with two independent variables (factors) the level of involvement of the product advertised versus the type of ad used. It also shows the variables measured in this study. Note that it is a between-within subjects design, which means that each respondent will answer questions about all three types of ad (pleasant, neutral and irritating) of one product group, but no respondent saw ads of both product groups.

![Table 3. Research design with a 2 x 3 between-within subjects ANOVA design.](image)

PARTICIPANTS

This study was conducted in the Netherlands, with Dutch-speaking respondents. For the final test a minimum of 180 respondents was needed. The respondents were acquired via e-mail, the invites were sent to various networks from many different acquaintances of friends, family, business and hobby networks, from all layers of society. Within those networks, the invites were often spread even further. The respondents who had participated in the pre-tests were not invited for the main study. In total this yielded a total of 334 registered respondents. However, 4 respondents did not give permission to use the data; 56 respondents had double entries (based on same IP-address, same gender, same year of birth and same education, in all
these cases the previous entry was interrupted, usually during or just after the display of the ads and they refreshed the page to do the survey again); and 44 respondents had quit entirely before finishing (36 of whom had not filled in a single question about the ads, the others less than 65%). This brings the total of valid responses for the final test on 230. 63% of the respondents is male, 37% of the respondents is female.

As shown in Figure 2, the years of birth of the population is roughly normally distributed ($M = 1967.24, SD = 12.838$). The education level of the respondents is higher than the education level in the Netherlands in the latest data (CBS, 2014) as shown by Figure 3. Note that no respondent selected the option primary school, and the few respondents that picked the option ‘other, please explain’ had an education level that would fall under the existing options (which has thus been corrected). Also, the CBS in the Netherlands has slightly different criteria for education level, so the percentages are slightly off.

Although all the respondents were linked to the same survey, the program divided the respondents randomly in two separate groups, one for low-involvement products (N = 122) and one for high-involvement products (N = 108). These groups did not differ much from each other, as the low-involvement group is 65.5% male and 34.4% female with normally distributed years of birth ($M = 1968.11, SD = 13.007$); and the high-involvement group is 60.2% male and 39.8% female and also with normally distributed years of birth ($M = 1966.24, SD = 12.630$). The education levels of both groups are nearly identical.
STIMULUS MATERIALS

Prior to this study, a total of 36 real print ads were selected, that were shared online for being humorous/irritating, and the neutral ads were largely manually selected from UK magazines. None of them originated from the Netherlands/used a product sold in the Netherlands or have been used on a large scale globally. Fritz (1979) argued that in her research, not all commercials she used were perfectly comparable, and the use of real brands could result in any kind of bias. To limit this problem, the ads were edited. This means that the ads have been heavily photoshopped or redesigned with fictive brands and products, as well as displayed in greyscale colouring, with a different text and slogan in Dutch, and sometimes completely different images in the same style. The style of the ads stayed close to the original, to maintain the very reason why the ad was considered to be pleasant/neutral/irritating. The final six ads that were used for the main study are the result of pre-testing that large group of 36 edited ads. More information on how the ads were selected, edited and pre-tested is found in Appendix I. The six ads are part of two pairs of three ads, with the same product, on the levels of low-involvement and high-involvement products. The pre-tests provided a well suitable pair of

<table>
<thead>
<tr>
<th>Pleasant</th>
<th>Neutral</th>
<th>Irritating</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Table 4. The final sets of ads for low-involvement and high-involvement products
insurance ads for high-involvement (with a positively rated pleasant ad, a nearly perfectly neutrally rated neutral ad, and a very negatively rated irritating ad). For low-involvement two pairs were combined for the ideal pair of cleaning products and cream. The two pairs used for the final test are shown in Table 4.

**PROCEDURE**

The main study was conducted after the final two sets were selected. Since the respondents in the main research group had no prior knowledge or associations with the fictive brands and ads, only a post-test was conducted. The survey for the final study was made with SurveyMonkey, which started with an opening message to thank the respondent for their time, the permission to use these results, and the general questions about gender, year of birth and education. SurveyMonkey then assigned each respondent randomly to either the low-involvement or the high-involvement product group, meaning that no respondent saw both groups in their survey. Then the initial show of a set of advertisements started, the whole set being from the same product category, in a random order for each respondent that conducted the survey. Also, throughout the questionnaire respondents were unable to click back to a previous page. The full questionnaire with screenshots of each page is found in Appendix II.

**MEASURES**

After the initial show of the three ads in a random order ended, each respondent was asked six questions, one for each variable. Each question was placed on a separate page.

**Recall**

Recall of the brands was the first variable measured, through an open question. The respondents were asked to type all the brands they can remember. These answers were later rated with points, 0 points if not recalled, 1 point if only the product or the ad was recalled, 2 points if the brand name was recalled but spelled wrong, and 3 points if the brand name was recalled with max. one misspelt letter.
Recognition

Recognition of the brand was measured with a multiple-choice question with all brand names as well as bogus brand names in a random order. Respondents had to tick the boxes of the brands that they recognized. This resulted in a binomial answer: the box was either ticked or not. Only the correct answers were counted, no penalty was given for wrong answers.

\( A_{BR} \) and \( A_{AD} \)

The other variables required a more elaborate way of measuring, meaning a 7-point Likert scale, with an 8th dot for ‘no opinion’. The ‘no opinion’ option was recoded to ‘value missing’. The respondents were asked what their feeling is with each brand, to measure \( A_{BR} \), with a list of all the brand names (in random order) and the Likert scale to rate the scores on. After that \( A_{AD} \) is measured in a similar way: the respondents were asked what their feeling is with each ad and had to rate each ad, in thumbnail size. Note that the thumbnails used for \( A_{AD} \) were large enough to distinguish the ads, but too small to read the text and the brand name is hard to see. This was to help respondents to know which ad is meant, but without the opportunity to enlarge it to avoid further bias.

Source credibility and purchase intention

Source credibility was measured through the question how reliable they think the source is, once again measured with the Likert scale. Purchase intention is measured with the question how likely it is that the respondent would consider the product/service at their next purchase, also with a Likert scale. For both questions the brands were shuffled randomly in order, and both had the option ‘no opinion’ as the 8th dot, which was recoded into ‘value missing’.

Note: all Likert-scale variables used were recoded from 1-7 into 3 to -3. This is because in the survey output 1 is the far end of the positive ratings, and 7 is the far end of negative ratings. Ratings from 3 to -3 made more sense statistically.
ANALYSIS OF RESULTS

The results were analysed in several different ways. As noted earlier, respondents were checked on permission given to use the results (if not, the survey was closed but it still gave an entry), double respondents were removed (using the IP-address, gender, year of birth and level of education for comparison), and respondents were checked on the amount of questions answered (and were eliminated if 35% or more of the entries about the ads are missing).

The results from recall were analysed with a 2 x 3 mixed model ANOVA (although the condition for using it is violated since the variable has 4 values instead of 5). In order to prevent any incorrect conclusions, the results were also double-checked by several different non-parametric tests for paired samples (the Friedman test for the main effect and the Wilcoxon Signed Ranks test for the pairwise comparisons), as well as Chi-Square tests.

Recognition required several different non-parametric tests for paired samples since the output was a binominal variable, which cannot be analysed with an ANOVA. A Cochran’s Q test was used for the main effect and the McNemar test for pairwise comparisons. The effects on low- or high-involvement were tested with Chi-Square tests.

For both recall and recognition a logistic regression analysis would have been more ideal to measure (or double-check) the interaction effect between type of ad and involvement since the non-parametric tests do not directly test the interaction effect between type of ad and involvement. But, logistic regression requires a great deal of expertise to perform. Instead for both variables additional testing with the non-parametric tests was done, to measure (or double-check) the differences between type of ad, which were split on either the levels of low-involvement or high-involvement.

All other variables, measured with the 7-point Likert-scale, meet the assumption of the variables to be continuous for an ANOVA. Mixed model ANOVA testing (for paired samples) was used to determine whether or not there is a significant main effect for pleasant, neutral and irritating ads, a significant main effect for low-involvement products and high-involvement products, as well as a significant interaction between type of ad versus low-involvement products and high-involvement products.
RESULTS

RECALL

Although recall is a categorical variable with 4 different values (and not 5, thus violating the condition to use an ANOVA), a 2 x 3 mixed model ANOVA was used to compare the ratings of recall for the three different types of ads. The boxplots and the Kolmogorov-Smirnov test indicate a deviation from normality ($p < 0.001$), and the histograms do not show a normal distribution for all three ads. Considering the categorical nature of this variable, this is as expected, and therefore the test results were double-checked with non-parametric tests. $F_{\text{max}} = 1.417$, demonstrating homogeneity of variances. Box’s test came out not significant, but Levene’s test came out significant for recall pleasant and irritating ($p < 0.001$) and recall neutral ($p = 0.007$), violating the assumption for a mixed model ANOVA. Considering the large and almost equal sample size in each box (N = 122 for all three low-involvement product ads, and N = 108 for all three high-involvement product ads) this is not considered to be a problem. Mauchly’s test indicated the assumption of sphericity was not violated.

The results from the mixed model ANOVA do not show a significant main effect for the different ads on recall, $F (2, 456) = 1.785, p = 0.169$, partial $\eta^2 = 0.008$. None of the pairwise comparisons were significant. This result was double-checked with a non-parametric Friedman test of differences among repeated measures with N = 230. It also did not show a significant difference between the three types of ads, $\chi^2(2) = 3.591, p = 0.166$. Pairwise comparisons of the different ads was done with the Wilcoxon Signed Ranks test, also with N = 230. Again there were no significant differences ($Z = -1.430, p = 0.153$) between pleasant ads ($M = 1.29, SD = 1.337$) and neutral ads ($M = 1.45, SD = 1.359$), as well as no significant differences between irritating ads ($M = 1.45, SD = 1.388$) and pleasant ads ($Z = -1.624, p = 0.104$) and neutral ads ($Z = -0.077, p = 0.938$). We cannot reject the null hypothesis that recall is the same for each ad type, and thus hypotheses H1a and H1b cannot be accepted.

