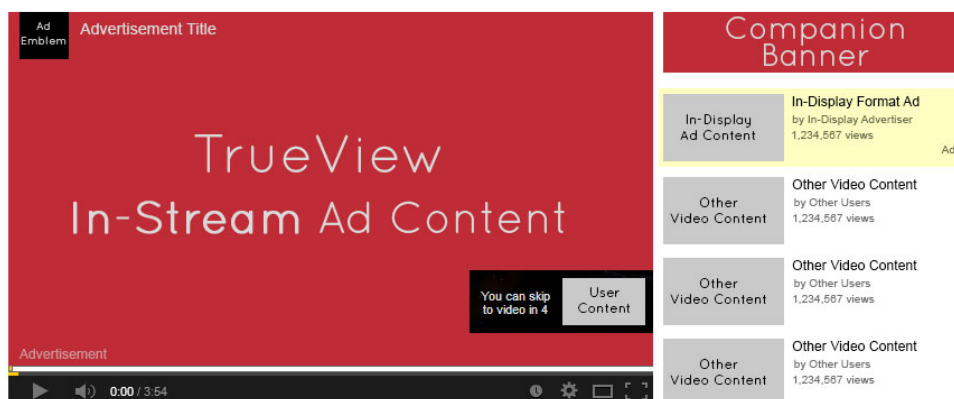


Master thesis

**The impact of program-advertisement appeal congruity
on in-stream video advertising**



Konstantinos Komninos -372454

Supervisor: Dr. Gui Liberali

Co-reader:

Rotterdam, 2015

Table of Contents

Chapter 1: Introduction	5
1.1) Background and context.....	5
1.2) Research Question.....	5
1.3) Research method	7
1.4) Research structure.....	8
Chapter 2: Theory	10
2.1) Definitions	10
2.1.1) <i>Digital video advertising</i>	10
2.1.2) <i>Appeal Congruity</i>	11
2.1.3) <i>Attitude toward the program</i>	13
2.1.4) <i>Attitude toward the ad</i>	14
2.1.5) <i>Attitude toward the brand</i>	15
2.1.6) <i>Purchase intention</i>	16
2.2) Conceptual Model.....	16
Chapter 3: Methodology	18
3.1) Experimental Design	18
3.1.1) <i>Design</i>	18
3.1.2) <i>Stimuli</i>	18
3.1.3) <i>Manipulations</i>	19
3.1.4) <i>Control variables</i>	20
3.2) Sampling design and procedure.....	20
3.3) Variables measurements.....	21
3.3.1) <i>Familiarity with the advertisement/program</i>	21
3.3.2) <i>Attitude toward the program</i>	21
3.3.3) <i>Attitude toward the advertisement</i>	21
3.3.4) <i>Attitude toward the brand</i>	21
3.3.5) <i>Purchase intention</i>	22
3.3.6) <i>Involvement with the advertisement/program</i>	22
3.3.9) <i>Appeal of the program and advertisement (Emotional / Informative)</i>	22
3.4) Questionnaire flow.....	23
Chapter 4: Data	24
4.1) Data cleaning	24

4.2) Demographics	24
4.3) Validity and reliability of constructs	25
4.4) Descriptive statistics	26
4.5) Manipulation check.....	29
Chapter 5: Results	30
5.1) Appeal congruity and the hierachy-of-effects variables.....	30
5.1.1) <i>Appeal congruity and attitude toward the program</i>	31
5.1.2) <i>Appeal congruity and attitude toward the advertisement</i>	31
5.1.3) <i>Appeal congruity and attitude toward the brand</i>	32
5.1.4) <i>Appeal congruity and purchase intention lift</i>	32
5.2) Relationships between the hierarchy of effects' variables	33
5.2.1) <i>Attitude toward the program and attitude toward the advertisement</i>	33
5.2.2) <i>Attitude toward the advertisement and attitude toward the brand</i>	34
5.2.3) <i>Attitude toward the brand and purchase intention lift</i>	34
5.3) Summary of results.....	35
Chapter 6: Discussion	36
6.1) Attitude toward the program	36
6.2) Attitude toward the advertisement.....	36
6.3) Attitude toward the brand.....	37
6.4) Purchase intention lift	37
Chapter 7: Conclusion	38
7.1) General conclusions.....	38
7.2) Managerial implications	38
7.3) Limitations and future research.....	39
References	41
Appendix.....	46
Appendix 1	46
<i>Questionnaire</i>	46
Appendix 2	53
<i>Correlations</i>	53
Appendix 3	54
<i>Cronbach's a</i>	54
Appendix 4	55

<i>Distribution of dependent variables.....</i>	55
Appendix 5	58
<i>ANOVA between appeal congruity and attitude toward the program.....</i>	58
Appendix 6	58
<i>ANOVA between appeal congruity and attitude toward the advertisement.....</i>	58
Appendix 7	58
<i>ANOVA between appeal congruity and attitude toward the brand.....</i>	58
Appendix 8	59
<i>ANOVA between appeal congruity and purchase intention</i>	59
Appendix 9	59
<i>Independent-samples t-test between attitude toward the program and attitude toward the advertisement</i>	59
Appendix 10	59
<i>Independent-samples t-test between attitude toward advertisement and attitude toward the brand.....</i>	59
Appendix 11	60
<i>Independent-samples t-test between attitude toward brand and purchase intention</i>	60

Chapter 1: Introduction

1.1) Background and context

With the use of Internet, the advertisement industry is becoming better measurable and easier to differentiate. Due to the current technological advantage of online ad targeting, advertisers can target by context and behavior. Extensive research efforts in the field of information retrieval have been made to match the content of a program against a dataset of advertisements to find out which ad to be displayed. Matching the characteristics (mood, context, gender, appeal) of the program with the ad is of critical importance, but there is still work to be done on which are these characteristics and what is the best combination.

That is why in this paper I am researching the appeal congruity between the program and the advertisement, trying to understand if an advertisement with congruent or incongruent appeal with the program is more effective. Much research has been done on this field on other medias like TV and magazines, but not on the Internet.

1.2) Research Question

According to L. Ha (2008) much research has been done on the effectiveness of online advertising, a research paradigm that explains the processing of online advertising emerges with attitudes toward advertising, media context, product involvement, product types, execution, brand familiarity and Internet experience as one or more commonly studied variables to predict advertising effectiveness using both offline media advertising effectiveness measures such as attitude toward the ad, behavioral intention, recall and recognition and Internet-related measures such as click-through rate and repeat visitor rate.

The concept of congruity is an important factor, which is largely researched. Most research done to date is claiming that people prefer consistency and avoid inconsistency regarding cognitions, actions and emotions (Sun et al., 2009). The

effect of ad congruity on the effectiveness of advertising is accepted by studies on television advertising.

The ad congruity can refer to many styles of congruity such as induced mood congruity, involvement type congruity and content congruity. Recently, studies on congruity started analyzing the web advertising. However, studies on congruity analysis on web advertising are not many.

This study examines the effects of congruity between advertisement and the program from the aspect of appeal congruity (emotional vs. informative). According to MacKenzie, Lutz and Belch (1986), attitude toward the ad leads to attitude toward the brand and then to the purchase intention. Recent studies have shown that for the online advertising, attitude toward the website is affecting the affect transfer hypothesis, because consumers will transfer their attitude toward the website to their attitude toward the ad (Bruner and Kumar, 2000). This suggests that attitude toward the website affects the attitude toward the ad which affects the attitude toward the brand and this leads to purchase intention (Bruner and Kumar, 2000). In my research the attitude toward the program replaces the attitude toward the website. It is expected that the attitude toward the program will influence the hierarchy of effects because the reaction of a person toward the program that the advertisement is embedded, is expected to influence his reaction toward the advertisement (Bruner and Kumar, 2000). According to Murry, Lastovicka and Singh (1992) many studies done on TV support this belief.

In order to research all the above factors the following research question will be answered:

How the appeal congruity (emotional vs. informative) between the program and the advertisement affects the attitude toward the program, the attitude toward the advertisement, the attitude toward the brand and the purchase intention?

1.3) Research method

The research method that is used in this study aims to answer the research question that was developed in the previous section. The first step is to review the existing literature that is relevant to my research. The second step is to develop several hypotheses. These two steps constitute the conceptual framework.

To test the research question, an experiment with 2x2 between subject designs is used. The manipulations that are applied are the following, advertisement appeal (informative versus emotional) and the program appeal (informative versus emotional). Four conditions in total were created. Using an online questionnaire the dependent variables are measured, using reliable and proven measurement scales from existing literature.

The product category used in my research is cars. This product category is selected based on the fact that cars balance the utilitarian and the hedonic appeal (Clowley, Spangenberg and Hughes, 1992; Voss, Spangenberg and Grohmann, 2003). This way there is no bias toward any of the appeals, except from the manipulation check of the informative or emotional appeal of the advertisement and the program. Furthermore most of the people are familiar with this product category.

Two different programs (informative vs. emotional) and two different advertisements (informative vs. emotional) are selected through the popular video on demand (VoD) website, YouTube. These videos are professionally manipulated in such a way that both programs are about the same length. The same applies to the advertisements. The length of the videos is about 4 minutes, based on the average length of videos on YouTube. The length of the advertisements is 30 seconds (Singh and Cole, 1993; Newell and Henderson, 2010; Rethans, Swasy and Marks, 1986).

A car brand that has balanced appeal is chosen for the advertisement. An emotional and an informative program and advertisement are chosen from the video on demand website "YouTube".

After watching the programs and the advertisements the respondents are asked to indicate to what extent they found the programs and the advertisements appeal emotional or informative.

After obtaining the data from the questionnaires, an analysis is performed using the statistical software SPSS.

Factor analysis is used to determine the unidimensionality of the attitude toward the program (A_{pr}), the attitude toward the advertisement (A_{ad}), the attitude toward the brand (A_b) and purchase intention (PI) (Bruner and Kumar, 2000). Also reliability analysis is conducted. Furthermore, ANOVA analysis is used to determine the effect of the independent variable separately on the four dependent variables (A_{pr} , A_{ad} , A_b , PI) (Bruner and Kumar, 2000). Also independent-samples t-tests are used to determine the effect of A_{pr} on A_{ad} , of A_{ad} on A_b and of A_b on PI.

1.4) Research structure

The first chapter (Introduction) aims to describe the research problem, the research background and the research method, which are applied to this study.

The second chapter (Theory) is divided into two sections. The first section gives the definition of the variables that are used in this study. In total five variables are examined: appeal congruity, attitude toward the program, attitude toward the ad, brand attitude and purchase intention. Attitude toward the ad and the brand attitude are examined to understand how the attitude toward the program affects the purchase intention. The hypotheses are formulated based on literature. In the second section the conceptual model is described and visually presented.

The third chapter (Methodology) describes the methodology I use in this paper. Furthermore the experimental design and the stimuli development are explained. After that, the construct measurement, along with the questionnaire design, are analyzed.

In the fourth chapter (Data) the descriptive statistics of the variables are analyzed. The validity and reliability of the variables are established.

In the fifth chapter (Results) the hypothesis are tested, explained and analyzed. Finally in the last two chapters, six (Discussion) and seven (Conclusion), the findings of this study are explained in depth, the managerial implications are discussed and suggestions for further research are presented.

Chapter 2: Theory

2.1) Definitions

In this chapter, the theoretical foundation of this study is explained and the variables used in this study are presented and described. Then, based on the arguments of the literature review, the hypotheses of this research are formulated.

2.1.1) Digital video advertising

Fifteen years ago, was the start of the digital video advertising. The year 2005 was an important one because digital video advertising started to grow with a very fast pace. Two major factors of this growth were the extent adoption of high-speed Internet connections and the improvements in video compression (IAB Platform Status Report: A digital video advertising overview [Interactive Advertising Bureau], 2008). Finally, the rapid growth of user-generated content changed the online video market by giving the opportunity to millions of Internet users to publish their own videos and become viral (Cha, Rodriguez and Moon; 2007).