The mixed model ANOVA shows a significant main effect for involvement, $F (1, 228) = 38.234, p < 0.001$, partial $\eta^2 = 0.114$. An additional ANOVA showed that involvement is significant for pleasant ads ($F (1, 228) = 25.365, p < 0.001$); it is also significant for neutral
ads \((F (1, 228) = 20.163, p < 0.001)\); as well as significant for irritating ads \((F (1, 228) = 21.212, p < 0.001)\). This was double-checked with multiple Chi-Square tests. The analysis used \(N = 230\) for all tests, 122 within low-involvement products and 108 within high-involvement products. The results confirmed the findings from the ANOVA: involvement is significant for pleasant ads \(\chi^2 (3) = 32.180, p < 0.001\); it is also significant for neutral ads \(\chi^2 (3) = 24.039, p < 0.001\); as well as significant for irritating ads \(\chi^2 (3) = 28.270, p < 0.001\).

The results from the mixed model ANOVA do not show a significant interaction for recall between type of ad used and low- or high-involvement products \(F (2, 456) = 0.068, p = 0.934, \text{partial } \eta^2 < 0.001\). Although this result cannot be directly double-checked without the use of logistic regression analysis, the decision was made to run additional non-parametric Friedman and Wilcoxon Signed Ranks tests for all three ads, on separated levels of low-involvement and high-involvement products. For low-involvement products, the Friedman test of differences among repeated measures \((N = 122)\) did not show a significant difference between the three types of ads, \(\chi^2 (2) = 1.736, p = 0.420\). Pairwise comparisons for low-involvement products done with Wilcoxon Signed Ranks tests \((N = 122)\) also showed there were no significant differences \((Z = -0.656, p = 0.512)\) between pleasant ads \((M = 1.69, SD = 1.349)\) and neutral ads \((M = 1.81, SD = 1.350)\), as well as no significant differences between irritating ads \((M = 1.83, SD = 1.401)\) and pleasant ads \((Z = -1.048, p = 0.295)\) and neutral ads \((Z = -0.261, p = 0.794)\). For high-involvement products, the Friedman test of differences among repeated measures \((N = 108)\) did not show a significant difference between the three types of ads, \(\chi^2 (2) = 1.859, p = 0.395\). Pairwise comparisons for low-involvement products done with Wilcoxon Signed Ranks tests \((N = 108)\) also showed there were no significant differences \((Z = -1.447, p = 0.148)\) between pleasant ads \((M = 0.84, SD = 1.177)\) and neutral ads \((M = 1.04, SD = 1.252)\), as well as no significant differences between irritating ads \((M = 1.02, SD = 1.245)\) and pleasant ads \((Z = -1.322, p = 0.186)\) and neutral ads \((Z = -0.136, p = 0.892)\). The null hypothesis that there no interaction for recall between the type of ad used and involvement level cannot be rejected, thus hypothesis \(H1_c\) cannot be accepted.
Figure 4 shows the results from the Chi-Square tests for recall, with the percentage that each value occurred in the sample. As shown, low-involvement products (purple bars) are far better recalled than the high-involvement products (red bars), with both types of involvement scoring almost exactly opposite. While the difference in recall between each type of ad was significant in none of the comparisons, the difference in recall between the low-involvement products and high-involvement products was clearly significant for all ads ($p < 0.001$).

![Figure 4](image)

**Figure 4.** Recall: Product involvement level * advertisement type (N = 230)

**RECOGNITION**

Considering the use of a binominal variable (respondents ticked the box or not), a non-parametric Cochran’s Q test was conducted with $N = 230$. The results do not show a significant difference between the three types of ads $\chi^2(2) = 2.505$, $p = 0.286$. Pairwise comparisons of the different ads using continuity-corrected McNemar’s tests with Bonferroni correction ($N = 230$) neither revealed any significant differences ($\chi^2(1) = 0.052$, $p = 0.820$) between pleasant ads ($M = 0.76$, $SD = 0.430$) and neutral ads ($M = 0.74$, $SD = 0.438$), as well as no significant differences between irritating ads ($M = 0.70$, $SD = 0.459$) and pleasant ads ($\chi^2(1) = 1.973$, $p = 0.160$) and neutral ads ($\chi^2(1) = 1.125$, $p = 0.289$). We cannot reject the null hypothesis that recognition is the same for each ad type, and thus hypotheses H2a and H2b cannot be accepted.
The main effect for involvement was analysed with multiple Chi-Square tests. The analysis used N = 230 for all tests, 122 within low-involvement products and 108 within high-involvement products. Involvement is significant for pleasant ads \( \chi^2(1) = 12.982, p < 0.001 \); it is also significant for neutral ads \( \chi^2(1) = 4.872, p = 0.027 \); as well as significant for irritating ads \( \chi^2(1) = 4.801, p = 0.028 \).

In order to test the interaction for recognition between type of ad used and low- or high-involvement products a logistic regression analysis would be needed, but considering the amount of expertise this requires, the decision was made to run additional non-parametric Cochran’s Q tests and McNemar’s tests for all three ads, on separated levels of low-involvement and high-involvement products. For low-involvement products, the Cochran’s Q test (N = 122) did not show a significant difference between the three types of ads, \( \chi^2(2) = 3.957, p = 0.138 \). Pairwise comparisons for low-involvement products done with the continuity-corrected McNemar’s tests with Bonferroni correction (N = 122) showed there were no significant differences (\( \chi^2(1) = 0.833, p = 0.361 \)) between pleasant ads (\( M = 0.85, SD = 0.356 \)) and neutral ads (\( M = 0.80, SD = 0.399 \)), but the difference between irritating ads (\( M = 0.76, SD = 0.427 \)) and pleasant ads is significant (\( \chi^2(1) = 3.030, p = 0.041 \) 1-tailed).

Between irritating ads and neutral ads there is no significant difference (\( \chi^2(1) = 0.552, p = 0.458 \)). For high-involvement products, the Cochran’s Q test (N = 108) did not show a significant difference between the three types of ads, \( \chi^2(2) = 0.585, p = 0.747 \). Pairwise comparisons for low-involvement products done with the continuity-corrected McNemar’s tests with Bonferroni correction (N = 108) also showed there were no significant differences (\( \chi^2(1) = 0.085, p = 0.770 \)) between pleasant ads (\( M = 0.65, SD = 0.480 \)) and neutral ads (\( M = 0.68, SD = 0.470 \)), as well as no significant differences between irritating ads (\( M = 0.63, SD = 0.485 \)) and pleasant ads (\( \chi^2(1) = 0.025, p = 0.874 \)) and neutral ads (\( \chi^2(1) = 0.372, p = 0.542 \)).

The null hypothesis that there no interaction for recognition between the type of ad used and involvement level cannot be rejected with certainty, thus hypothesis H2c cannot be accepted.
Figure 5 shows the results from the Chi-Square tests for recognition, with the percentage that each value occurred in the sample. As shown, the low-involvement products (purple bars) are better recalled than the high-involvement products (red bars), although the difference is much smaller compared to recall. The low-involvement pleasant ad scored significantly higher (p = 0.041 1-tailed) than the low-involvement irritating ad, but none of the other comparisons between the ads was significant. The difference in recall between the low-involvement products and high-involvement products was significant for all ads (on varying p-scores).

**ATTITUDE TOWARDS THE BRAND (\text{A}_{\text{BR}})**

A 2 x 3 mixed model ANOVA was used to compare the ratings of the \text{A}_{\text{BR}} for the three different types of ads. Boxplots and the Kolmogorov-Smirnov test indicate a deviation from normality (p < 0.001), but the histograms of the data show a roughly normal distribution for \text{A}_{\text{BR}} for both pleasant and neutral, and a right-skewed distribution for irritating. The Central Limit Theorem (CLT) states that with sufficient sample size and the normal distribution of the sampled group, normality may be assumed for the data itself as well (Moore & McCabe, 2008). Since the respondents are normally distributed and the sample size is large, normality is thus assumed. $F_{\text{max}} = 1.701$, demonstrating homogeneity of variances, however Box’s test
came out significant \((p = 0.001)\) and Levene’s test came out significant \((p = 0.041)\) for \(A_{BR}\) neutral, violating the assumption for a mixed model ANOVA. Considering the large sample size in each box \((N = 105\) for all three low-involvement product ads, and \(N = 83\) for all three high-involvement product ads) this is not considered to be a problem. Mauchly’s test indicated the assumption of sphericity was not violated.

The results show a significant main effect for the different ads on \(A_{BR}\), \(F(2, 372) = 43.251, p < 0.001\), partial \(\eta^2 = 0.189\). Pairwise comparisons revealed that the \(A_{BR}\) for the pleasant ads \((M = 0.22, SD = 1.444)\) and the neutral ads \((M = 0.47, SD = 1.438)\) do not significantly differ from each other \((p = 0.292)\), but the \(A_{BR}\) for the irritating ads \((M = -0.88, SD = 1.598)\) is significantly lower than pleasant \((p < 0.001)\) and neutral \((p < 0.001)\). Therefore we reject the null hypothesis, and accept hypothesis H3\textsubscript{a} as irritating ads score lower than both pleasant and neutral ads, however hypothesis H3\textsubscript{b} is not accepted as pleasant ads do not score higher than neutral ads. A significant main effect for involvement was not found, \(F(1, 186) = 1.259, p = 0.263\), partial \(\eta^2 = 0.007\).

There was no significant interaction found for \(A_{BR}\) between type of ad used and low- or high-involvement products \(F(2, 372) = 1.368, p = 0.256\), partial \(\eta^2 = 0.007\). The means for the pleasant ads are \(M = 0.30, SD = 1.344\) for low-involvement and \(M = 0.12, SD = 1.565\) for high-involvement products; for the neutral ads \(M = 0.64, SD = 1.249\) for low-involvement and \(M = 0.25, SD = 1.629\) for high-involvement products; and for the irritating ads \(M = -0.93, SD = 1.625\) for low-involvement and \(M = -0.82, SD = 1.571\) for high-involvement products. The null hypothesis that there no interaction for \(A_{BR}\) between the type of ad used and involvement level cannot be rejected, thus hypothesis H3\textsubscript{c} cannot be accepted.

**ATTITUDE TOWARDS THE AD (A\textsubscript{AD})**

A 2 x 3 mixed model ANOVA was used to compare the ratings of the \(A_{AD}\) for the three different types of ads. Like \(A_{BR}\), the boxplots and the Kolmogorov-Smirnov test also indicate a deviation from normality \((p < 0.001)\), and like \(A_{BR}\), the histograms show a roughly normal distribution for pleasant and neutral, but a right-skewed distribution for irritating. In
according to CLT we once again assume normality. $F_{\text{max}} = 1.821$, demonstrating homogeneity of variances. Box’s test came out not significant, but Levene’s test came out significant for $A_{\text{AD}}$ neutral ($p = 0.044$) and $A_{\text{AD}}$ irritating ($p = 0.021$), violating the assumption for a mixed model ANOVA. Considering the large and almost equal sample size in each box (N = 115 for all three low-involvement product ads, and N = 106 for all three high-involvement product ads) this is not considered to be a problem. Mauchly’s test indicated the assumption of sphericity was not violated.

The results show a significant main effect for the different ads on $A_{\text{AD}}$, $F(2, 438) = 216.184$, $p < 0.001$, partial $\eta^2 = 0.497$. Pairwise comparisons revealed that the $A_{\text{AD}}$ for the pleasant ads ($M = 0.36, SD = 1.503$) is significantly lower ($p = 0.002$) than the neutral ads ($M = 0.79, SD = 1.277$). Also the $A_{\text{AD}}$ for the irritating ads ($M = -1.64, SD = 1.425$) is significantly lower than pleasant ($p < 0.001$) and neutral ($p < 0.001$). Therefore we reject the null hypothesis, and accept hypothesis $H_4_a$ as irritating ads score lower than both pleasant and neutral ads, however hypothesis $H_4_b$ is not accepted as pleasant ads do not score higher than neutral ads.

A significant main effect for involvement was not found, $F(1, 219) = 0.546$, $p = 0.461$, partial $\eta^2 = 0.002$.

A significant interaction was found for $A_{\text{AD}}$ between type of ad used and low- or high-involvement products $F(2, 438) = 5.238$, $p = 0.006$, partial $\eta^2 = 0.023$. An additional ANOVA was used to analyse the differences between the low-involvement and high-involvement means for each type of ad (contrast analysis). The means for the pleasant ad do not differ significantly ($F(1, 223) = 0.190$, $p = 0.663$) between low-involvement products ($M = 0.32, SD = 1.442$) and high-involvement products ($M = 0.40, SD = 1.572$); for the neutral ad they also did not differ significantly ($F(1, 222) = 1.276$, $p = 0.260$) between low-involvement products ($M = 0.69, SD = 1.165$) and high-involvement products ($M = 0.90, SD = 1.387$); but for the irritating ad there was a significant difference ($F(1, 227) = 10.047$, $p = 0.002$) between low-involvement products ($M = -1.37, SD = 1.490$) and high-involvement products ($M = -1.92, SD = 1.300$). With these results we reject the null hypothesis and accept hypothesis $H_4_c$. 

34
SOURCE CREDIBILITY

A 2 x 3 mixed model ANOVA was used to compare the ratings of source credibility for the three different types of ads. A large sample was used with N = 112 for all three low-involvement ads, and N = 92 for all three high-involvement ads. Like A_B, and A_AD, the boxplots and the Kolmogorov-Smirnov test again indicate a deviation from normality ($p < 0.001$), and again the histograms show a roughly normal distribution for pleasant and neutral, but a slightly right-skewed distribution for irritating. In accordance to CLT we once again assume normality. $F_{\text{max}} = 1.221$, demonstrating homogeneity of variances. Box’s test and Levene’s test were not significant, also demonstrating homogeneity of variances. However Mauchly’s test showed sphericity was violated ($p < 0.001$). Therefore sphericity is not assumed and the alternative Huynh-Feldt method was used to correct the degrees of freedom. The results show a significant main effect for the different ads on source credibility, $F (1.866, 377.024) = 69.604, p < 0.001$, partial $\eta^2 = 0.256$. Pairwise comparisons revealed that the source credibility for the pleasant ads ($M = -0.20, SD = 1.325$) is significantly lower ($p < 0.001$) than the neutral ads ($M = 0.25, SD = 1.435$), and the source credibility for the irritating ads ($M = -1.19, SD = 1.320$) is significantly lower than pleasant ($p < 0.001$) and neutral ($p < 0.001$). Therefore we reject the null hypothesis, and accept the hypothesis $H_5$ as irritating ads score lower than both pleasant and neutral ads. Hypothesis $H_5_b$ is also accepted as neutral ads score higher than both pleasant and irritating ads. A significant main effect for involvement was not found, $F (1, 202) = 0.159, p = 0.691$, partial $\eta^2 = 0.001$.

There was no significant interaction found for source credibility between type of ad used and low- or high-involvement products $F (1.866, 377.024) = 0.123, p = 0.871$, partial $\eta^2 = 0.001$. The means for the pleasant ads are $M = -0.25, SD = 1.312$ for low-involvement and $M = -0.13, SD = 1.344$ for high-involvement products; for neutral ads $M = 0.25, SD = 1.430$ for low-involvement and $M = 0.25, SD = 1.450$ for high-involvement products; and for irritating ads $M = -1.21, SD = 1.323$ for low-involvement and $M = -1.17, SD = 1.323$ for high-involvement products. The null hypothesis that there no interaction for source credibility between the type of ad used and involvement level cannot be rejected, thus hypothesis $H_5_c$ cannot be accepted.
**PURCHASE INTENTION**

A 2 x 3 mixed model ANOVA was used to compare the ratings of purchase intention for the three different types of ads. A large sample was used with N = 117 for all three low-involvement ads, and N = 104 for all three high-involvement ads. Again, boxplots and the Kolmogorov-Smirnov test indicate a deviation from normality (p < 0.001), but now histograms show a right-skewed distribution for all types of ads. Still, in accordance to CLT we once again assume normality. $F_{max} = 2.063$, demonstrating homogeneity of variances. Box’s test and Levene’s test were not significant, also demonstrating homogeneity of variances. However Mauchly’s test showed sphericity was violated (p = 0.030). Therefore sphericity is not assumed and the alternative Huynh-Feldt method was used to correct the degrees of freedom.

The results show a **significant** main effect for the different ads on purchase intention, $F (1.964, 430.206) = 24.112, p < 0.001$, partial $\eta^2 = 0.099$. Pairwise comparisons revealed that the purchase intention for the pleasant ads ($M = -1.38, SD = 1.616$) is **significantly** lower ($p = 0.037$) than the neutral ads ($M = -1.11, SD = 1.803$), and the purchase intention for the irritating ads ($M = -1.90, SD = 1.365$) is **significantly** lower than pleasant ($p < 0.001$) and neutral ($p < 0.001$). Therefore we reject the null hypothesis, and accept the hypothesis H6a as irritating ads score lower than both pleasant and neutral ads, however hypothesis H6b is not accepted as pleasant ads do not score higher than neutral ads. A significant main effect for involvement was not found, $F (1, 219) = 0.249, p = 0.619$, partial $\eta^2 = 0.001$.

There was no significant interaction found for purchase intention between type of ad used and low- or high-involvement products $F (1.964, 430.206) = 0.067, p = 0.933$, partial $\eta^2 < 0.001$.

The means for the pleasant ad are $M = -1.32, SD = 1.596$ for low-involvement and $M = -1.45, SD = 1.642$ for high-involvement products; for neutral ads $M = -1.07, SD = 1.765$ for low-involvement and $M = -1.15, SD = 1.853$ for high-involvement products; and for irritating ads $M = -1.88, SD = 1.433$ for low-involvement and $M = -1.92, SD = 1.290$ for high-involvement products. The null hypothesis that there no interaction for purchase intention between the type of ad used and involvement level cannot be rejected, thus hypothesis H6c cannot be accepted.
Figure 6 is the comparison of the mean scores for each type of ad, by the four variables measured by the Likert scale (the main effect for type of ad is significant for each variable with $p < 0.001$). Neutral scores clearly higher than pleasant (significant for all variables except $A_{BR}$, on varying $p$-scores), and irritating scores lower than both neutral and pleasant (significant for all variables with $p < 0.001$). Figure 7 shows the same variables on the levels of low-involvement and high-involvement. The interaction effect between low- or high-involvement products and type of ad was found to be significant ($p = 0.006$) for $A_{AD}$. For $A_{BR}$,
source credibility and purchase intention it was not significant. On closer examination for A_{AD}, only the difference between the low-involvement and the high-involvement irritating ad was found to be significant ($p = 0.002$). The figures shows that the difference between low and high-involvement bars is indeed very small for A_{BR}, source credibility and purchase intention, as well as pleasant and neutral for A_{AD}, compared to irritating for A_{AD}.