Due to the fact that digital video advertisement is a relatively new topic, there is little research done. One study shows that the testimonial ads with audio and video results in better reception, better rating of the website and the advertising product (Appiah, 2006). Because of the small amount of studies there is no exact definition of the term “digital video advertisement”. For my study the definition of digital video advertising is based on Rosenkrands (2009) definition: “Appear before, during, and after content, including streaming video, gaming, animation, and music video, as well as digital video that appears in live, archived, and downloadable streaming content.”

After many years, TV advertisements are under attack by a new, better measurable and personalized way of advertising, the In-stream video advertising, also known as inserted video advertising into a stream of video content (Mandese, 2006; Best practice in online and high definition video advertising [Eyeblaster], 2008).

The In-stream video advertising is divided into two main categories, the “Linear Video” advertisements and the “Non-linear Video” advertisements.

The linear video advertisements are pretty much like ordinary TV advertisements where the advertisements are presented before, in the middle, or after the video content. The main characteristic of the linear video advertisement is that the user watches only the advertisement instead of watching the video. So the advertisement takes over the whole view of the video for a period of time. Some examples of linear video ads include a traditional repurposed 15 or 30 second TV ad, a purpose-built digital video ad product with interactivity inherent within the core video product experience and a full screen display ad or bumper ad viewed within a video player.

The linear video ads can be placed in several parts of the video. A placement of the ad before the content is known as pre-roll; between the content is known as med-roll and after the content is known as post-roll. Pre-roll and post-roll ads can also be referred to as a 15 or 30 second spot, but in this research “pre-roll” and “post-roll” are used consistently as a description for the placement of the ad, which is embedded at the start, or at the end of the video.

On the other side non-linear video ad runs parallel to the video content, so the users watch the ad while watching the content. Non-linear video can take different formats such as text ads, graphical ads or video overlays. Common non-linear video ad products include overlays that are shown directly over the content video itself and product placements, which are ads placed within the video content itself (IAB Platform Status Report: A digital video advertising overview [Interactive Advertising Bureau], 2008; Digital Video In-stream Ad Metrics Definition [Interactive Advertising Bureau], 2008).

This study uses linear and post-roll video ads.

2.1.2) Appeal Congruity

Much research has been done on the effect of advertising congruity on how individuals process information, their attention to the ad, recall and recognition of the advertisement and their attitude toward the advertisement. Most of the previous research about congruence and position effects is focused on television commercials. Based on the findings of Novak, Hoffman, Yung (2000), nowadays consumers are turning their attention toward the Internet, where they concentrate purely on what they are looking for and don't pay attention to less relevant items.

There are three approaches to measure effectiveness of web-based ads: cognition, affect and behavior measurements (Broxton, Interian, Vaver and Wattenhofer, 2013). Cognition measurements include attention and awareness. Affect measurements include attitude toward the ad and intention to buy. Lastly, behavior measurements include click-through-rate and actual purchase behavior. In this study I examine the affect measurements of attitude toward the program, attitude toward the advertisement, attitude toward the brand and purchase intention.

As mentioned above different types of congruence has been studied. Mood is one of the most researched types of congruity. Several studies found that it is more effective when the commercial has the same mood (happy vs. sad) with the program (Kamins, Marks and Skinner, 1991; Lord, Burnkrant and Unnava, 2001). At the same time a study from Pelsmacker, Geuens and Anckaert (2002) found that mood has a positive effect only on low involvement viewers. Other studies (Parker and Furnham, 2007; Gunter, Furnham and Pappa, 2005) found a negative congruity effect.

Furthermore, other studies researched the advertising appeal congruity, These studies found that value-expressive advertising appeals are effective when the product is value expressive and utilitarian appeals are effective when the product is utilitarian (Gunter, Baluch, Duffy and Furnham, 2002; Parker and Furnham, 2007; Gunter et al., 2005; Nitschke and Bogomolova, 2012).

The congruity between genre of the program and the advertisement also has been studied. Findings from Gunter et al. (2002) suggested that incongruity has a bigger effect on advertisement and brand recall.

Also Furnham, Bergland and Gunter (2002) found that advertising products in programs of similar nature have a higher brand recall than in a non-matching context.

Furthermore there are other studies that researched other types of congruity. Celuch and Slama (1993) found that the congruency between the sources of a program and ad involvement did not produce greater ad effectiveness than the incongruent. Sharma (2000) found that for the cognitively involving commercial in the cognitively involving program context, the free recall and cued recall are higher than for the affectively involving program context. Finally, Moore, Stammerjohan and Coulter (2005) found that incongruity has a favorable effect on recall and recognition, whereas congruity has favorable effect on attitudes.

In this research the effect of the program/advertisement appeal congruity (emotional vs. informational) on the attitude toward the program, the attitude toward the advertisement, the attitude toward the brand and the purchase intention is examined. Based on the literature I expect that congruent appeal program/advertisement will have a positive effect on attitude toward the program, the attitude toward the advertisement, the attitude toward the brand and the purchase intention. (Kamins et al., 1991; Lord et al., 2001; Bendal-Lyon and Powers, 2004).

H1: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' attitude toward the program.

H2: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' attitude toward the advertisement.

H3: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' attitude toward the brand.

H4: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' purchase intention.

2.1.3) Attitude toward the program

Bruner and Kumar (2000) suggest that the attitude toward a website can be seen as an indicator of retail web site effectiveness. Furthermore, based on the web commercial and advertising hierarchy-of-effects, the attitude toward the website has positive associations with the attitude toward the ad, the attitude toward the brand and purchase intention. Moreover, studies on TV advertising showed the association of TV programs with the attitude toward the ad (Sharma, 2010; Kamins et al., 1991; Furnham, Gunter and Richardson, 2006; Pelsmacker et al., 2002; Furnham, Gunter and Walsh, 1998; Furnham, 2002).

In my research the attitude toward the website is replaced by the attitude toward the program.

Based on the literature I expect that the attitude toward the program will affect the attitude toward the advertisement. The A_{pr} will have a positive effect on the A_{ad} and this will have a positive effect on PI through the well accepted hierarchy-of-effects.

H5: The attitude toward the program has a positive association with attitude toward the advertisement.

2.1.4) Attitude toward the ad

According to MacKenzie et al. (1986) the attitude toward the ad has been suggested to be a causal mediating variable in the process through which advertising influences brand attitudes and purchase intentions. For this research I am going to adopt the definition for attitude toward the ad from Lutz (1985), which he described as “predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion”. Based on MacKenzie and Lutz (1989) the following four possible specifications of the casual role of attitude toward the ad are proposed: the affect transfer hypothesis, the dual mediation hypothesis, the reciprocal mediation hypothesis and the independent influences hypothesis.

Based on MacKenzie et al. (1986) there are three basic similarities between the four alternative models: ad-related cognition leads to attitude toward the ad; brand-related cognition leads to attitude toward the brand and lastly attitude toward the brand leads to purchase intention. Based on the elaboration likelihood model (ELM) of Petty, Cacioppo and Schumann (1983) there are two routes leading to persuasion, the central and the peripheral. The link between the attitude toward the ad and the attitude toward the brand represents the peripheral route to persuasion in the elaboration likelihood model (ELM). Based on the ELM, when the audience members respond less to the content of a persuasive message than to factors incidental to the content, the peripheral route takes place. Also according to Mitchell and Olson (1981) under low involvement situations, the ELM is dominated by the link between the attitude toward the ad and attitude toward the brand, which is the peripheral processing. The central processing of message is brand-related cognition that leads to attitude toward the brand. In the dual mediation hypothesis another link is introduced between the attitude toward the ad and the brand-related cognition. This link represents the consumer affective reaction to an ad on behalf of the brand. In general the dual mediation hypothesis is found to be superior in comparison with the three competing models of the casual mediation role of attitude toward the ad (MacKenzie, 1986).

Based on the literature I expect that the attitude toward the advertisement will have a positive effect on the attitude toward the brand.

H6: The attitude toward the advertisement has a positive association with the attitude toward the brand.

2.1.5) Attitude toward the brand

According to the definition of Mitchell and Olson (1981) the attitude toward the brand can be defined as an individual's internal evaluation of the brand. Numerous of studies have been published concerning attitude toward the brand. Most of these studies examine the attitude toward the brand within the attitude toward the ad framework (Spears and Singh, 2012). Also, existing literature studied the relationship between the attitude toward the brand and the purchase intention. Some of the studies suggest that those two are separate constructs and other studies suggest that A_b and PI are correlated items and they simply combine them (Spears and Singh, 2012). One explanation for the relationship between the A_{ad} and A_b is based on the ELM. The ELM suggests that the persuasion may take a central or a peripheral route (Cacioppo and Petty, 1983). Based on the dual mediation model the relationship between the brand cognition and A_b represent the central route and the relationship between the A_{ad} and A_b is the peripheral route (MacKenzie et al., 1986). Further modification on the dual mediation model suggested that A_{ad} could have an effect from both the central (ad claims) and peripheral route (ad cues) (Miniard, Bhatla and Rose, 1990). Finally according to Miniard et al. (1990) both the claim and cue manipulations influence the A_{ad} under high involvement conditions, contrary to the low involvement conditions where A_{ad} formation is unaffected by the claims.

Based on the literature I expect that the attitude toward the brand will have a positive effect on the purchase intention.

H7: The attitude toward the brand has a positive association with the purchase intention.

2.1.6) Purchase intention

According to Bandal-Lyon and Powers (2004) behavioral intentions are an outcome of the satisfaction process. Behavioral intentions can be grouped into two categories: economic behavior that impacts the financial aspects, such as repeat purchase behavior, willingness to pay more and switching behavior; social behavioral intentions that impact the responses of existing and potential customers, such as complaint behavior and words of mouth.

In this research I define purchase intention as a consumer future behavior. This is a subjective judgment of a consumer in relevance to his/hers willingness to purchase a product in the future. Purchase intention does not necessarily involve the concept of the actual purchase. In the existing literature there are a lot of articles studying the relationship between different types of congruity, such as induced mood congruity (happy vs. sad) (Kamins et al., 1991; Lord et al., 2001), involvement type congruity (affective vs. cognitive) (Sharma, 2010) and content congruity (product type) (Furnham and Price, 2006). Most of these studies conclude that subjects prefer the congruity, which leads to a higher purchase intention.

2.2) Conceptual Model

Based on the hypothesis, a conceptual model is developed. It is suggested that different appeal combinations between the program and the advertisement (emotional vs. informative) will affect the attitude toward the program, which will affect the attitude toward the advertisement, which will affect the attitude toward the brand and finally will affect the purchase intention. There is clear evidence from the literature that the main path of the hierarchy-of-effects is supported ($A_{ad} \rightarrow A_b \rightarrow PI$).

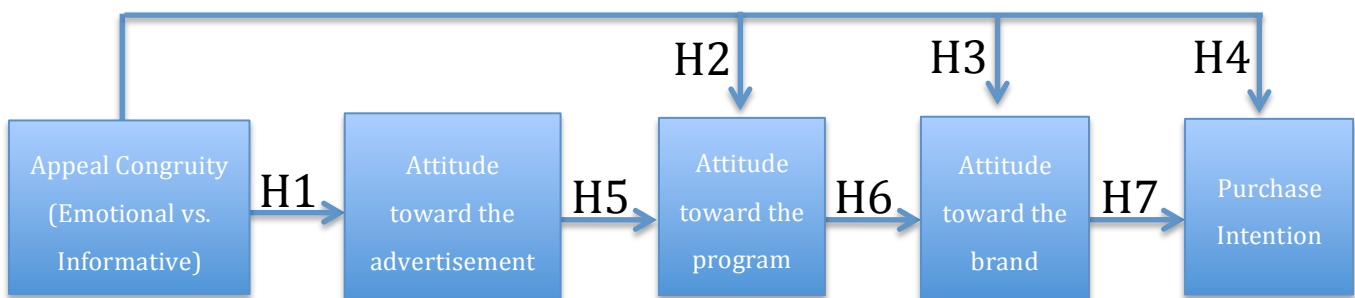


Figure 1: Conceptual model

All the hypothesis taking place in the conceptual model are presented as follow:

H1: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' attitude toward the program.