Table 5 shows the summary of all hypotheses.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Accepted/rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H1_a$: The recall of the brand is significantly higher with the use of an irritating ad, than with a pleasant ad or a neutral ad.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H1_b$: The recall of the brand is significantly higher with the use of a pleasant ad, than with a neutral ad, but significantly lower than with an irritating ad.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H1_c$: The difference in scores in recall of the brand for each type of ad is significantly stronger for low-involvement products than for high-involvement products.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H2_a$: The recognition of the brand is significantly higher with the use of an irritating ad, than with a pleasant ad or a neutral ad.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H2_b$: The recognition of the brand is significantly higher with the use of a pleasant ad, than with a neutral ad, but significantly lower than with an irritating ad.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H2_c$: The difference in scores in recognition of the brand for each type of ad is significantly stronger for low-involvement products than for high-involvement products.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H3_a$: The attitude towards the brand (A_{BR}) is significantly lower with the use of an irritating ad, than with a pleasant ad or a neutral ad.</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H3_b$: The attitude towards the brand (A_{BR}) is significantly higher with the use of a pleasant ad, than with a neutral ad or an irritating ad.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H3_c$: The difference in scores in attitude towards the brand (A_{BR}) for each type of ad is significantly stronger for high-involvement products than for low-involvement products.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H4_a$: The attitude towards the advertisement (A_{AD}) is significantly lower with the use of an irritating ad, than with a pleasant ad or a neutral ad.</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H4_b$: The attitude towards the advertisement (A_{AD}) is significantly higher with the use of a pleasant ad, than with a neutral ad or an irritating ad.</td>
<td>Rejected</td>
</tr>
<tr>
<td>$H4_c$: The difference in scores in attitude towards the ad (A_{AD}) for each type of ad is significantly stronger for high-involvement products than for low-involvement products.</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H5_a$: The source credibility is significantly lower with the use of an irritating ad, than with a pleasant ad or a neutral ad.</td>
<td>Accepted</td>
</tr>
<tr>
<td>$H5_b$: The source credibility is significantly higher with the use of a neutral ad, than with a pleasant ad or an irritating ad.</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
The effects of advertising appeals, such as irritating and pleasant, have been largely ambiguous for marketers. To date, many decisions involving advertising campaigns are made on no more than an educated guess and the advertising agency’s experience, which can lead to ineffective campaigns and loss of invested funds. This study attempts to fill in the gaps in the existing literature on the effects of pleasant ads, neutral ads and irritating ads compared to one another, and the effects of all three ad types for low- and high-involvement products.

**CONCLUSION**

For irritating ads, the few studies that compare irritating to neutral, suggest that irritating *should* be better than neutral for recall and recognition (Fritz, 1979; Moore & Hutchinson, 1983; Silk & Vavra, 1974). In the current study, there was neither an advantage nor disadvantage for irritating ads for recall when comparing the ads, and neither with taking low-involvement and high-involvement products into account. In fact, all types of ad with low-involvement products were far better recalled than those with high-involvement products, without a difference between the type of ad used. For recognition, low-involvement product ads were also better recognized than high-involvement products for all types of ad, although the difference between low-involvement product ads and high-involvement product ads was smaller. Although for recognition there was no visible interaction effect between product involvement level and type of ad, the low-involvement product irritating ad did score significantly lower than the low-involvement product pleasant ad. For high-involvement, the
ads did not differ. As expected, it was found that irritating ads are harmful to $A_{BR}$, $A_{AD}$, source credibility and purchase intention, and lead to lower scores than both neutral and pleasant ads. For $A_{AD}$, low- and high-involvement products were found to be a significant moderator, with a much stronger negative score for irritating ads for high-involvement products. This means that a higher level of involvement associated with the product leads a much lower $A_{AD}$ in the case of irritating ads.

Pleasant ads scored lower than expected for almost all variables. It was outperformed by neutral for $A_{BR}$, $A_{AD}$, source credibility and purchase intention, and only for source credibility that was as expected. For recall and recognition it did not score significantly different from neutral or irritating, which is the same as Eisend (2009) concluded for recall and recognition for pleasant ads and irritating ads. While there was no interaction between type of ad and involvement for recognition, the low-involvement pleasant ad did score significantly higher than the low-involvement irritating ad.

The real oddball from this study is the neutral ad. For recall and recognition, it did not differ significantly from pleasant and neutral ads. It has the highest average score for $A_{BR}$, $A_{AD}$, source credibility and purchase intention, although the latter one was still negative. With the exception of source credibility, many previous studies show that pleasant *should* be higher than neutral (Aaker *et al.*, 1986; Aaker & Stayman, 1989; Chung & Zhao, 2011; Eisend, 2009; Fritz, 1979; Geuens & De Pelsmacker, 1998; Speck, 1987) or suggest that pleasant is probably better than neutral (Aaker & Bruzzone, 1981; Cline & Kellaris, 2007).

Interestingly, the product involvement level was found to be a significant moderator for the types of ad on $A_{AD}$, which influences the irritating ads in particular: the higher the level of involvement associated with the product, the lower the $A_{AD}$ if irritating ads are used. In the case of recall and recognition the product involvement level was not a significant moderator for the type of ad used, instead the difference between product involvement levels by itself caused a large difference in scores *regardless* of what type of ad was used, with a clear advantage for ads with low-involvement products.


**DISCUSSION**

Although both neutral and pleasant ads score different than expected, this does not mean that all the results from this study are completely different than expected. As stated earlier, irritating ads scored almost exactly as expected, but without an additional benefit for recall and recognition over other ads. Source credibility was the only variable measured exactly as expected, with a positive neutral ad score and a negative score for both pleasant and irritating ads. But why did the neutral ads end up with such a relatively high score in this study, while pleasant scored lower than expected? There can be various explanations for this inconsistency, which will be discussed one by one.

First of all, this study used stimuli of a positively rated pleasant ad, a neutrally rated neutral ad, and a negatively rated irritating ad. However, there may be a negative bias against ads in general, which resulted in lower positive scores for the pleasant ads and the neutral ads in the pre-tests, as seen in Figures II and III in Appendix I. Many neutral ads have a mean score around -2 (the neutral ads with quite a bit of text were disliked in particular). Only 2 out of the 12 neutral ads scored close to 0, which were used for this study. Arguably, the decision to use neutral ads scoring close to 0 might actually have led to selecting neutrals ads that are more ‘pleasant’ than a regular neutral ad, which might be closer to -2 (and are almost never pre-tested for any other study). Pleasant ads have the same problem (at least for low-involvement products), as few pleasant ads are rated higher than just above neutral in the pre-tests. The selected pleasant ads had much higher scores than neutral in the pre-tests, but neither of them reached the level of ‘extremely’ pleasant that, for example, irritating ads reached for ‘extremely’ irritating. Fritz (1979) shows that for claim recall, the effect is stronger on the far ends of pleasant versus irritating, with the lowest point at neutral. This might explain why the neutral ad is in reality closer to mid-pleasant, while the ‘extreme’ pleasant ad is in reality also closer to mid-pleasant, it could lead to a difference in expected and measured results.

Also, almost all the research done on both pleasant/humorous and irritating advertising has been done with commercials rather than print ads (Aaker & Bruzzone, 1981; Aaker &
Bruzzone, 1985; Aaker et al., 1986; Aaker & Stayman, 1989; Chung & Zhao, 2011; De Pelsmacker & Van den Bergh, 1998; Eisend, 2009; Fritz, 1979; Greyser, 1973; Silk & Vavra, 1974; Speck, 1987, 1991). Greyser (1973) states that television is the most irritating advertisement medium, mainly because commercials interrupt programs. Worochel et al. (1975) argue that television is a more involving medium than print, and thus leads to stronger reactions. A study reported by Trendbox (1995) in the Netherlands concluded that 89% of the respondents state there is too much advertising on television. In the same study, besides television, outdoor and radio advertising also score very high on the statement “should be forbidden.” Magazine and newspaper ads score very low on this factor, but only because they score high on “you can skip it” (De Pelsmacker & Van den Bergh, 1998, p. 8; Trendbox, 1995). A recent study conducted by ABN-AMRO (one of the main banks in the Netherlands) shows that to date this trend is only growing, with an explosive increase of the use of ad-blockers for browsers, but also the rapid growth of ‘ad-free’ television services, such as Netflix (Van Dongen, 2015). It is not unlikely that the more ‘intrusive’ level of advertising on television would lead to stronger reactions, as opposed to the print ads used in this study.

Cultural differences might have also influenced the results. The vast majority of research on advertising has been conducted in the USA. Hatzithomas et al. (2011) found that culture is of significant importance to the type of humour that a marketer should use, because different cultures seem to favour different kinds of humour. It is not unthinkable that cultural preference for a particular appeal in advertising is not limited to just humorous ads, but for all advertisement types. For example, perhaps the Dutch culture favours a different advertising strategy than the American culture. Geuens & De Pelsmacker (1997) found that there is a difference in effects for the same ads presented to a Belgian group of respondents, compared to a Polish group of respondents. Although there is no academic source for the specific comparison between Dutch and American advertising preferences, Sluis (2013), the B2C & social media brand manager for KLM (Royal Dutch Airlines), wrote a blog about how in the USA commercials with a large amount of emotion seem to be effective, with barely anything of the rational or informative side, but argues that the Dutch commercials typically are more
informative of nature as preferred by the Dutch people. Perhaps while the pleasant ads were selected on much higher ‘pleasant’ scores than the neutral ads in the pre-tests, the Dutch audience in specific could prefer the neutral ad for advertising appeals. Finally, can the humour in the humorous ads used for pleasant have caused a lower score than expected? The risk of this bias, which may be caused by people ‘not getting the joke’ (Duncan & Nelson, 1985) or that the humour is stupid or exaggerated like satire or sexually aggressive (De Pelsmacker & Van den Bergh, 1998; Geuens, 1996; Lammers, 1991; Smith, 1993; Zhang & Zinkhan, 1991) is limited as best as possible with the two pre-tests for the pleasant ads. The selected low-involvement pleasant ad (cleaning product) was by far the highest rated of all low-involvement ads, and the selected high-involvement pleasant ad (insurance) was the 3rd highest rated ad for high-involvement, with a score very close to the 1st and 2nd highest scoring ads. In the pre-test high-involvement pleasant ads scored higher in general than low-involvement pleasant ads. For A_BR, A_AD, source credibility and purchase intention there was no significant difference between the low- and high-involvement pleasant ads, and while for recall and recognition this difference was significant, that difference was significant regardless of what ad was used. Flaherty et al. (2004) confirm this, as they found the use of humour (or not) strongly outweighs the level of involvement associated with the product for A_AD and A_BR. Apparently the difference in scores for humorous ads are not that much influenced by level of involvement associated with the product, but if the humour is not understood or not liked in an ad, this would lead to significantly lower scores on A_AD and A_BR (Flaherty et al., 2004). In other words, if one of the pleasant ads used in this study contained humour that did not lead to the expected positive effect, there would have been a difference visible between the two pleasant ads. Since this difference is not found, it is assumed both pleasant ads performed as they should have, and the difference in scores compared to neutral ads for example has to be explained by a different possible cause.

This study also confirmed the interaction effect between type of ad used and product type on A_AD. Eisend (2009) found that the effectiveness of humour on A_BR is moderated by product type. The current study did not find a significant effect between type of ad used and product
Between Knowing and Liking a Brand by A.A.M. Barendregt

type on \( A_{BR} \), but this effect was found on \( A_{AD} \). Although Eisend (2009) does not investigate the moderating role between product type and any other variables, he does state that \( A_{AD} \) and \( A_{BR} \) have a mean weighted correlation of 0.557 \( (p < 0.001) \). Although the interaction effect was confirmed, this study did not find a significant difference between low-involvement and high-involvement pleasant and neutral ads, but for irritating this difference was significant. Further evidence is found by Dens & De Pelsmacker (2010), who also found a significant effect for involvement for both positive and negative ads on \( A_{AD} \), with a stronger impact for high-involvement products. Czellar (2003) found that ads for high-involvement products are processed more centrally than low-involvement ads, which could explain the stronger change in \( A_{AD} \). Basically, high-involvement products lead to stronger responses (than low-involvement products) for \( A_{AD} \), with a stronger negative response to the irritating ad.

The involvement level of the product was found to be significant for recall and recognition. Although the scores of the different types of ad did not differ significantly on recall and recognition, and even for recognition only the low-involvement pleasant ad scored higher than the low-involvement irritating ad, when product involvement level is analysed without taking the ad types into account it shows a large difference in scores. Brands from the low-involvement ads were significantly much better recalled and recognized than the brands from the high-involvement ads. Although this outcome is counter-intuitive, Lastovicka & Gardner (1978) and Zaichkowsky (1985, 1986) argue that this outcome is as expected since respondents tend to remember brand names better if the products are relevant to their own situation. The low-involvement ads contained cleaning products and a cream, which are likely to be more relevant to people’s day-to-day lives than the three insurances for the high-involvement product ads. Radder & Huang (2008) have a different explanation, as they state that brand familiarity is also very important for high-involvement products, with the logo being equally important as the brand name, while for low-involvement products the brand name alone is enough. Considering the used ads for high-involvement contain fictive brands, and do not use a logo other than a fancy font for the brand name, this might explain the lower recall and lower recognition scores for this product category.
PRACTICAL IMPLICATIONS

This study shows that the neutral ad is the real underdog of print advertising. Throughout the literature study this type of ad was said to be less effective than the pleasant ad for all effects except for source credibility, and less effective than the irritating ad for recall and recognition, but better for the other variables. The neutral ads in this study, which were pre-tested for a total score of close to 0 (making them as neutral as possible), outperformed (in the case of \( A_{AD} \), source credibility and purchase intention) or matched (in the case of recall, recognition and \( A_{BR} \)) the pleasant ads, for both low- and high-involvement products. The neutral ads also matched the irritating ads in the case of recall and recognition, but outperformed them for all other variables. So, a print ad that is truly considered to be neutral by the public seems to work the best for most communication effects on the short term, although using any kind of print ads for purchase intention appears to be ineffective in general. And, irritating ads are not as ineffective as many scholars predicted, as they scored as high as the other ads for recall and recognition, and only lower than pleasant for low-involvement products on recognition. It is very well possible that for long-term recall, this type of ad is better than the others. But, irritating ads should be used with caution, as they do lead to lower scores on \( A_{BR} \), \( A_{AD} \), source credibility and purchase intention. Based on the results on this study it is perhaps better to use a neutral ad instead, as it has the same (or better) benefits without the negative consequences. For marketers and advertising agencies this means they should not just assume that print ads that are funny, pleasant, eye-catching, offensive or screaming are a better choice than a neutral ad. The two neutral ads used in this study can be used as an example to create a selection of ads from, which can then be tested. If the ad is truly neutral, it has the potential to be more successful than both humorous and irritating ads. Regardless of the type of ad used, in the case of low-involvement products, print ads seem to be a very effective way to increase recall and recognition, but high-involvement products may require a different strategy. High-involvement products do cause a stronger response to the ad, at least in the case of attitude towards the ad, which in turn is related to attitude towards the brand. Choosing the right communication strategy is very important for this product type.
LIMITATIONS AND FUTURE RESEARCH

This study has several limitations. Most important is the limited generalization possible. Although this study contained a large sample of 230 valid responses, the respondents are Dutch-speaking respondents from the Netherlands, aged 18+, with more men than women and a higher education level than the population. This limits generalization for other countries, and also for the Netherlands itself. Also, this study has been done through the use of print ads in an online survey, which limits the generalization for advertising campaigns on other media.

The second limitation is the decision to use real ads. This means the comparability is not optimal, since the ads differ in amount of text, lay-out, use of images and general style. In other studies the differences between the ads are generally smaller (only a difference in text, or a different cartoon). To increase comparability of these real ads, all ads selected have been heavily photoshopped by reverting them to greyscale, replacing the brand, text, product and (most) images, and were paired around a single product or a group of very similar products. These pairs were pre-test selected for the final study. The benefit of this strategy is that the results from this research reflect a better real-life situation and might be more relevant to marketers for that reason. As Strick et al. (2009) argue, most research conducted on advertisements is done in a controlled setting, where each ad is given more attention than in a real situation, and thus optimisation for the study itself can be at the cost of a more accurate real situation, leading to biased results. The same argument can be said for the use and development of conditioned ads by scholars, which in reality may not even be used by advertising agencies. For example, humorous print ads that contain a joke in the text alone or with a cartoon are frequently used by scholars, but when looking at the humorous ads used by advertising agencies, they almost exclusively featured a joke through the means of an image, most often using the art style ‘alienation’, with very little text, which is a prime example of incongruity humour (Speck, 1987, 1991; Spotts et al., 1997).

Furthermore, it can be argued that the use of a pleasant, neutral or an irritating ad is not an independent variable, because it depends on how the respondent perceives the ad instead of it being a fixed condition. Still, past research has successfully compared pleasant/humorous and
irritating ads to neutral ads through the use of pre-tests, so by pre-testing all ads designed and limiting the 36 ads down to a final 2 pairs of each 3 ads, it was tested whether or not each ad actually is perceived as pleasant, neutral or irritating.

Lastly, as with all social sciences, the effects of stimuli are moderated by personal variables, different from person to person. Cline & Kellaris (2007) argue that the effect of humorous ads is moderated by the level of ‘need for humour’ by an individual. The higher the need for humour, the better the effect. A somewhat similar construct is proposed by Thota & Biswas (2009), as they found that levels of irritation differ depending on the level of ‘need for evaluation’ by an individual. Higher levels of irritation were found among those with a high level of need for evaluation. Cline & Kellaris (2007) found that mood moderates the effect of humour, which is confirmed by Eisend (2009). These moderating variables have not been taken into consideration in the current study.

For future research, it is suggested to investigate the variables named by Eisend (2009) that are not part of the current study. For example variables that relate much closer to the ad itself, such as comprehension, attention to the ad, recall and recognition of the ad. Also affect, both positive and negative, which are the feelings (mood) a respondent has. Cognitive responses, both positive and negative, are thoughts the respondent has while processing the ads, and purchase behaviour is different from purchase intention in that this requires an action. Finally, recall of the brand is measured on a short-term only, which means the so-called sleeper effect (which favours the use of irritating advertising in the long run, as the association of irritation with the brand can eventually wear off, while the brand awareness remains) is not measured (Aaker & Bruzzone, 1985; De Pelsmacker & Van den Bergh, 1998; Moore & Hutchinson, 1983). This effect is poorly studied and would be a valuable addition to this study, unfortunately it requires longitudinal research rather than a one-time only survey.

Future research should also look into neutral ads, in order to find out if there are different types with different effects. Also, performing a similar study with a different medium, such as TV commercials, may yield different results and should thus also be investigated.
This study aimed to provide more insight for marketers in the different effects for pleasant, neutral and irritating ads, for low- and high-involvement products. It will prove a useful tool to determine which campaign strategy should be chosen. For the scientific community this study showed that there is still a lot to be discovered in effects of advertising, as assumptions made on the effects of several ad types may not be correct, which will hopefully lead to more research and a better understanding to the effects of advertising in the future.

REFERENCES


APPENDIX I: PRE-TEST

This appendix contains the methodology and the results of the pre-test conducted prior to the main study, which served as a way to select the final tools for the main study.

PARTICIPANTS

This study was conducted in the Netherlands, with Dutch-speaking respondents. A minimum amount of 30 respondents was needed for both of the pre-tests; and the respondents who participated in the pre-test were excluded from the final test to avoid bias. The pre-test population was selected by inviting a total of 76 friends, family members, co-workers and their families by e-mail, while keeping a list of whom had been invited (so they were not given an invite for the final test). It was made clear that participation required the age of 18+. From direct feedback can be assumed that many respondents participated in both pre-tests. The pre-test for the low-involvement advertisements yielded 37 responses in total, although 6 respondents quit at the first question. The pre-test for high-involvement products yielded 32 responses in total, one respondent quit at the first question. In both pre-tests, one respondent was considered invalid, due to half of their entries being outliers or voting the far end of negative for every single ad. The total of valid responses is thus 30 for each pre-test.

STIMULUS MATERIALS

The pre-tests have been done by an online survey with fictive brands and ads. Like the research done by Fritz (1979), existing ads were selected for the study (none of them are in Dutch, were used in the Netherlands or were widely used internationally), which were shared or discussed on social media such as Blogs, Twitter, Facebook or even LinkedIn for being pleasant or irritating. Neutral ads were manually selected from UK magazines.

Types of ads

Pleasant ads, which were selected from humorous ads, are almost exclusively ads with a large image and little text. The ads that were by far the most shared on social media often contain
an image with the art style ‘alienation’. This is also known as incongruity humour, which is by far the most used type of humour (Speck, 1987, 1991; Spotts et al., 1997). According to incongruity theory, people laugh at what surprises them, is unexpected, or is odd in a non-threatening way (Berger, 1979; Deckers & Divine, 1981; McGhee, 1979; Shultz, 1972). Neutral ads are non-emotional ads, without a joke or any obscure image/text/claim. They often contain a lot of text too. These ads show the product itself more than the other ads and are more informative.