H2: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' attitude toward the advertisement.

H3: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' attitude toward the brand.

H4: Advertisements that are embedded in programs with congruent appeal have positive effect on the viewers' purchase intention.

H5: The attitude toward the program has a positive association with the attitude toward the advertisement.

H6: The attitude toward the advertisement has a positive association with the attitude toward the brand.

H7: The attitude toward the brand has a positive association with the purchase intention.

Chapter 3: Methodology

3.1) Experimental Design

3.1.1) Design

A 2x2 between-subjects design is used. Each responded is randomly assigned to one of the two categories. The first category is the appeal congruity of the program (emotional vs. informative). Within this category the respondents randomly are assigned in the second category, which is the appeal congruity of the ad (emotional vs. informative).

	Emotional Ad	Informative Ad
Emotional Program	A1	B1
Informative Program	A2	B2

Table 1: Experimental design

3.1.2) Stimuli

Both the program and the advertisement use the same product category to minimize the effect of different product categories on the dependent variables.

For the advertisements the video “2014 Acura RDX Sanctuary Commercial” has been chosen for the emotional appeal and for the informative appeal the video “Acura RDX commercial” is used. Samples of the advertisements can be seen in figure 2 and 3:



Figure 2: Emotional Advertisement



Figure 3: Informative Advertisement

These videos have been chosen through the video on demand website YouTube. At the lower right corner of the videos I placed the text “Advertisement”, to make clear to the respondents that those are the advertisements.

For the hosting videos two programs are selected. For the emotional the program “RANGE ROVER SPORT EXTREME OFFROAD” has been chosen and for the informative appeal the program “Vehicle Testing at Range Rover Gaydon, UK”. Samples of the programs can be seen in figure 4 and 5:



Figure 4: Emotional Program



Figure 5: Informative Program

These programs have also been chosen through the video on demand website YouTube.

3.1.3) Manipulations

The car brand used in the ad is relatively unknown in Europe. Based on literature the effect of brand familiarity on the ad attitude exists for both novel and familiar brands (Brown and Stayman, 1992). Two questions about the purchase intention and the familiarity of the respondents with the exact car model are asked before the exposure to the stimuli. The scales purchase intention toward the product in the ad and the familiarity with the product category/brand are used with necessary modifications. Based on Buchholz and Smith (1991) the following instructions appears before the start of the video:

“You are going to watch a short program about Land Rover cars. After the program an advertisement about a car model will appear. I would like you to imagine that you are about to purchase a car and you are considering various brands. Therefore, after you watch the advertisement, think about how the advertised product would suit your

own needs. In other words, evaluate the product advertised as you actually would before buying one. Please pay close attention the whole time.”

The purpose of the instructions is to make the respondents highly involved. Like this both the central and the peripheral routes of persuasion are activated (Miniard et al., 1990).

After that the stimuli is presented. On the next page of the questionnaire the attitude toward the program, the attitude toward the ad, the attitude toward the brand and purchase intention is measured.

After the respondents answer the previous questions, they are asked if they have ever seen this advertisement and this program in the past.

To verify that the instructions produce the high involvement that is wanted, I have included a manipulation check at the end of the questionnaire. A 5-item scale to measure the attention to the advertisement and a 7-item scale to assess the involvement with the product category are used. (Buchholz and Smith, 1991; Lacznik, Muehling and Grossbart, 1989; Bruner and Kumar, 2000).

A question about the appeal of the program and the advertisement that the respondents have watched is asked to control the manipulation of the appeal of the programs and the advertisements

3.1.4) Control variables

Control questions about the appeal of the car brand, the program and the advertisement are asked to ensure the effectiveness of the manipulations. The ten-item scale of HED/UT is used for the car brand and a three seven-point scale is used for the advertisement and the program (Voss et al., 2003; Barnes and Hair, 2008).

3.2) Sampling design and procedure

The experiment is distributed through Internet and is hosted in the online survey websites, LimeSurvey.

The respondents have to be familiar with the product category of cars and they also have to be Internet users. Furthermore, they have to be over eighteen years old because people younger than this age are not allowed to drive, so they are totally

uninvolved with the product category. Most of the respondents are from the European Union. The sample size must be at least 100 valid respondents, this way placing 25 respondents in each experimental group.

3.3) Variables measurements

In this research existing scales are used. Necessary modification may be applied to them. The following dependent variables are examined: attitude toward the program, attitude toward the advertisement, attitude toward the brand and purchase intention. Moreover the control variable of the appeal of each program and advertisement is measured by developing a pre-test. Also the familiarity and the involvement of the respondents are measured.

3.3.1) Familiarity with the advertisement/program

To measure the familiarity of the respondent with the advertisement, the scale familiarity of the object of Moore et al. (2003) is used. Three, seven-point semantic differentials are used.

The same scale is used to examine the familiarity of the subjects with the program.

3.3.2) Attitude toward the program

To measure the attitude toward the program, the scale attitude toward the TV program found in Russell et al. (2004) is modified and used. Three, seven-point semantic differentials are used to evaluate the program.

3.3.3) Attitude toward the advertisement

To measure the attitude toward the advertisement, the scale attitude toward the ad of De Pelsmacker et al. (2002) is used. A six item, seven-point likert-type scale is used.

3.3.4) Attitude toward the brand

To measure the attitude toward the brand, the scale attitude toward the brand of Sengupta and Johar (2002) is used. Three, seven-point Likert-type statements are used.

3.3.5) Purchase intention

To measure the purchase intention toward the brand, the scale purchase intention toward the product in the ad of Lepkowska et al. (2003) is modified and used. Three, five-point Likert-type statements are used.

3.3.6) Involvement with the advertisement/program

To measure the involvement of the respondents with the advertisement, the scales attention to the ad (general) of Bruner et al. (2000) and involvement with the product category of Coulter et al. (2003) are used. A 5-item scale to measure the attention to the ad and a 7-item scale to assess the involvement with the product category are used.

3.3.7) Familiarity with the brand

To measure the familiarity of the respondent with the brand that is presented in the advertisement, the scale familiarity with the product category/brand of Martin and Stewart (2001) is used. Seven, seven-point Likert statements are used.

3.3.8) Appeal of the Brand

To measure the appeal of the brand the scale HED/UT of Voss et al. (2003) is used. Ten, seven-point semantic differentials representing the hedonic and utilitarian dimensions of product attitude are used.

3.3.9) Appeal of the program and advertisement (Emotional / Informative)

To be sure that the appeal of each program and advertisement (emotional vs. informative) is correct, I have to construct a pre-test and ask the respondents about their opinion. Three, seven-point semantic differentials are used from Moore et al. (1995). The same scale is used in the final questionnaire to ensure the appeal of the programs and the advertisements.

3.4) Questionnaire flow

On the first page of the questionnaire a short introduction to the experiment is presented. To proceed to the next page the respondents have to click each time on the button “Next”. On the second page the instructions of the experiment are presented. On the next page pre-measurement questions about the purchase intention and the familiarity with the model of the car in the ad are asked. Then the stimulus is shown. After the respondents watched the stimulus carefully, they can proceed to the next page where the questions measure the dependent variables. Questions about the involvement with the advertisement and the program, the familiarity with the program and the advertisement and the appeal of the program and the advertisement are asked before the final demographic questions. The questionnaire can be found at the appendix 1.

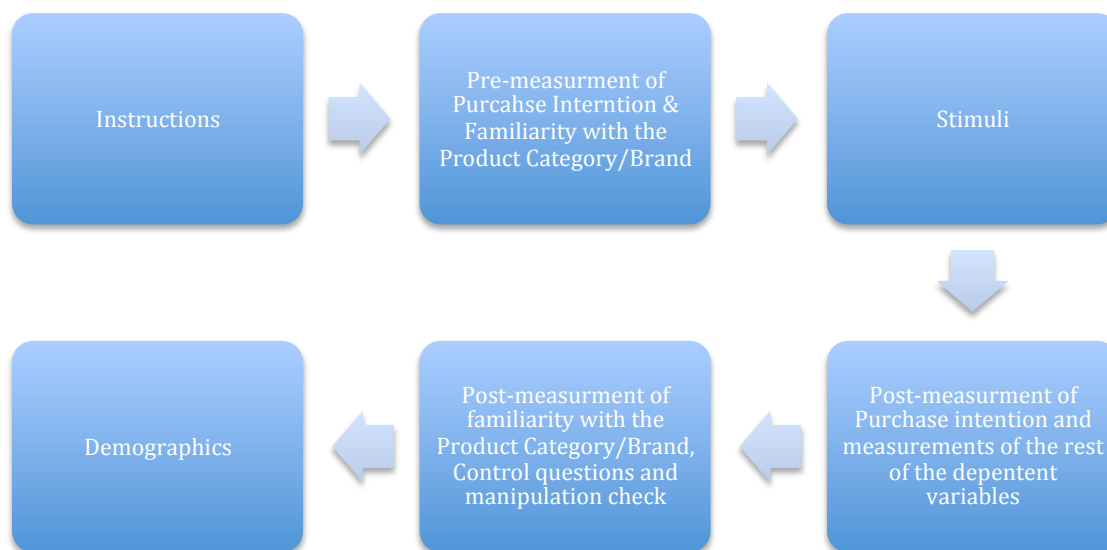


Figure 6: Representation of the blocks of the questionnaire

Chapter 4: Data

In this chapter the data obtained from the experiment is presented. In the first part the data cleaning and the demographics are presented. In the second part I tested the validity and the reliability of each construct. Finally the descriptive statistics and the manipulations are tested.

4.1) Data cleaning

In the period from 01-06-2015 until 10-06-2015, a total number of 198 respondents have filled in the questionnaire, which was shared through various social media. A total of 145 questionnaires were completed. 53 questionnaires had incomplete answers and for that reason they were excluded from further analyses. Furthermore, I had to exclude more responses because they weren't meeting the screening criteria. Based on this, the respondents had to be unfamiliar with the program and the advertisement. In my experiment most of the respondents were unfamiliar with both the program and the advertisement. In total 14 questionnaires were excluded from further analyses. Finally 131 questionnaires were left for my analysis. Each of the four experimental conditions had the following number of respondents.

Program & Advertisement Appeal	
A1 (EE)	n=27
B1 (EI)	n=37
A2 (IE)	n=30
B2 (II)	n=37

Table 2: Number of respondents per experimental condition

4.2) Demographics

At the last section of the questionnaire, three questions about demographics were asked: age, gender and education level. From the total 131 respondents the 62 (47,3%) were female and the 69 (52,7%) were male. The average age of the respondents was 29 years old, with the minimum of 18 and the maximum of 62 years old. The 80,2% of respondents was between 18 and 30 (105 out of the 131). Finally, concerning the education level most of the respondents were Master's degree graduates, in total 73

(56.5%) ,with the second biggest group being the Bachelor’s degree graduates with 39 (29,8%). High school and doctoral degree graduates were 9 and 6 respectively. Finally they were 3 more respondent which answered other.