Irritating ads are a very diverse group. Among the ads shared on social media, many have an offensive/abrasive image with little text, or they contain an extreme amount of ‘screaming’ text, with the brand name all over. Sometimes they contained a false claim. Interestingly, some of these ads led to protests strong enough that the campaigns were stopped.

Many of the selected ads came from the USA and the UK, as well as a few from Australia and one from New Zealand. Most neutral ads were manually selected from magazines imported from the UK, as those are the only ads that are rarely spontaneously shared among the online community, arguably due to their ‘boring’ neutral character. Out of the numerous ads that were found this way, a selection of 36 print ads was made (6 per box in the ANOVA table, see Table 3 on page 22).

**Editing of the ads**

Fritz (1979) argued that in her research, not all commercials she used were perfectly comparable, and the use of real brands could result in any kind of bias. To limit this problem, the ads were edited. This means that the selected ads have been heavily photoshopped or redesigned with fictive brands and products, as well as displayed in greyscale colouring, a different text and slogan in Dutch, and sometimes completely different images in the same style. The style of the ads stays close to the original, to maintain the very reason why the ad was considered to be pleasant/neutral/irritating. Figure I gives an example of two ads that were edited entirely, including the images. If the original ad had an image that already contained the joke/was considered very offensive, this image was not replaced unless it was
easy to re-create. Note that for low-involvement ads they all displayed a product, while for high-involvement ads this was rarely the case, also because many high-involvement ads contained a service rather than a tangible object. For the car ads the decision was made to design fictive cars as the design of existing cars would create an association with an existing brand. The 36 selected ads were placed in pairs of three, with the same product, on the levels of low-involvement products and high-involvement products. So, each pair has a pleasant ad, a neutral ad and an irritating ad, all with the same or a similar product. The pairs were tested by two pre-tests (one for low-involvement ads, one for high-involvement ads). The pre-tests were used to narrow down this large group of 36 ads, divided into 12 pairs of three ads (pleasant, neutral, irritating) of the same product, to 2 pairs of three ads: one pair for low-involvement products and one pair for high-involvement products. The aim was to select the best pair for each based on a high positive score for the pleasant ad, a score closest to 0 for the neutral ad and a high negative score for the irritating ad. Table I shows all the ads for low-involvement, and Table II shows all the ads for high-involvement. The ads outlined in orange are the ads that were selected after the pre-tests, more on this in results.
<table>
<thead>
<tr>
<th>Between Knowing and Liking a Brand by A.A.M. Barendregt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pleasant</strong></td>
</tr>
<tr>
<td>Shampoo</td>
</tr>
<tr>
<td><img src="image1" alt="Shampoo" /></td>
</tr>
<tr>
<td>Cleaning</td>
</tr>
<tr>
<td><img src="image3" alt="Cleaning" /></td>
</tr>
<tr>
<td>Sleep/cream</td>
</tr>
<tr>
<td><img src="image5" alt="Sleep/cream" /></td>
</tr>
</tbody>
</table>
Table I. Final set of conditioned low-involvement product advertisement pairs

<table>
<thead>
<tr>
<th>Pleasant</th>
<th>Neutral</th>
<th>Irritating</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
<tr>
<td><img src="image7.png" alt="Image" /></td>
<td><img src="image8.png" alt="Image" /></td>
<td><img src="image9.png" alt="Image" /></td>
</tr>
</tbody>
</table>
Table II. Final set of conditioned high-involvement product advertisement pairs
MEASURES

As stated before, the final sets of print ads have been selected from the prepared 36 ads by two pre-tests of 30 respondents each (who were not part of the main study afterward), one with 18 low-involvement product ads, and one with 18 high-involvement product ads. The pre-test goals were to identify the sets with the most ideal scoring ads for pleasant, neutral and irritating. Each respondent was asked to rate all ads on a list of different emotions, all of which are associated with pleasance or irritation, made from a selection used by Fritz (1979) and Geuens & De Pelsmacker (1998). The ratings were done on a 5-point Osgood scale, as seen in Table III. According to Fritz (1979), this is a viable method to compare all types since one can now assign them in the spectrum, based on their mean scores.

<table>
<thead>
<tr>
<th></th>
<th>Highly pleasant</th>
<th>Neutral</th>
<th>Highly irritating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant</td>
<td>O O O O O</td>
<td></td>
<td>Unpleasant</td>
</tr>
<tr>
<td>Soothing</td>
<td>O O O O O</td>
<td></td>
<td>Irritating</td>
</tr>
<tr>
<td>Interesting</td>
<td>O O O O O</td>
<td></td>
<td>Uninteresting</td>
</tr>
<tr>
<td>Attractive</td>
<td>O O O O O</td>
<td></td>
<td>Unattractive</td>
</tr>
<tr>
<td>Funny</td>
<td>O O O O O</td>
<td></td>
<td>Boring</td>
</tr>
<tr>
<td>Carefree</td>
<td>O O O O O</td>
<td></td>
<td>Concerned</td>
</tr>
<tr>
<td>Cheerfulness</td>
<td>O O O O O</td>
<td></td>
<td>Misery</td>
</tr>
</tbody>
</table>

*Table III. Pre-test advertisement rating (Fritz, 1979; Geuens & De Pelsmacker, 1998)*

As noted in the theoretical background, it is possible for ads to be both humorous and irritating. Duncan & Nelson (1985) show that the respondents who consider the humorous ad to be irritating fail to see the humour in it. To avoid the mean score to be influenced by these scores that would be opposite of expected, the decision was made to include at least 30 respondents for each pre-test. This way the risk of the inclusion of ‘negative’ humorous ads was limited. The mean scores that passed for the pre-test were either convincing positive, neutral or negative, depending on the type of ad. Also, the mean scores were checked by the normal mean scores but also by the so-called ‘trimmed mean’, which means the top 5% and the bottom 5% scores would be removed in the statistic to identify any influence by outliers.
RESULTS

The results were interesting, as almost all of the neutral ads scored much lower than neutral and the pleasant ads for low-involvement products scored roughly neutral overall. Figure II and III show the mean scores of all 36 ads, per pair and per ad. An ideal pair would have a diagonal line, starting high on pleasant, cutting the X-axis at neutral, and ending low on irritating.

*Figure II.* Pre-test low-involvement advertisement pairs (N = 30)

*Figure III.* Pre-test high-involvement advertisement pairs (N = 30)

For high-involvement products the best pair was considered to be the pair of insurance ads, with a fairly positively rated pleasant ad ($M = 3.50$, $SD = 6.157$), a nearly perfectly neutrally rated neutral ad ($M = 0.20$, $SD = 5.333$) and a very negatively rated irritating ad ($M = -8.10$, $SD = 5.333$).
For low-involvement products two pairs had to be combined for the most ideal score: a fairly positively cleaning product ad ($M = 4.87$, $SD = 4.485$), a nearly perfectly neutrally rated cream ad ($M = 0.27$, $SD = 4.792$) and a fairly negatively rated cleaning ad ($M = -6.60$, $SD = 4.775$). In Table I and Table II, all 36 ads are shown, and the final ads selected are marked with an orange outline.
APPENDIX II: ONLINE SURVEY

Note: respondents are now split for low-involvement (p. 66) or high-involvement (p. 71)
Between liking and knowing a brand: what do advertenties met ons?

Missie: Verwijder al het karbovaatje vull in huis zonder te schrikken.

Oplossing: Alles verwijderde zonder te puzelen? Dat lijkt wel een STEEK verhaal! Maar er is een oplossing:
STEEN alkenenigen, met speciaal condens inolovumuniezoen mens en tegen het meest hand- nikkels vull. Twee keer per dag, elf minuten telken ochtkinen en STEEN Hijf Ze STEEN voor zelfs de meestelijke weer plekken! Een alkoven en of alhier met een doekje en klaar!

Nu al meer bliksema vossen bui! Nooit meer zaai striken nog schuilen door het schrikken, en dat alleen door STEEN tricht die alkenenigen. Nu nooit was schril want het zelf niet!

Voorwaarden: Door het gebruik van inzamelse parturen is er een verkooptie kans van terugval naar lucht en overgevoel. Om de STEEK als en begin met training. Bekijk de website voor speciaal trainingsprogramma en/of the blikken. Alleen voor de aller STEEKsten!

Between liking and knowing a brand: what do advertenties met ons?

De nieuwe gais- spray van Shine.
Professionele huidverzorging
Zonder de rekening van dokter.

Iva Bodylotion
Een unieke formule die miljoenen mensen met een te droge huid geholpen heeft te eluseren van dat giftje van de geboetseurs en de vele plastundaanraden. Professionele verzorging voor je huid, zonder naar de apotheker te gaan.

Voor een babyzachte huid.

*Iva Bodylotion consumeertoon, amf.*

**Welke merken kunt u zich herinneren van de getoonde advertenties?**

1. 
2. 
3. 

Volg.
Between knowing and liking a brand: wat doen advertenties met ons?

* Welke van de onderstaande merken heeft u gezien?

- [ ] Malva
- [ ] Iva
- [ ] Illius
- [ ] Revalion
- [ ] Shine
- [ ] Sterk
- [ ] Geen van de bovenstaande

Volg.

---

Between liking and knowing a brand: wat doen advertenties met ons?

* Wat is uw gevoel bij de volgende merken?

<table>
<thead>
<tr>
<th></th>
<th>Zeer positief</th>
<th>Positief</th>
<th>Beetje positief</th>
<th>Neutraal</th>
<th>Beetje negatief</th>
<th>Negatief</th>
<th>Zeer negatief</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volg.
Between knowing and liking a brand: wat doen advertenties met ons?

* Wat is uw gevoel bij de volgende advertenties?

<table>
<thead>
<tr>
<th></th>
<th>Zeer positief</th>
<th>Positief</th>
<th>Beter positief</th>
<th>Neutraal</th>
<th>Beter negatief</th>
<th>Negatief</th>
<th>Zeer negatief</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volg.