Description		Frequency	Percentage
Gender	Female	62	47,3%
	Male	69	52,7%
Age	18-30	105	80,2%
	31-43	19	14,5%
	44-56	5	3,8%
	56+	2	1.5%
Education Level	High School	9	6,9%
	Bachelor’s Degree graduate	39	29,8%
	Master’s Degree graduate	74	56,5%
	PhD	6	4,6%
	Other	3	2,3%

Table 3: Demographics

4.3) Validity and reliability of constructs

In the previous chapter the validity and reliability of the construct measurements has been proven by using existing scales from the literature. To validate even more my research, factor analysis is performed. Also a reliability analysis is performed on each variable to measure the internal consistency, which shows how closely related the items are as a group (Bruner and Kumar, 2000).

The factor analysis is performed using principal components analysis with a Varimax rotation, which will lead to factor scores that explain a maximum possible share of the variance. The Kaiser-Mayer-Okin test (KMO) and the Bartlett’s test of sphericity measures determine if the sample size is large enough to reliably extract factors. A high score close to 1, higher that 0,5 and a p-value < 0.05 is acceptable for the KMO and the Bartlett’s test respectively. Then looking at the Eigenvalues and the Scree plots, the number of underlying factors is determined. Using the Anti-image correlation matrix items with low (<0.50) MSA (Measures of Sampling Adequacy)

are eliminated. Finally based on the factor loadings of the Rotated component matrix produced from the Varimax rotation each item is assigned to a specific factor (Janssens et al., 2008).

For the reliability analysis, the Cronbach's alpha is calculated. Values over 0.7 are good and that means that no item has to be eliminated with the purpose to increase the alpha (Janssens et al., 2008).

I tested the items of the following five variables with factor analysis: attitude toward the program, attitude toward the advertisement, attitude toward the brand, purchase intention of the product in the advertisement, appeal of the program and appeal of the advertisement. Five factors are extracted. The correlation matrix (Appendix 2) presents the correlations between the items that I used. There are several reasons that can explain the high correlation between the variables but I am going to discuss them in the limitation chapter of this research.

Finally all the constructs scored high in the Cronbach's alpha, ranging between .816 (utilitarian appeal of brand) and .961 (familiarity with the program). Only one item from the construct attitude toward the advertisement had to be deleted to maximize the Cronbach's alpha from .839 to .907. The Cronbach's alpha of all the variables can be found in the table included in "Appendix 3".

4.4) Descriptive statistics

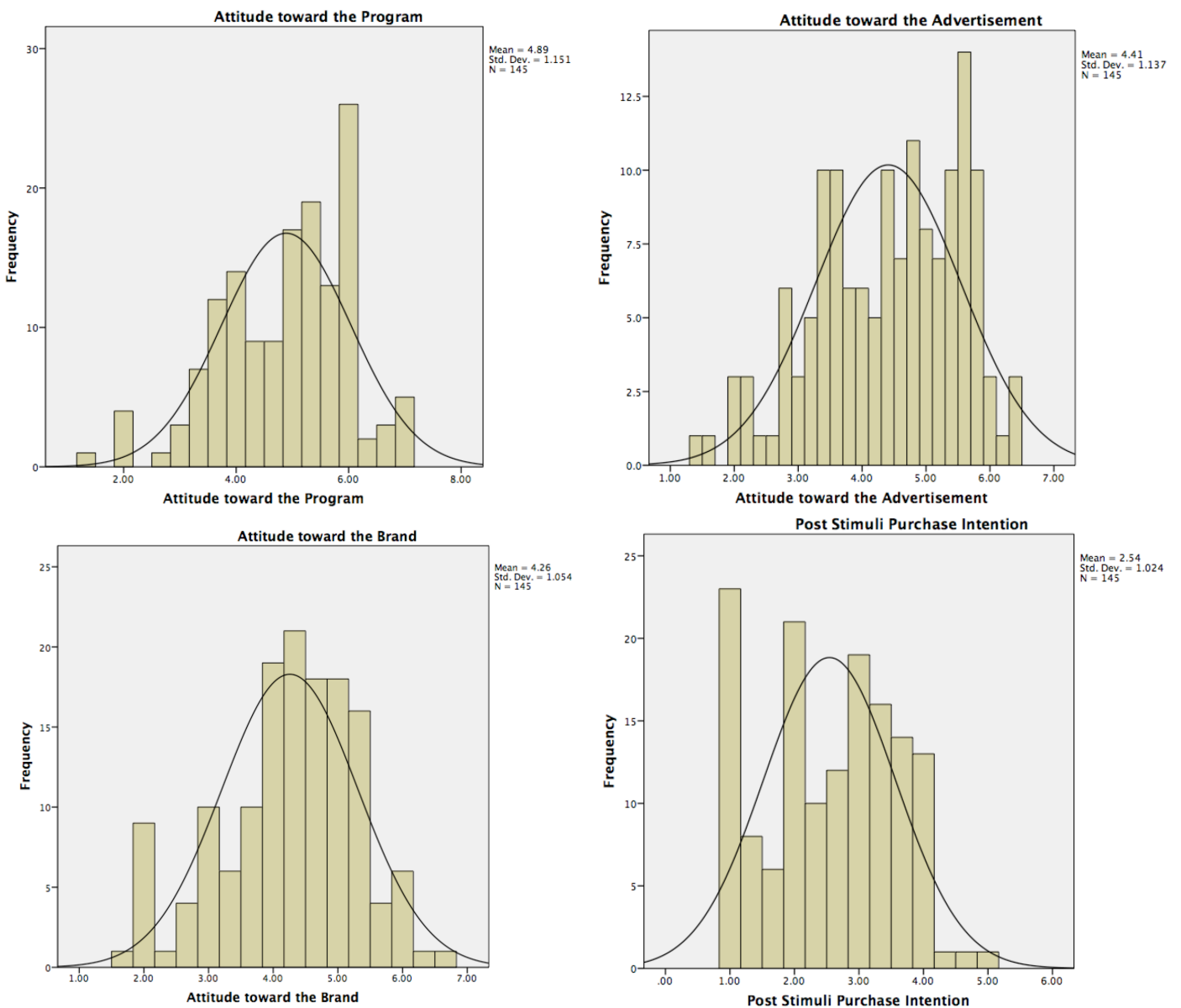
In the section of descriptive statistics the frequencies of every dependent and control variable is measured. A histogram graphically represents the frequency of every variable and the distribution of them. These measures help me to determine any abnormal values in the data.

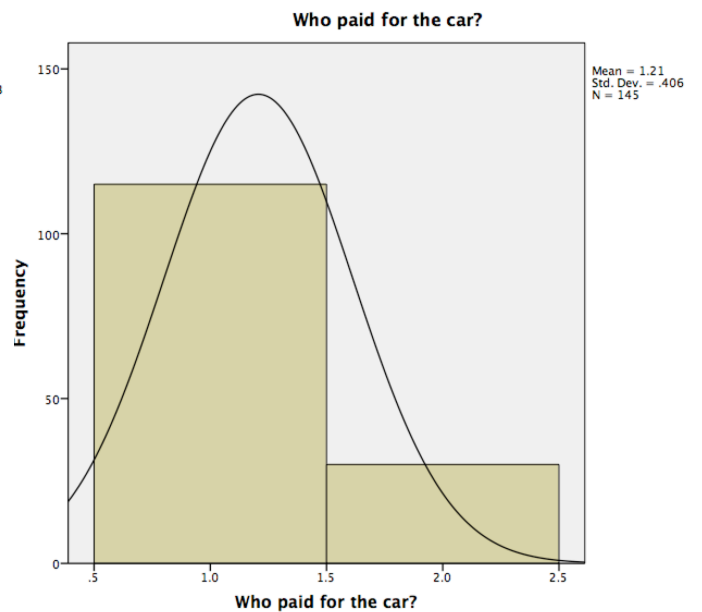
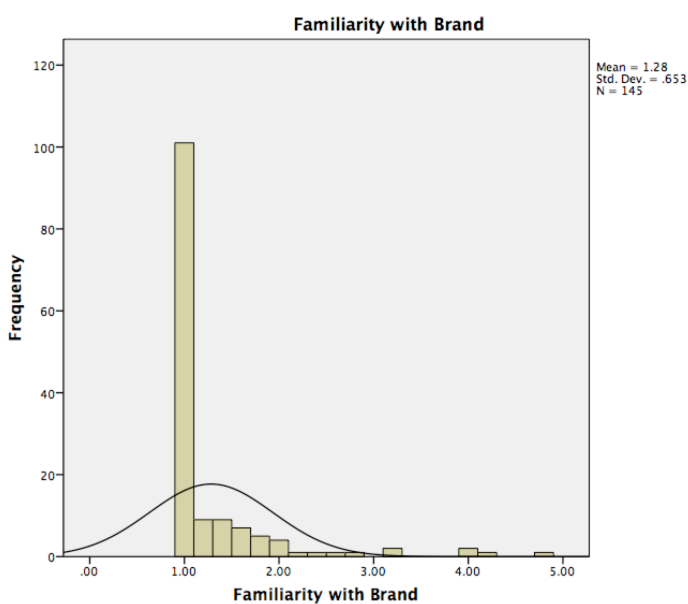
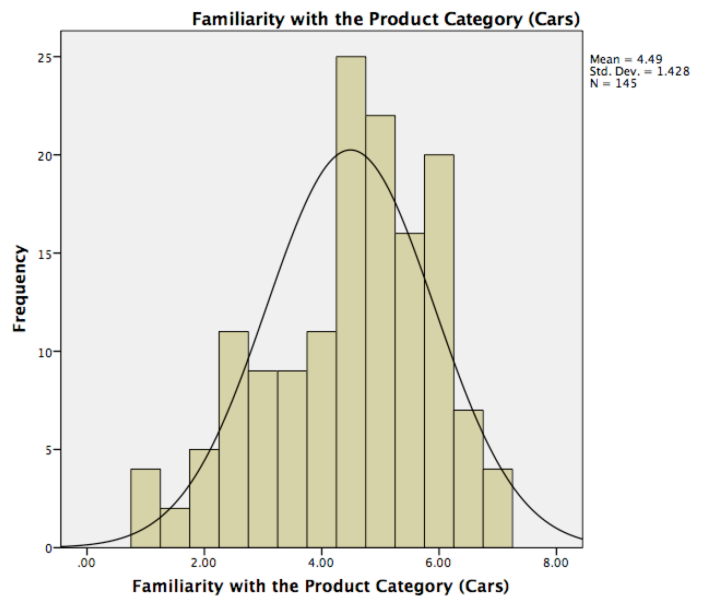
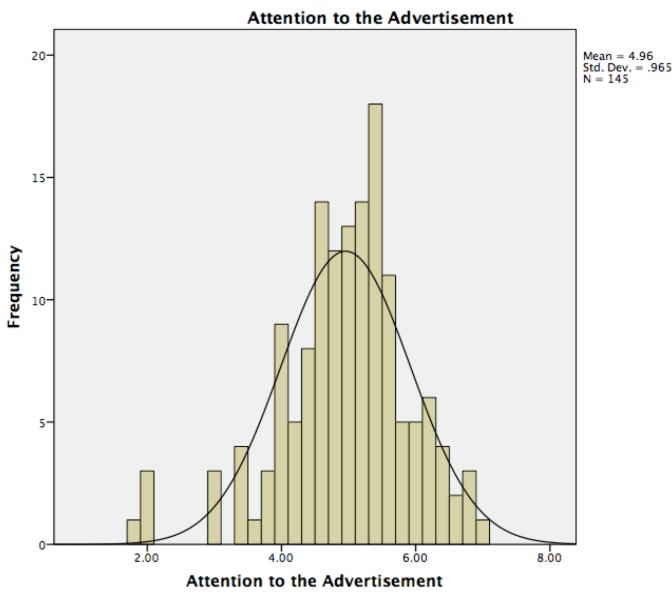
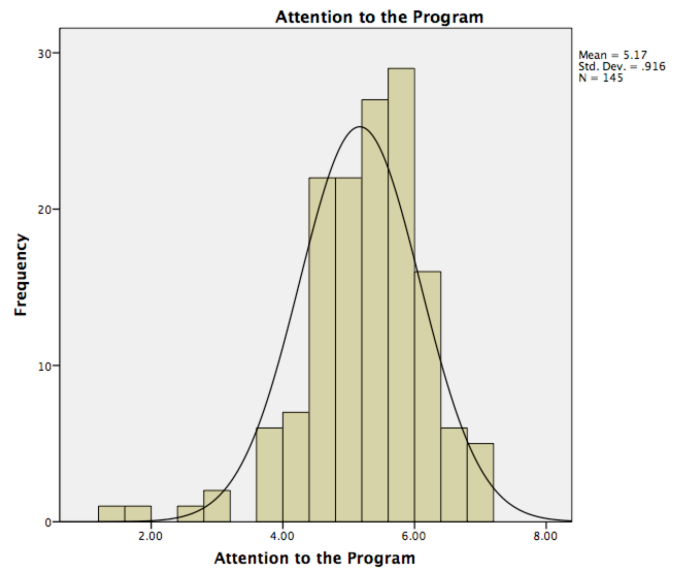
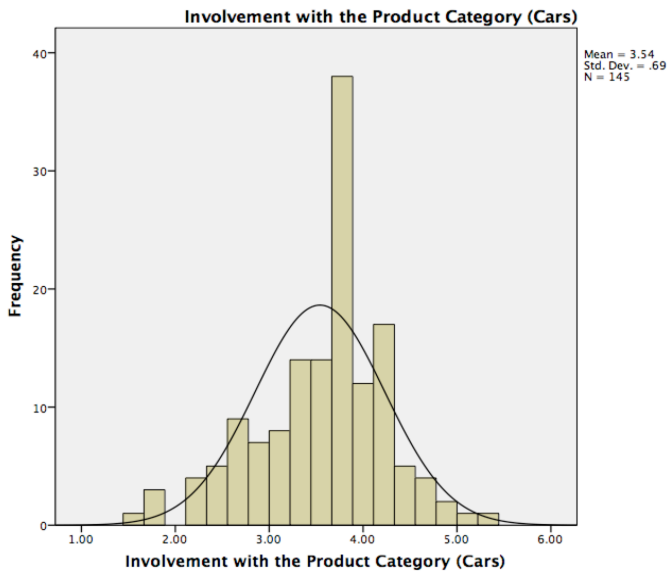
The mean, standard deviation and the variance of each variable are computed. These statistics help me to quickly determine the most important characteristics of the variables.