Between liking and knowing a brand: wat doen advertenties met ons?

* Hoe betrouwbaar vindt u deze merken?

<table>
<thead>
<tr>
<th></th>
<th>Zeer betrouwbaar</th>
<th>Betrouwbaar</th>
<th>Beter betrouwbaar</th>
<th>Neutraal</th>
<th>Beter onbetrouwbaar</th>
<th>Onbetrouwbaar</th>
<th>Onbetrouwbaar onbetrouwbaar</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volg.
Between liking and knowing a brand: wat doen advertenties met ons?

* Hoe waarschijnlijk is het dat u producten van deze merken zal kopen?

<table>
<thead>
<tr>
<th></th>
<th>Zeer waarschijnlijk</th>
<th>Waarschijnlijk</th>
<th>Normaal</th>
<th>Onwaarschijnlijk</th>
<th>Zeer onwaarschijnlijk</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shime</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volg.

Between liking and knowing a brand: wat doen advertenties met ons?

Dit is het einde van dit onderzoek. Ik wil u nogmaals hartelijk bedanken voor uw tijd en moeite, want met uw hulp kan ik hopelijk bijdragen aan een wereld met beter gekozen advertentie-campagnes. U kunt altijd contact met mij opnemen voor vragen/opmerkingen of voor de uitslagen van dit onderzoek, de resultaten worden medio oktober verwacht.

Klik op ‘gered’ om de enquête te verzenden.

Met vriendelijke groet,

Artie Barendregt
Student Master Communication Studies
a.m.barendregt@student.uu.nl

Gered
Between liking and knowing a brand: wat doen advertenties met ons?
De dood van je vrouw aan het plannen?

Geef maar gewoon toe. We weten het namelijk al. Of ben je er zo zenuwachtig van dat je als eerste de pijp uit zal gaan? Dat je vrouw in jaren dood financieel hulp nodig heeft? Heeft ze je voorgemak dat jij een levenoverzetting al moet sluiten, zodat ze er strikken waarde bij kijkt? Klinkt allemaal heel leuk en aardig, maar in werkelijkheid kijk je nu verder dan je neus lang is. Er is geen garantie dat je vrouw langer leeft dan jij. Sterker nog, de kans dat je beide overleeft is maar liefst 40%! Heb je er ooit ooit na gedacht wat er met jou gebeurt als jij overlijdt?

Na een werk in de zaken, kan je nog het huis schoonmaken?

Overdag een manager. Slaapt nachtje, komt morgen dood. Wat dan? Praktisch geen moest jij neens kwaam, wreedheid en onen het huis schoon gaan maken. Heb je kinderen?

Of dacht jij van jou, die verhoogt voor het slapen gaan, dat beetje huiswerk, zo voorbereiden op het echte leven, dat kan er prima bij mijn voluit baan en het volle huishouden hebben?

Nee, zo want dat niet. Daarvoor heb je echt hulp nodig. En zoals met alles in deze wereld, die hulp is niet goedkoper.

Recent onderzoek heeft uitgewezen dat de gemiddelde moeder van drie kinderen omge- met 80 uur per week (bijna) is aan huishoudelijk genezen, 80 uur!

Als je iemand vindt om dat voor je te doen, voor een schat die loopt van €2.50 per uur, dan ben je zeer €10.000 per jaar kwijt. Hoe wil je dat in godsnaam betalen?

Het antwoord is simpel. Voor maar €15. per maand drukken wij tot €50.000 op jaarbasis in huishoudelijke huurling moet je vrouw onverwacht komen te overlij- den. Vir hebben zelfs een polis voor niet geval dat jullie beiden overlijden. Het plan- nen van de dood van je vrouw is niet zo mogelijk. Maar als je ook een vader bent, zal je je moet plannen voor na haar dood...

Maar verzekeringen voor al wat onverwacht.

Volg
Between knowing and liking a brand: wat doen advertenties met ons?

Een nieuw huis, een nieuw begin. Het leven lacht u toe!

Dat wilt u graag zo houden.

Om de inwerking in uw nieuwe huis te kunnen waarborgen, heeft u een goede inkoopverzekering nodig niet voor een aparte prijs. Zoekt naar een goede afdekking voor zowel uw leven als uw persoonlijke eigendommen. Hoeveel inkomsten een huis kan brengen zonder daadwerkelijk is aan zorg tegen onverwachte kosten zoals dierlijk of schade te beschermen, is het belangrijk om u goed in te laten in alle verschillende verzekeringen op de markt. Bij Illius bieden we:

- Aan uw persoonlijke inkoopverzekering voor uw woning;
- Doorlossing van parkeervoorzieningen en parkeervoorzieningen met betrekking tot de inkoop, met speciale extra afzetting voor auto's, computers en andere speciale waardevolle bezittingen;
- Een tevreden aansprakelijkheidsverzekering om u en uw gezin schadeloos te stellen.

We zijn er voor u.

Illius verzekeringen
058-6662930
www.illius.nl
* Welke van de onderstaande merken heeft u gezien?

- [ ] Malva
- [ ] Illus
- [ ] Shine
- [ ] Iva
- [ ] Sterk
- [ ] Revalion
- [ ] Geen van de bovengenoemde

Volg.

* Wat is uw gevoel bij de volgende merken?

<table>
<thead>
<tr>
<th></th>
<th>Zeer positief</th>
<th>Positief</th>
<th>Beetje positief</th>
<th>Neutraal</th>
<th>Beetje negatief</th>
<th>Negatief</th>
<th>Zeer negatief</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revalion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volg.
**Between liking and knowing a brand: wat doen advertenties met ons?**

* Wat is uw gevoel bij de volgende advertenties?

<table>
<thead>
<tr>
<th></th>
<th>Zeer positief</th>
<th>Positief</th>
<th>Beetje positief</th>
<th>Neutraal</th>
<th>Beetje negatief</th>
<th>Negatief</th>
<th>Zeer negatief</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Hoe betrouwbaar vindt u deze merken?

<table>
<thead>
<tr>
<th></th>
<th>Zeer betrouwbaar</th>
<th>Betrouwbaar</th>
<th>Beetje betrouwbaar</th>
<th>Neutraal</th>
<th>Beetje onbetrouwbaar</th>
<th>Onbetrouwbaar</th>
<th>Onbetrouwbaar</th>
<th>Zeer onbetrouwbaar</th>
<th>Geen mening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revalon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malva</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volg.
Between liking and knowing a brand: wat doen advertenties met ons?

<table>
<thead>
<tr>
<th><em>Hoe waarschijnlijk is het dat u producten van deze merken zal kopen?</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Illus</strong></td>
</tr>
<tr>
<td>Zeer waarschijnlijk</td>
</tr>
<tr>
<td>○</td>
</tr>
<tr>
<td><strong>Revallion</strong></td>
</tr>
<tr>
<td>○</td>
</tr>
<tr>
<td><strong>Malva</strong></td>
</tr>
<tr>
<td>○</td>
</tr>
</tbody>
</table>

Volg.

Between liking and knowing a brand: wat doen advertenties met ons?

Dit is het einde van dit onderzoek. Ik wil u nogmaals hartelijk bedanken voor uw tijd en moeite, want met uw help kan ik hopelijk bijdragen aan een wereld met beter gekozen advertentie-campagnes. U kunt altijd contact met mij opnemen voor vragen/opmerkingen of voor de uitslagen van dit onderzoek, de resultaten worden medio oktober verwacht.

Klik op ‘gereed’ om de enquête te verzenden.

Met vriendelijke groet,

Ardie Barendregt
Studente Master Communication Studies
a.a.m.barendregt@student.utwente.nl

Gereed
Appendix III: SPSS Syntax

****Check for respondents who did not give permission to use the data
Elimination of respondents: 27, 32, 154, 162.****

****Check for double entries based on IP-Address, Gender, Year of Birth and Education

****Check for respondents that quit with less than 20% of the questions about the ads answered

****Check for respondents that quit with less than 50% of the questions about the ads answered
Elimination of respondents: 60, 98, 138, 190, 286.****

****Check for respondents that quit with less than 65% of the questions about the ads answered
Elimination of respondents: 43, 179, 299.****

****Manually created the variable 'Involvement', to classify the groups.****
****Manually moved the results from low-involvement to the same columns as the results from high-involvement.****

****Manually assigned points to the correct columns for the three open question answers for RecallPleasant, RecallNeutral, RecallIrritating.****

****Manually assigned points to the correct columns for the multiple choice question answers for RecognitionPleasant, RecognitionNeutral, RecognitionIrritating.****

****Recoding Likert-scale Variables****

RECODE ABrPleasant ABrNeutral ABrIrritating AAdPleasant AAdNeutral AAdIrritating CredibilityPleasant CredibilityNeutral CredibilityIrritating PurchasePleasant PurchaseNeutral PurchaseIrritating

(0=SYSMIS) (1=3) (2=2) (3=1) (4=0) (5=-1) (6=-2) (7=-3).

EXECUTE.

****Demographic profile of the respondents****

DESCRIPTIVES VARIABLES=Gender Birthdate Education

/STATISTICS=MEAN STDDEV RANGE MIN MAX.

****Removed date of birth for respondent no. 40 since it was 1050, which is not possible. Set to value missing.****
FREQUENCIES VARIABLES=Gender Birthdate Education
   /HISTOGRAM NORMAL
   /ORDER=ANALYSIS.

IF (Involvement=1) LowinvGender=Gender.
EXECUTE.

IF (Involvement=1) LowinvBirthdate=Birthdate.
EXECUTE.

IF (Involvement=1) LowinvEducation=Education.
EXECUTE.

IF (Involvement=2) HighinvGender=Gender.
EXECUTE.

IF (Involvement=2) HighinvBirthdate=Birthdate.
EXECUTE.

IF (Involvement=2) HighinvEducation=Education.
EXECUTE.

FREQUENCIES VARIABLES=LowinvGender LowinvBirthdate LowinvEducation
   /HISTOGRAM NORMAL
   /ORDER=ANALYSIS.
BETWEEN KNOWING AND LIKING A BRAND BY A.A.M. BARENDREGT

FREQUENCIES VARIABLES=HighinvGender HighinvBirthdate HighinvEducation
/HISTOGRAM NORMAL
/OVER=ANALYSIS.

****General statistics report on research data and normality tests****

DESCRIPTIVES VARIABLES=RecallPleasant RecallNeutral RecallIrritating
RecognitionPleasant
   RecognitionNeutral RecognitionIrritating ABrPleasant ABrNeutral ABrIrritating
AAdPleasant
   AAdNeutral AAdIrritating CredibilityPleasant CredibilityNeutral CredibilityIrritating
   PurchasePleasant PurchaseNeutral PurchaseIrritating
/STATISTICS=MEAN STDDEV RANGE MIN MAX.

FREQUENCIES VARIABLES=RecallPleasant RecallNeutral RecallIrritating
/HISTOGRAM NORMAL
/OVER=ANALYSIS.

EXAMINE VARIABLES=RecallPleasant RecallNeutral RecallIrritating
/PLOT BOXPLOT NPLOT
/COMPARE VARIABLES
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.
FREQUENCIES VARIABLES=ABrPleasant ABrNeutral ABrIrritating
/HISTOGRAM NORMAL
/ORDER=ANALYSIS.

EXAMINE VARIABLES=ABrPleasant ABrNeutral ABrIrritating
/PLOT BOXPLOT NPLOT
/COMPARE VARIABLES
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

FREQUENCIES VARIABLES=AAdPleasant AAdNeutral AAdIrritating
/HISTOGRAM NORMAL
/ORDER=ANALYSIS.

EXAMINE VARIABLES=AAdPleasant AAdNeutral AAdIrritating
/PLOT BOXPLOT NPLOT
/COMPARE VARIABLES
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

FREQUENCIES VARIABLES=CredibilityPleasant CredibilityNeutral CredibilityIrritating
/HISTOGRAM NORMAL
/ORDER=ANALYSIS.
EXAMINE VARIABLES=CredibilityPleasant CredibilityNeutral CredibilityIrritating
/PLOT BOXPLOT NPLOT
/COMPARE VARIABLES
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

FREQUENCIES VARIABLES=PurchasePleasant PurchaseNeutral PurchaseIrritating
/HISTOGRAM NORMAL
/ORDER=ANALYSIS.

EXAMINE VARIABLES=PurchasePleasant PurchaseNeutral PurchaseIrritating
/PLOT BOXPLOT NPLOT
/COMPARE VARIABLES
/STATISTICS DESCRIPTIVES
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.

****Analysis results H1 with Mixed Model ANOVA, double-checked with non-parametric tests and chi2 tests since categorical variable data****

GLM RecallPleasant RecallNeutral RecallIrritating BY Involvement
/WSFACTOR=Typead 3 Polynomial
/METHOD=SSTYPE(3)
/PLOT=PROFILE(Typead*Involvement)
/EMMEANS=TABLES(Typead) COMPARE ADJ(BONFERRONI)
/PRINT=DESCRIPTIVE ETASQ HOMOGENEITY
/CRITERIA=ALPHA(.05)
/WSDESIGN=Typead
/DESIGN=Involvement.

ONEWAY RecallPleasant RecallNeutral RecallIrritating BY Involvement
/STATISTICS DESCRIPITVES HOMOGENEITY
/PLOT MEANS
/MISSING ANALYSIS.

NPAR TESTS
/FRIEDMAN=RecallPleasant RecallNeutral RecallIrritating
/MISSING LISTWISE.

NPAR TESTS
/WILCOXON=RecallPleasant RecallPleasant RecallNeutral WITH RecallNeutral RecallIrritating
RecallIrritating
   RecallIrritating (PAIRED)
/STATISTICS DESCRIPITIVES
/MISSING ANALYSIS.

CROSSTABS
/TABLES=Involvement BY RecallPleasant RecallNeutral RecallIrritating
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ
/CELLS=COUNT ROW
/COUNT ROUND CELL.
IF (Involvement=1) LowinvRecallPleasant=RecallPleasant.
EXECUTE.

IF (Involvement=1) LowinvRecallNeutral=RecallNeutral.
EXECUTE.

IF (Involvement=1) LowinvRecallIrritating=RecallIrritating.
EXECUTE.

IF (Involvement=2) HighinvRecallPleasant=RecallPleasant.
EXECUTE.

IF (Involvement=2) HighinvRecallNeutral=RecallNeutral.
EXECUTE.

IF (Involvement=2) HighinvRecallIrritating=RecallIrritating.
EXECUTE.

NPAR TESTS
/FRIEDMAN=LowinvRecallPleasant LowinvRecallNeutral LowinvRecallIrritating
/MISSING LISTWISE.

NPAR TESTS
/WILCOXON=LowinvRecallPleasant LowinvRecallPleasant LowinvRecallNeutral WITH
LowinvRecallNeutral LowinvRecallIrritating
LowinvRecallIrritating (PAIRED)
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.
**NPAR TESTS**

/FRIEDMAN=HighinvRecallPleasant HighinvRecallNeutral HighinvRecallIrritating
/MISSING LISTWISE.

**NPAR TESTS**

/WILCOXON=HighinvRecallPleasant HighinvRecallPleasant HighinvRecallNeutral WITH HighinvRecallNeutral HighinvRecallIrritating
HighinvRecallIrritating (PAIRED)
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.

****Analysis results H2 with non-parametric tests and chi2 tests since binominal variable data****

**NPAR TESTS**

/COCHRAN=RecognitionPleasant RecognitionNeutral RecognitionIrritating
/STATISTICS DESCRIPTIVES
/MISSING LISTWISE.

**NPAR TESTS**

/MCNEMAR=RecognitionPleasant RecognitionPleasant RecognitionNeutral WITH RecognitionNeutral RecognitionIrritating RecognitionIrritating (PAIRED)
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.
CROSSTABS
/TABLES=Involvement BY RecognitionPleasant RecognitionNeutral RecognitionIrritating
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ
/CELLS=COUNT ROW
/COUNT ROUND CELL.

IF (Involvement=1) LowinvRecognitionPleasant=RecognitionPleasant.
EXECUTE.

IF (Involvement=1) LowinvRecognitionNeutral=RecognitionNeutral.
EXECUTE.

IF (Involvement=1) LowinvRecognitionIrritating=RecognitionIrritating.
EXECUTE.

IF (Involvement=2) HighinvRecognitionPleasant=RecognitionPleasant.
EXECUTE.

IF (Involvement=2) HighinvRecognitionNeutral=RecognitionNeutral.
EXECUTE.

IF (Involvement=2) HighinvRecognitionIrritating=RecognitionIrritating.
EXECUTE.
NPAR TESTS
/COCHRAN=LowinvRecognitionPleasant LowinvRecognitionNeutral
LowinvRecognitionIrritating
/STATISTICS DESCRIPTIVES
/MISSING LISTWISE.

NPAR TESTS
/MCNEMAR=LowinvRecognitionPleasant LowinvRecognitionPleasant
LowinvRecognitionNeutral WITH LowinvRecognitionNeutral
   LowinvRecognitionIrritating LowinvRecognitionIrritating (PAIRED)
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.

NPAR TESTS
/COCHRAN=HighinvRecognitionPleasant HighinvRecognitionNeutral
HighinvRecognitionIrritating
/STATISTICS DESCRIPTIVES
/MISSING LISTWISE.

NPAR TESTS
/MCNEMAR=HighinvRecognitionPleasant HighinvRecognitionPleasant
HighinvRecognitionNeutral WITH HighinvRecognitionNeutral
   HighinvRecognitionIrritating HighinvRecognitionIrritating (PAIRED)
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS.

****Analysis results H3 - H6 with Mixed Model ANOVA****
GLM ABrPleasant ABrNeutral ABrIrritating BY Involvement
/WSFACTOR=Typead 3 Polynomial
/METHOD=SSTYPE(3)
/PLOT=PROFILE(Typead*Involvement)
/EMMEANS=TABLES(Typead) COMPARE ADJ(BONFERRONI)
/PRINT=DESCRIPTIVE ETASQ HOMOGENEITY
/CRITERIA=ALPHA(.05)
/WSDESIGN=Typead
/DESIGN=Involvement.

GLM AAdPleasant AAdNeutral AAdIrritating BY Involvement
/WSFACTOR=Typead 3 Polynomial
/METHOD=SSTYPE(3)
/PLOT=PROFILE(Typead*Involvement)
/EMMEANS=TABLES(Typead) COMPARE ADJ(BONFERRONI)
/PRINT=DESCRIPTIVE ETASQ HOMOGENEITY
/CRITERIA=ALPHA(.05)
/WSDESIGN=Typead
/DESIGN=Involvement.

ONЕWAY AAdPleasant AAdNeutral AAdIrritating BY Involvement
/STATISTICS DESCRIPTIVES HOMOGENEITY
/PLOT MEANS
/MISSING ANALYSIS.
Between Knowing and Liking a Brand by A.A.M. Barendregt

GLM CredibilityPleasant CredibilityNeutral CredibilityIrritating BY Involvement
/WSFACTOR=Typead 3 Polynomial
/METHOD=SSTYPE(3)
/PLOT=PROFILE(Typead*Involvement)
/EMMEANS=TABLES(Typead) COMPARE ADJ(BONFERRONI)
/PRINT=DESCRIPTIVE ETASQ HOMOGENEITY
/CRITERIA=ALPHA(.05)
/WSDESIGN=Typead
/DESIGN=Involvement.

GLM PurchasePleasant PurchaseNeutral PurchaseIrritating BY Involvement
/WSFACTOR=Typead 3 Polynomial
/METHOD=SSTYPE(3)
/PLOT=PROFILE(Typead*Involvement)
/EMMEANS=TABLES(Typead) COMPARE ADJ(BONFERRONI)
/PRINT=DESCRIPTIVE ETASQ HOMOGENEITY
/CRITERIA=ALPHA(.05)
/WSDESIGN=Typead
/DESIGN=Involvement.