	Mean	Std. Deviation	Variance
Attitude toward the Program	4.89	1.15	1.32
Attitude toward the Advertisement	4.41	1.14	1.29
Attitude toward the Brand	4.25	1.05	1.11
Post Stimuli Purchase Intention	2.54	1.02	1.05
Involvement with the Product Category	3.54	0.69	0.48
Attention to the Program	5.17	0.91	0.84
Attention to the Advertisement	4.95	0.96	0.93
Familiarity with Product Category (Cars)	4.49	1.42	2.04
Familiarity with the Brand	1.28	0.65	0.43
Who paid for the car?	1.21	0.41	0.26

Table 4: Descriptive Statistics

The following histograms show the normal distribution among the observations:





4.5) Manipulation check

Two manipulation checks were conducted in the experiment. The appeal of the program and the advertisement manipulations are successful according to the results. Regarding the question measuring the emotional appeal of the programs, the respondent confirmed my expectations. The emotional program has a mean score of 4.58 and the informative program a mean score of 3.76. The difference between the informative and the emotional program is significant, $p=0.003$. Regarding the question measuring the informative appeal of the programs, the respondent again confirmed my expectations. The emotional program has a mean score of 3.47 and the informative program a mean score of 5.79. The difference between the informative and the emotional program is significant, $p=0.000$.

Regarding the question measuring the emotional appeal of the advertisements, the respondent again confirmed my expectations. The emotional advertisement has a mean score of 4.63 and the informative advertisement a mean score of 2.82. The difference between the informative and the emotional advertisement is significant, $p=0.000$. Regarding the question measuring the informative appeal of the advertisement the respondent confirmed my expectations. The emotional advertisement has a mean score of 2.39, which is lower than the mean score of the informative program (4.78). The difference between the informative and the emotional program is significant, $p=0.000$.

Chapter 5: Results

First the effect of the appeal congruity on the attitude toward the program, the attitude toward the advertisement, the attitude toward the brand and the purchase intention is examined. To examine each one of the described relationships one-way ANOVA test is used. If the significance of each relationship is lower than 0.05 ($p < 0.05$) and the mean score of the congruent appeal is higher than the mean score of the incongruent appeal, then H1, H2, H3 and H4 are supported.

To test the relationship between the attitude toward the program with the attitude toward the advertisement (H5), the attitude toward the advertisement with attitude toward the brand (H6) and the attitude toward the brand with purchase intention (H7), multiple independent-sample t-tests are used. The independent variable in each one of these relationships has to be divided into two groups (Low and High) by using a median split. If the significance of each relationship is lower than 0.05 ($p < 0.05$) and the mean score of the high group is higher than the mean score of the low group, then H5, H6 and H7 are supported.

5.1) Appeal congruity and the hierarchy-of-effects variables

First I have to check the assumptions of multivariate normality. Based on the Shapiro-Wilk's test for two of my variables, attitude toward the advertisement ($p = .044 < .05$) and attitude toward the brand ($p = .009 < .05$) the null hypothesis for normality may not be rejected. A rejection of the null hypothesis in this case is not an indication that the deviation is large enough to cause a distortion of the statistical analyses. This is why a graphic inspection of the normality is performed. The visual inspection of the Q-Q plot, the box plots and the histograms indicate normality for all the four variables. In the Q-Q plots I can see that most of the observations lie very close to the straight line. In the box plots, the observations are symmetrical and in the histograms my data distribution fits closely to the normal distribution (appendix 4).

5.1.1) Appeal congruity and attitude toward the program

To test this relationship a one-way ANOVA test is used. The independent variable is divided into two groups: the program/advertisement congruent appeal group and the program/advertisement incongruent group. Based on the Levene's test of homogeneity of variances, which is significant $p=0.005$, I have to reject the null hypothesis, which assumes that the variances are homogeneous. This means that I cannot use the main results of the ANOVA even though they are significant. In this case I used the results of the Welch test and the Brown-Forsythe test, which are robust to violation of homogeneity of variances. Based on the table in appendix 5 for both the Welch and the Brown-Forsythe tests the difference between the congruent and the incongruent groups is significant $F(1,122.923)=17.255$, $p=0.000$. This means that the two groups of the independent variable affect the attitude toward the program differently. Looking the means and standard deviations of each group in table 5, I can see that the congruent group produced a higher attitude toward the program (mean=5.250) in comparison with the incongruent group (mean=4.458). Hence, H1 is supported.

Appeal Congruity	N	Mean	Standard Deviation
Congruent	64	5.250	0.937
Incongruent	67	4.458	1.232

Table 5: Means and Standard Deviations of attitude toward the program

5.1.2) Appeal congruity and attitude toward the advertisement

A one-way ANOVA was used to examine whether the two groups of the appeal congruity (congruent vs. incongruent) affect the attitude toward the advertisement differently. The Levene's test of homogeneity of variances is not significant $F(1,129)=0.024$, $p=0.878$, suggesting that there is an equality of variances, indicating that I can use the results of the main ANOVA table (appendix 6). A statistical significance, $F(1,129)=13.747$, $p=0.000$, indicated that the two groups of the appeal congruity result in different attitude toward the advertisement. Looking the means and standard deviations in table 6, I can see that the congruent appeal results in a

higher attitude toward the advertisement (mean=4.759) in comparison with the incongruent appeal, which results in a mean score of 4.054. Hence, H2 is supported.

Appeal Congruity	N	Mean	Standard Deviation
Congruent	64	4.759	1.099
Incongruent	67	4.054	1.079

Table 6: Means and Standard Deviations of attitude toward the advertisement

5.1.3) Appeal congruity and attitude toward the brand

To test the relationship between the appeal congruity and the attitude toward the brand a one-way ANOVA is used. Based on the Leven's test of homogeneity of variances, I have to reject the null hypothesis of equality of variances ($p=0.017$). Again I used the results from the Welch and the Brown-Forsythe tests (appendix 7). Both tests were significant $F(1,124.446)=17.448$, ($p=0.000$). This means that the two groups of the appeal congruity affect differently the attitude toward the brand. In table 7 I can see that the congruent appeal group produces higher attitude toward the brand (mean=4.594) in comparison with the incongruent appeal group (mean=3.8607). Consequently, H3 is supported.

Appeal Congruity	N	Mean	Standard Deviation
Congruent	64	4.594	0.880
Incongruent	67	4.054	1.119

Table 7: Means and Standard Deviations of attitude toward the brand

5.1.4) Appeal congruity and purchase intention lift

To test the relationship of appeal congruity with my last dependent variable, purchase intention lift, a one-way ANOVA is used. The Levene's test of homogeneity of variances is significant $F(1,129)=6.480$, $p=0.012$, which means that I have to reject the null hypothesis of equality of variances. To interpret my results I used the Welch and the Brown-Forsythe tests (appendix 8). Both tests are significant $F(1,123.603)=14.795$, $p=0.000$. This means that the purchase intention is affected

differently from the congruent appeal group and the incongruent appeal group. Looking the means and standard deviations in table 8, I can see that the congruent appeal group produces higher purchase intention (mean=1.130) in comparison with the incongruent appeal group (mean=0.478). Consequently, H4 is supported.

Appeal Congruity	N	Mean	Standard Deviation
Congruent	64	1.130	1.045
Incongruent	67	0.478	0.886

Table 8: Means and Standard Deviations of purchase intention

5.2) Relationships between the hierarchy of effects' variables

5.2.1) Attitude toward the program and attitude toward the advertisement

To test my fifth hypothesis (H5) I used an independent-samples t-test. To divide the attitude toward the program into two groups I used a median split. I set the cut point based on the median of the attitude toward the program, which is 5.000, and every case equal and greater than 5.000 is assigned to the high attitude toward the program group. Every case lower than 5.000 is assigned to the low attitude toward the program group. The Levene's test is not significant, $p=0.523$, suggesting that there is equality of variance. Looking the main results of the independent-samples t-test I can see that the relationship between the two variables is significant, $p=0.000$ (appendix 9).

According to table 9 the high attitude toward the program group produces a higher mean (mean=5.000) for the attitude toward the advertisement than the low attitude toward the program group, which produces a mean of 3.618. This suggests that people, who like the program more, also like the advertisement more. Hence, the H5 is supported.

Attitude toward the Program	N	Mean	Standard Deviation
High	74	5.000	0.959
Low	57	3.618	0.850

Table 9: Means and Standard Deviations of attitude toward the advertisement

5.2.2) Attitude toward the advertisement and attitude toward the brand

A one-way ANOVA is used to test the relationship between the attitude toward the advertisement with the attitude toward the brand. The median split is used here as well to divide the attitude toward the advertisement into two categories: high and low. The cut point of the attitude toward the advertisement is 4.600. All the cases equal and greater than 4.600 are assigned to the high attitude toward the advertisement group and all the cases lower than 4.600 are assigned to the lower attitude toward the advertisement group. The Levene's test is not significant, $p=0.091$, suggesting that there is equality of variance. The main results of the independent-sample t-test is significant, $p=0.000$, which means that there is a relationship between the dependent and the independent variable (appendix 10). According to table 10 the mean of the attitude toward the brand is higher for the high attitude toward the advertisement group in comparison with the mean for the low attitude toward the advertisement group. This suggests that people who like the advertisement more, also like the brand more. Consequently H6 is supported.

Attitude toward the advertisement	N	Mean	Standard Deviation
High	66	4.889	0.796
Low	65	3.539	0.867

Table 10: Means and Standard Deviations of attitude toward the brand

5.2.3) Attitude toward the brand and purchase intention lift

Finally to test the relationship between the attitude toward the brand and the purchase intention lift a one-way ANOVA is used. Again the median split is used to divide the attitude toward the brand into two categories: high and low. The cut point is 4.333 and every case over and equal to this number forms the high attitude toward the brand group and every case lower than this number forms the low attitude toward the brand group. I can see that the Levene's test is not significant, $p=0.000$, which means that I reject the null hypothesis of equality of variances. In this case I have to use the results from the table of the independent-samples t-test, which are marked as "equal variances not assumed". Again the relationship between the attitude toward the brand

and the purchase intention lift is significant, $p=0.000$ (appendix 11). According to table 11 the mean score of purchase intention lift is higher for the high attitude toward the brand group in comparison with the low attitude toward the brand group, which means that people, who like the brand more, also have higher likelihood to purchase the product. Hence, H7 is supported.

Attitude toward the brand	N	Mean	Standard Deviation
High	66	4.889	0.796
Low	65	3.539	0.867

Table 11: Means and Standard Deviations of purchase intention

5.3) Summary of results

Hypothesis 1: Advertisements that are embedded in programs with congruent appeal will have positive effect on the viewers' attitude toward the program.	Supported
Hypothesis 2: Advertisements that are embedded in programs with congruent appeal will have positive effect on the viewers' attitude toward the advertisement.	Supported
Hypothesis 3: Advertisements that are embedded in programs with congruent appeal will have positive effect on the viewers' attitude toward the brand.	Supported
Hypothesis 4: Advertisements that are embedded in programs with congruent appeal will have positive effect on the viewers' purchase intention.	Supported
Hypothesis 5: The attitude toward the program will have a positive association with the attitude toward the advertisement	Supported
Hypothesis 6: The attitude toward the advertisement will have a positive association with the attitude toward the brand.	Supported
Hypothesis 7: The attitude toward the brand will have a positive association with the purchase intention.	Supported

Chapter 6: Discussion

In this chapter the findings of chapter 5 are going to be further analyzed and discussed.

6.1) Attitude toward the program

Based on the literature the attitude toward the program, which is one of my dependent variables, has a positive association with the attitude toward the advertisement (Bruner and Kumar, 2000). Based also on the theory of the hierarchy-of-effects I expected a positive association between those two variables. In my research I found that the attitude toward the program has a positive effect on the attitude toward the advertisement. Also there is a significant difference between the two groups of the appeal congruity on the attitude toward the program. Confirming the literature, (Kamins et al., 1991; Lord et al., 2001; Bendel-Lyon and Powers, 2004) I also found that congruent appeal between program and advertisement is more effective and produces a higher attitude toward the program.

6.2) Attitude toward the advertisement

According to MacKenzie et al. (1986) the attitude toward the advertisement has a direct positive effect on the attitude toward the brand and an indirect effect on the attitude toward the brand through the brand cognition based on the dual mediation hypothesis. In my research I found that the attitude toward the advertisement has a positive effect on the attitude toward the brand. Also there is a significant difference between the two groups of the appeal congruity on the attitude toward the advertisement. Confirming the literature, (Kamins et al., 1991; Lord et al., 2001; Bendel-Lyon and Powers, 2004) I also found that congruent appeal between program and advertisement is more effective and produces a higher attitude toward the advertisement.

6.3) Attitude toward the brand

According to MacKenzie et al. (1986), all of the four alternative structural specifications of the mediating role of the attitude toward the advertisement have a main similarity. The attitude toward the brand has a direct positive relationship with the purchase intention. Confirming the literature, I also found that attitude toward the brand has a direct and positive association with the purchase intention. Furthermore, similar to the previous two dependent variables, the congruent and the incongruent appeal have a different effect on attitude toward the brand. I also found that congruent appeal between program and advertisement is more effective and produces a higher attitude toward the brand, confirming the literature (Kamins et al., 1991; Lord et al., 2001; Bendel-Lyon and Powers, 2004).

6.4) Purchase intention lift

In this research the results are congruent with the results in the literature (Kamins et al., 1991; Lord et al., 2001; Bendel-Lyon and Powers, 2004). Based on my outcome I found that when the appeal of the program and the advertisement is congruent, the effect on the purchase intention is higher than when the appeal of the program and the advertisement is incongruent.

Chapter 7: Conclusion

7.1) General conclusions

The main purpose of this study is to investigate the effect of the program-advertisement appeal congruency (emotional vs. informative) on the main variables of the advertising hierarchy-of-effects. Furthermore, previous studies on congruity on web advertising are not many and the current research contributes to the knowledge in this field. Moreover, the relationship between the variables of the hierarchy-of-effects is tested.

After extensive examination of prior literature a conceptual model was developed. Based on the conceptual model the relationship between the appeal congruity, the attitude toward the program, the attitude toward the advertisement, the attitude toward the brand and the purchase intention was established. The direct and the indirect effect of the appeal congruity on the purchase intention was also investigated. The main results suggest that there is a positive and direct effect of appeal congruity on the attitude toward the program, the attitude toward the advertisement, the attitude toward the brand and the purchase intention. Confirming the literature, I found a positive relationship between the variables of the hierarchy-of-effects ($A_{pr} \rightarrow A_{ad} \rightarrow A_b \rightarrow PI$), which suggest that there is an indirect effect of the appeal congruity on purchase intention through the hierarchy-of-effects variables (A_{pr} , A_{ad} , A_b , PI).

After considering all my results I conclude that when the program and the advertisement have a congruent appeal, attitude toward the program, attitude toward the advertisement, attitude toward the brand and purchase intention are more effective than when the appeal is incongruent.

7.2) Managerial implications

As I mentioned earlier in my research the use of Internet and especially the use of video on demand websites is widely spread and it is still growing. This developed a huge market for new types of advertising that are more personalized and better targeted. One of the most important types of online advertising is the in-stream video advertising. Many companies are taking advantage of this media, but they have to

make their advertisement more effective because the cost of online advertising is also rising. So the companies have to understand that the effectiveness of the advertisement is affected by the program it is embedded.

Based on my results, the current study suggests that the managers have to think carefully the appeal of the program (emotional or informative) that they are going to embed their advertisement. A program which has a congruent appeal with the advertisement will be more effective than embedding the advertisement in an incongruent program. So an emotional advertisement is better to be embedded in an emotional program and an informative advertisement is better to be embedded in an informative program. Like this the viewers produce a higher attitude toward the advertisement, which leads to higher attitude toward the brand and finally leads to higher purchase intention.

7.3) Limitations and future research

Several limitations have to be considered in order to correctly interpret the results of this study.

The first limitation is the amount of respondents and their age. To obtain a more accurate result 131 valid respondents are not enough and a bigger number of respondents are required. Also the mean age was low, 29 years old, and most of them were master student. In general the sample was pretty homogenous and consequently the results could not be generalized. Also I used shorter duration programs in order to keep the attention of the respondents through out the whole questionnaire. Likewise this research investigates only the product category of the cars. Finally during the factor analysis I found that some of my dependent variables were correlated. That may have occurred due to poor formulation of the questions or by poor interpretation of the questions by the respondents, as most of the respondents were not native English speakers.

Further research could investigate the same concept in different product categories. Moreover experiments with the advertisement embedded in longer program and/or different product category can be examined. Furthermore a study where the respondent will be involved with the product category and they will be willing to buy a brand from this product category in a specified period of time would minimize the

bias that this survey had due to the instruction text that was presented to the respondents. Also the addition of covariates will help explain which other reasons affect the dependent variables. Finally a future study could develop the research on an actual video on demand website and investigate the click-through rate of the advertisement.

References

- A. Furnham & M.T. Price (2006), "Memory for televised advertisements as a function of program context viewer-involvement, and gender", *Communications*, Vol. 31, pp. 155-172.
- A. Furnham, B. Gunter, D. Walsh (1998), "Effects of programme context on memory of humorous television commercials", *Applied Cognitive Psychology*, Vol. 12, pp. 555-567.
- A. Furnham, J. Bergland, B. Gunter (2002), "Memory for television advertisements as a function of advertisement-programme congruity", *Applied Cognitive Psychology*, Vol. 16, pp. 525-545.
- A. J. Rethans, J. L. Swasy, L. J. Marks (1986), "Effect of television commercial repetition receiver knowledge, and commercial length: A test of the two-factor model", *Journal of Marketing Research*, Vol. 23, pp. 50-61.
- A.A. Mitchell, J.C. Olson (1981), "Are product attribute beliefs the only mediator of advertising effects on brand attitude?", *Journal of Marketing Research*, Vol. 18, pp. 318-332
- A.E. Crowley, E.R. Spangenberg, K.R. Hughes (1992), "Measuring the hedonic and utilitarian dimensions of attitude towards product categories", *Marketing Letters*, Vol. 3, pp. 239-249.
- A.J. Rethans, J.L. Swasy, L.J. Marks (1986), "Effects of Television Commercial Repetition, Receiver Knowledge, and Commercial Length: A Test of the Two-Factor Model", *Journal of Marketing Research*, Vol 23, pp. 50-61
- Adrew Sharma (2010), "Recall of television commercial as a function of viewing context: The impact of program-commercial congruity on commercial messages", *The Journal of General Psychology*, Vol. 127, pp. 383-396.
- Andy Field (2000), "Discovering statistics using SPSS for Windows: Advanced techniques for Beginners", Sage Publications Ltd
- B. Gunter, A. Furnham, C. Beeson (1997), "Recall of television advertisements as a function of program evaluation", *The Journal of Psychology*, Vol. 131, pp. 541-553.
- B. Gunter, A. Furnham, E. Pappa (2005), "Effects of television violence on memory for violent and nonviolent advertising", *Journal of Applied Social Psychology*, Vol, 35, pp. 1680-1697.
- B. Gunter, B. Baluch, L.J. Duffy, A. Furnham (2002), "Children's memory for television advertising: effects of programme-advertisement congruency", *Applied*

Cognitive Psychology, Vol. 16, pp.171-190.

B. Nitschke, S. Bogomolova (2012), "A typology of elements used in contextually congruent television advertising", Australian and New Zealand Marketing Academy Conference 2012, pp. 1-7.

Bruner, G.C. and Kumar, A. (2000), "Web commercials and advertising hierarchy-of-effects", Journal of Advertising Research, Vol. 40, pp. 35-43.

D. Bendal-Lyon, T.L. Powers (2004), "The impact of structure and process attributes on satisfaction and behavioral intentions", Journal of Services Marketing, Vol. 18, pp. 114-121

D. Park, J. Lee (2008), "eWOM overload and its effect on consumer behavioral intention depending on consumer involvement", Electronic Commerce Research and Applications, Vol. 7, pp. 386-398

D.J Moore, William D. Harris and Hong C. Chen (1995), "Affect Intensity: An individual difference response to advertising appeals", Journal of Consumer Research, Vol. 22, pp. 154-164

Ellie Parker & Andrian Furnham (2007), "Does Sex sell? The effect of sexual programme content on the recall of sexual and non-sexual advertisements", Applied Cognitive Psychology, Vol. 21, pp. 1217- 1228.

Eyeblaster, "Best practice in online and high definition video advertising", 2008, Web, http://www2.mediamind.com/data/uploads/resourcelibrary/eyeblaster_white_paper_%20video_best_practices.pdf

Furnham, Gunter, Richardson (2006), "Effects of Product-Program Congruity and Viewer involvement on memory for televised advertisements", Journal of Applied Social Psychology, Vol. 32, pp. 124-141.

G. Chatzopoulou, C. Sheng, M. Faloutsos (2010), "A first step towards understanding popularity in YouTube", INFOCOM IEEE Conference on Computer Communications Workshops 2010, pp. 1-6

G. Guest, A. Bunce, L. Johnson (2006), "How many interviews are enough? And experiment with data saturation and variability", Field Methods, Vol. 18, pp. 59-82

G. Rosenkrands (2009), "The creativeness and effectiveness of online interactive rich media advertising", Journal of Interactive Advertising, Vol. 9, pp. 18-31

Interactive Advertising Bureau (2008), "Digital Video In-stream Ad Metrics Definition", http://www.iab.net/media/file/DV_In-Stream_Metrics_Definitions.pdf

Interactive Advertising Bureau (2008), "IAB Platform Status Report: A digital video advertising overview", <http://www.iab.net/media/file/dv-report-v3.pdf>

- Interactive Advertising Bureau (June 2008), Digital Video In-stream Ad Metrics Definitions, www.iab.net/dv_metrics_definitions
- J. S. Johar & M. Joseph Sirgy (1991), "Value-expressive versus Utilitarian advertising appeals: When and Why to use which appeal", *Journal of Advertising*, Vol. 20, pp. 23-33.
- J.P. Murry, Jr. J.L. Lastovicka, S.N. Singh (1992), "Feeling and Liking Responses to Television Programs: An Examination of Two Explanations for media-context Effects", *Journal of Consumer Research*, Vol. 18, pp. 441-451
- J.T. Cacioppo, R.E. Petty (1983), "Central and Peripheral routes to persuasion: Application to advertising", *Advertising and consumer psychology*
- Joe Mandese, "Ad Execs see TV budgets moving into online video", *MediaDailyNews*, MediaPost, 14 November 2006, Web, <http://www.mediapost.com/publications/article/51103/ad-execs-see-tv-budgets-moving-into-online-video.html>
- K. B. Murray (1991), "A test of services marketing theory: Consumer information acquisition activities", *Journal of Marketing*, Vol. 55, pp.10-25
- K. R. Lord, R. E. Burnkrant, H. R. Unnava (2001), "The effect of program-induced mood states on memory for commercial information", *Journal of Current Issues & Research in Advertising*, Vol. 23, pp. 1-15.
- K.E. Voss, E.R. Spangenberg, B. Grohmann (2003), "Measuring the hedonic and utilitarian dimensions of consumer attitude" *Journal of Marketing Research*, Vol. 40, pp. 310-320.
- K.G. Celuch, M. Slama (1993), "Program content and advertising effectiveness: A test of the congruity hypothesis for cognitive and affective source of involvement"
- Kamins, Michael, Lawrence J. Marks, and Deborah Skinner (1991), "Television Commercial Evaluation in the Context of Program Induced Mood: Congruency versus Consistency Effects," *Journal of Advertising*, Vol. 20, pp. 1-14.
- L. Ha (2008), "Online advertising research in advertising journals: A review", *Journal of current issues & research in advertising*, Vol. 30, pp. 31-48.
- L.M. Buchholz, R.E. Smith (1991), "The role of consumer involvement in determining cognitive response to broadcast advertising", *Journal of Advertising*, Vol. 20, pp. 4-17
- L.Y. Duan, J. Wang, W. Gao, H. Lu, J.S. Jin, C. Xu (2011), "Online Multimedia Advertising: Techniques and Technologies", Chapter 10 1st Edition, IGI Global.
- L.Y. Duan, J. Wang, W. Gao, H. Lu, J.S. Jin, C. Xu (2011), "Online Multimedia Advertising: Techniques and Technologies", Chapter 11, 1st Edition, IGI Global.
- M. Cha, H. Kwak, P. Rodriguez, Y.Y. Ahn, S. Moon (2007), "I tube, you tube, everybody tubes: analyzing the world's largest user generated content video

system”, IMC '07 Proceedings of the 7th ACM SIGCOMM conference on Internet measurement, pp. 1-14

M. Pashkevich, S. Dorai-Raj, M. Kellar, D. Zigmond (2012), “Empowering online advertisements by empowering viewers with the right to choose”, *Journal of Advertising Research*, Vol. 52, pp. 65-71.

N. Spears, S.N. Singh (2012), “Measuring attitude toward the brand and purchase intention”, *Journal of current issues & research in advertising*, Vol. 26, pp. 53-66

O. Appiah (2006), “Rich media, Poor media: The impact of Audio/Video vs. Text/Picture testimonial ads on browsers’ evaluation of commercial web sites and online products”, *Journal of Current Issues & Research in Advertising*, Vol. 28, pp. 73-86

P. De Pelsmacker, M. Geuens, P. Anckaert (2002), “Media context and advertising effectiveness: The role of context appreciation and context/ad similarity”, *Journal of Advertising*, Vol. 31, pp. 49-61.

P.W. Miniard, S. Bhatla, R.L. Rose (1990), “On the formation and relationship of ad and brand attitude: an experimental and causal analysis”, *Journal of Marketing Research*, Vol. 27, pp. 290-303

R. Barta, O. T. Ahtola (1991), “Measuring the hedonic and utilitarian sources of consumer attitudes”, *Marketing Letters*, Vol. 2, pp. 159-170.

R.E. Petty, J.T. Cacioppo, D. Schumann, (1983), “Central and peripheral routes to advertising effectiveness: The moderating Role of Involvement”, *Journal of Consumer Research*, Vol. 10, pp. 135-146

R.N. Laczniak, D.D. Muehling, S. Grossbart (1989), “Manipulating message involvement in advertising research”, *Journal of Advertising*, Vol. 18, pp. 28-38

R.S. Moore, C.A. Stammerjohan, R.A. Coulter (2005), “Banner Advertising-Web site context congruity and color effects on attention and attitudes”, *Journal of Advertising*, Vol. 34, pp. 71-84.

S. B. Barnes & N.F. Hair (2008), “From banners to YouTube: using the rearview mirror to look at the future of internet advertising”, *International Journal of Internet Marketing and Advertising*, Vol. 05, pp. 223-239.

S. B. MacKenzie, R. J. Lutz (1989), “An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context”, *Journal of Marketing*, Vol. 53, pp. 48-65

S. J. Newell & K. V. Henderson (2010), “ Super Bowl advertising: field testing the importance of advertisement frequency, length and placement on recall”, *Journal of Marketing Communications*, Vol. 4, pp. 237-248.

S. N. Singh & C. A. Cole (1993), “The effects of length, content, and repetition on television commercial effectiveness”, *Journal of Marketing Research*, Vol. 30, pp.

91-104.

S. P. Brown & D. M. Stayman (1992), "Antecedents and consequences of attitude toward the ad: A meta-analysis", *Journal of Consumer Research*, Vol. 19, pp. 34-51.

Scott B. MacKenzie, Richard J. Lutz and George E. Belch (1986), "The Role of Attitude toward the Ad as a Mediator of Advertising Effectiveness: A Test of Competing Explanations", *Journal of Marketing Research*, Vol. 23, pp. 130-143.

T. Broxton, Y. Interian, J. Vaver, M. Wattenhofer (2013), "Catching a viral video", *Journal of Intelligent Information Systems*, Vol. 40, pp. 241-259

T. Mei, X.S. Hua, L. Yang, S. Li (2007), "VideoSense: towards effective online video advertising", *Multimedia '07 Proceeding of the 15th international conference on Multimedia*, pp. 1075-1084.

T.P. Novak, D.L. Hoffman, Y. Yung (2000), "Measuring the customer experience in online environment: A structural modeling approach", *Marketing science*, Vol. 19, pp. 22-42

V. Gueorguieva (2007), "Voters, MySpace, and YouTube the impact of alternative communication channels on the 2006 election cycle and beyond", *Social Science Computer Review*, Vol. 26, pp. 288-300.

W. Janssens, K. Wijnen, P. De Pelsmacker, P. Van Kenhove (2008), *Marketing Research With SPSS*, Edinburgh: Pearson Education Limited

Y. Chen, S. Barnes (2007), "Initial trust and online buyer behaviour", *Industrial Management & Data Systems*, Vol. 107, pp. 21-36

Y. Sun, Y. Xun, Y. Wang, X. Chen (2009), "How to advertise appropriately on the word wide web? A Multi-congruity analysis approach", *Paris 2009 proceedings*, Paper 107.

YouTube, (16 July 2014), <http://www.youtube.com/yt/press/statistics.html>

Appendix

Appendix 1

Questionnaire

Main Survey (I)

Dear participants,

Thank you for taking the time to fill out the survey for my master thesis. The survey will last about ±15 minutes. After some instruction, a video (4 minutes) will be shown. Those will be followed by questions. Your answers are anonymous and there are no wrong or correct answers. If you have any question or concerns, please contact me at kom_nas@hotmail.com

Thank you again for your help,
Konstantinos Komninos

[Load unfinished survey](#) [Next >](#) [Exit and clear survey](#)

0% 100%

*** Please click and drag the slider handles to enter your answer.**

How familiar are you with Acura RDX?	Not at all familiar	<input type="range"/>	Very familiar
How familiar are you with Acura RDX SUV car?	Not at all familiar	<input type="range"/>	Very familiar
How familiar are you with the types of retail stores that carry Acura products?	Not at all familiar	<input type="range"/>	Very familiar
How familiar are you with the type of advertising that Acura RDX currently uses?	Not at all familiar	<input type="range"/>	Very familiar
How familiar are you with SUV in general?	Not at all familiar	<input type="range"/>	Very familiar
How familiar are you with cars in general?	Not at all familiar	<input type="range"/>	Very familiar
How much experience do you have with Acura RDX products?	No experience at all	<input type="range"/>	much experience


[Resume later](#) [Previous](#) [Next >](#) [Exit and clear survey](#)

0% 100%

*** Please indicate the level of agreement with the following statements.**

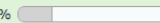
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
If I were looking for a car my likelihood of purchasing the Acura RDX would be high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I were to buy a car, the probability that I would consider buying the Acura RDX would be high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If had to buy a car, my willingness to buy the Acura RDX would be high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


[Resume later](#) [Previous](#) [Next >](#) [Exit and clear survey](#)

0%  100%

You are going to watch a short program about Land Rover cars. After the program an advertisement about a car model will appear. I would like you to imagine that you are about to purchase a car and you are considering various brands. Therefore, after you watch the advertisement, think about how the advertised product would suit your own needs. In other words, evaluate the product advertised as you actually would before buying one. Please pay close attention the whole time. After the end of the video you can press the "Next" button under the video to proceed to the next page.

[Resume later](#) [← Previous](#) [Next →](#) [Exit and clear survey](#)


0%  100%





After the end of the video you can press the "Next" button under the video to proceed to the next page.

[← Previous](#) [Next →](#)


Please indicate how familiar you are with the **program** you just watched.
Please click and drag the slider handles to enter your answer.


Not at all familiar  Extremely familiar
 1 7


Definitely do not recognise  Definitely recognise
 1 7

Definitely have not seen it before  Definitely have seen it before
 1 7


Please indicate how familiar you are with the **advertisement** you just watched.
Please click and drag the slider handles to enter your answer.


Not at all familiar  Extremely familiar
 1 7


Definitely do not recognise  Definitely recognise
 1 7

Definitely have not seen it before  Definitely have seen it before
 1 7


Please indicate what is your attitude about the **program** that you just watched.
Please click and drag the slider handles to enter your answer.


I liked it  I disliked it
 1 7


Good  Bad
 1 7

Favorable  Unfavorable
 1 7

Please indicate what is your attitude about the **program** that you just watched.
Please click and drag the slider handles to enter your answer.

I liked it  I disliked it
 1 7

Good  Bad
 1 7

Favorable  Unfavorable
 1 7

* While watching/looking at this advertisement ...

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I got a positive impression.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it really something for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it credible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it exaggerated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it attractive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

0% 100%

* Please evaluate the brand that appears in the advertisement by indicating your agreement or disagreement with the following statements.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I think the Acura RDX is a very good car.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think the Acura RDX is a very useful car.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My opinion of the Acura RDX is very favorable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Please indicate the level of agreement with the following statements.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
If I were looking for this type of product my likelihood of purchasing the brand in the ad would be high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I were to buy this type of product, the probability that I would consider buying the brand in the ad would be high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If had to buy this type of product, my willingness to buy the brand in the ad would be high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[◀ Previous](#) [Next ▶](#)

0% 100%

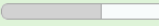
* Please fill in the next questions about the advertisement.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
How much attention did you pay to the advertisement?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much did you concentrate on the advertisement?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How involved were you with the advertisement?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much thought did you put into evaluating the advertisement?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much did you notice the advertisement?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Please fill in the next questions about the program.

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
How much attention did you pay to the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much did you concentrate on the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How involved were you with the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much thought did you put into evaluating the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much did you notice the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>


[◀ Previous](#) [Next ▶](#)

0%  100%








• Indicate to which level you agree with the following sentences concerning the product category of cars.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
are part of my self-image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are boring to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
portray an image of me to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are fun to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are fascinating to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
are exciting to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
tell others about me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
tell me about other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

◀ Previous Next ▶

0%  100%

Please click and drag the slider handles to enter your answer.

How familiar are you with Acura RDX?	Not at all familiar 1  Very familiar 7
How familiar are you with Acura RDX SUV car?	Not at all familiar 1  Very familiar 7
How familiar are you with the types of retail stores that carry Acura products?	Not at all familiar 1  Very familiar 7
How familiar are you with the type of advertising that Acura RDX currently uses?	Not at all familiar 1  Very familiar 7
How familiar are you with SUV in general?	Not at all familiar 1  Very familiar 7
How familiar are you with cars in general?	Not at all familiar 1  Very familiar 7
How much experience do you have with Acura RDX products?	No experience at all 1  much experience 7

◀ Previous Next ▶

* Who paid for the car that you currently own or who is going to pay for the purchase of your future car?
Choose one of the following answers

- You
- Other:

For each statement below, place a check mark closer to the adjective that you believe best describes your feelings about the Acura RDX. The more appropriate the adjective seems, the closer you should place your mark to it.
Please click and drag the slider handles to enter your answer.

effective	<input type="range"/>	not effective
1		7
helpful	<input type="range"/>	no helpful
1		7
functional	<input type="range"/>	not functional
1		7
necessary	<input type="range"/>	not necessary
1		7
practical	<input type="range"/>	not practical
1		7
not fun	<input type="range"/>	fun
1		7
dull	<input type="range"/>	exciting
1		7
not delightful	<input type="range"/>	delightful
1		7
not thrilling	<input type="range"/>	thrilling
1		7
unenjoyable	<input type="range"/>	enjoyable
1		7

Please click and drag the slider handles to enter your answer.

In my opinion, this advertisement has a very strong appeal to my emotions.

Strongly Disagree Strongly Agree

This advertisement contained a lot of information

Strongly Disagree Strongly Agree

This advertisement really did hold my attention

Strongly Disagree Strongly Agree

Please click and drag the slider handles to enter your answer.

In my opinion, this program has a very strong appeal to my emotions.

Strongly Disagree Strongly Agree

This program contained a lot of information

Strongly Disagree Strongly Agree

This program really did hold my attention

Strongly Disagree Strongly Agree

0% 100%

* What is your age?

Only numbers may be entered in this field.

* Your gender:

Female Male

* What is the highest education level you have completed?

Choose one of the following answers

High School

Bachelor's degree

Master's degree

Doctoral degree

Other:

[← Previous](#)

[Submit](#)

Thank you very much for completing this questionnaire and helping me finish my Master Thesis.
Konstantinos Komninos 372454kk@student.eur.nl

Appendix 2

Correlations

Correlations

		Emotional_Ad Appeal_SQ	Informative_Ad Appeal_SQ	Emotional_Program Appeal_SQ	Informative_Program Appeal_SQ	AtP_S Q1	AtP_S Q2	AtP_S Q3	AtA_S Q1	AtA_S Q2	AtA_S Q3	AtA_S Q4	AtA_S Q5	AtBr_S Q1	AtBr_S Q2	AtBr_S Q3	PitBr_ SQ1	PitBr_ SQ2	PitBr_ SQ3
Emotional_Ad Appeal_SQ1	Pearson Correlati Sig. (2- tailed) N	1 145	-.269** .001 145	.163 .050 145	.089 .289 145	.216** .009 145	.227** .006 145	.275** .001 145	.171 .040 145	.229** .006 145	.151 .070 145	.164 .049 145	.322** .000 145	.180 .030 145	.086 .305 145	.150 .071 145	.160 .054 145	.159 .057 145	.232** .005 145
Informative_Ad Appeal_SQ2	Pearson Correlati Sig. (2- tailed) N	-.269** .001 145	1 145	.116 .166 145	.140 .093 145	.026 .759 145	.044 .596 145	-.037 .659 145	.199* .016 145	.167* .045 145	.211* .011 145	.379** .000 145	.149 .074 145	.298** .000 145	.364** .000 145	.297** .000 145	.275** .001 145	.365** .000 145	.294** .000 145
Emotional_Program Appeal_SQ1	Pearson Correlati Sig. (2- tailed) N	.163 .050 145	.116 .166 145	1 145	-.076 .361 145	.147 .077 145	.168* .043 145	.187* .024 145	.077 .356 145	.107 .201 145	.101 .225 145	.300** .000 145	.114 .171 145	.243** .003 145	.227** .006 145	.181* .029 145	.034 .686 145	.112 .178 145	.109 .192 145
Informative_Program Appeal_SQ2	Pearson Correlati Sig. (2- tailed) N	.089 .289 145	.140 .093 145	-.076 .361 145	1 145	.330** .000 145	.411** .000 145	.339** .000 145	.141 .091 145	.211* .011 145	.130 .118 145	.129 .121 145	.090 .282 145	.196* .018 145	.200* .016 145	.142 .088 145	.109 .193 145	.102 .223 145	.091 .275 145
AtP_SQ1	Pearson Correlati Sig. (2- tailed) N	.216** .009 145	.026 .759 145	.147 .077 145	.330** .000 145	1 145	.857** .000 145	.827** .000 145	.606** .000 145	.583** .000 145	.540** .000 145	.382** .000 145	.523** .000 145	.473** .000 145	.347** .000 145	.454** .000 145	.369** .000 145	.318** .000 145	.293** .000 145
AtP_SQ2	Pearson Correlati Sig. (2- tailed) N	.227** .006 145	.044 .596 145	.168* .043 145	.411** .000 145	.857** .000 145	1 145	.811** .000 145	.511** .000 145	.529** .000 145	.434** .000 145	.338** .000 145	.448** .000 145	.456** .000 145	.337** .000 145	.429** .000 145	.312** .000 145	.258** .002 145	.251** .002 145
AtP_SQ3	Pearson Correlati Sig. (2- tailed) N	.275** .001 145	-.037 .659 145	.187* .024 145	.339** .000 145	.827** .000 145	.811** .000 145	1 145	.542** .000 145	.575** .000 145	.492** .000 145	.380** .000 145	.452** .000 145	.451** .000 145	.355** .000 145	.460** .000 145	.334** .000 145	.317** .000 145	.287** .000 145
AtA_SQ1	Pearson Correlati Sig. (2- tailed) N	.171 .040 145	.199* .016 145	.077 .356 145	.141 .091 145	.606** .000 145	.511** .000 145	.542** .000 145	1 145	.713** .000 145	.740** .000 145	.558** .000 145	.676** .000 145	.592** .000 145	.425** .000 145	.580** .000 145	.524** .000 145	.474** .000 145	.484** .000 145
AtA_SQ2	Pearson Correlati Sig. (2- tailed) N	.229** .006 145	.167* .045 145	.107 .201 145	.211* .011 145	.583** .000 145	.529** .000 145	.575** .000 145	.713** .000 145	1 145	.696** .000 145	.582** .000 145	.664** .000 145	.523** .000 145	.547** .000 145	.571** .000 145	.590** .000 145	.546** .000 145	.548** .000 145
AtA_SQ3	Pearson Correlati Sig. (2- tailed) N	.151 .070 145	.211* .011 145	.101 .225 145	.130 .118 145	.540** .000 145	.434** .000 145	.492** .000 145	.740** .000 145	.696** .000 145	1 145	.624** .000 145	.748** .000 145	.615** .000 145	.473** .000 145	.603** .000 145	.569** .000 145	.493** .000 145	.520** .000 145
AtA_SQ4	Pearson Correlati Sig. (2- tailed) N	.164 .049 145	.379** .000 145	.300** .000 145	.129 .121 145	.382** .000 145	.338** .000 145	.380** .000 145	.558** .000 145	.582** .000 145	.624** .000 145	1 145	.621** .000 145	.513** .000 145	.542** .000 145	.502** .000 145	.411** .000 145	.514** .000 145	.525** .000 145
AtA_SQ5	Pearson Correlati Sig. (2- tailed) N	.322** .000 145	.149 .074 145	.114 .171 145	.090 .282 145	.523** .000 145	.448** .000 145	.452** .000 145	.676** .000 145	.664** .000 145	.748** .000 145	.621** .000 145	1 145	.587** .000 145	.422** .000 145	.563** .000 145	.541** .000 145	.478** .000 145	.566** .000 145

AtBr_SQ1	Pearson	.180*	.298**	.243**	.196*	.473**	.456**	.451**	.592**	.523**	.615**	.513**	.587**	1	.733**	.811**	.611**	.535**	.602**
	Correlati.																		
	Sig. (2-tailed)	.030	.000	.003	.018	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
AtBr_SQ2	Pearson	.086	.364**	.227**	.200*	.347**	.337**	.355**	.425**	.547**	.473**	.542**	.422**	.733**	1	.753**	.550**	.605**	.591**
	Correlati.																		
	Sig. (2-tailed)	.305	.000	.006	.016	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
AtBr_SQ3	Pearson	.150	.297**	.181*	.142	.454**	.429**	.460**	.580**	.571**	.603**	.502**	.563**	.811**	.753**	1	.623**	.602**	.662**
	Correlati.																		
	Sig. (2-tailed)	.071	.000	.029	.088	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
PltBr_SQ1	Pearson	.160	.275**	.034	.109	.369**	.312**	.334**	.524**	.590**	.569**	.411**	.541**	.611**	.550**	.623**	1	.842**	.808**
	Correlati.																		
	Sig. (2-tailed)	.054	.001	.686	.193	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
PltBr_SQ2	Pearson	.159	.365**	.112	.102	.318**	.258**	.317**	.474**	.546**	.493**	.514**	.478**	.535**	.605**	.602**	.842**	1	.848**
	Correlati.																		
	Sig. (2-tailed)	.057	.000	.178	.223	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
PltBr_SQ3	Pearson	.232**	.294**	.109	.091	.293**	.251**	.287**	.484**	.548**	.520**	.525**	.566**	.602**	.591**	.662**	.808**	.848**	1
	Correlati.																		
	Sig. (2-tailed)	.005	.000	.192	.275	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 3

Cronbach's α

Pre Familiarity with the Brand	.894
Pre Familiarity with the Product Category	.851
Pre Purchase Intention	.941
Attitude toward Program	.935
Attitude toward Advertisement	.907
Attitude toward Brand	.907
Post Purchase Intention	.937
Attention to the Program	.880
Attention to the Advertisement	.875
Familiarity with the Program	.961
Familiarity with the Advertisement	.928
Involvement with the Product Category	.861
Post Familiarity with the Brand	.837
Post Familiarity with the Product Category	.864
Utilitarian Appeal of the Brand	.816
Emotional Appeal of the Brand	.897

Appendix 4

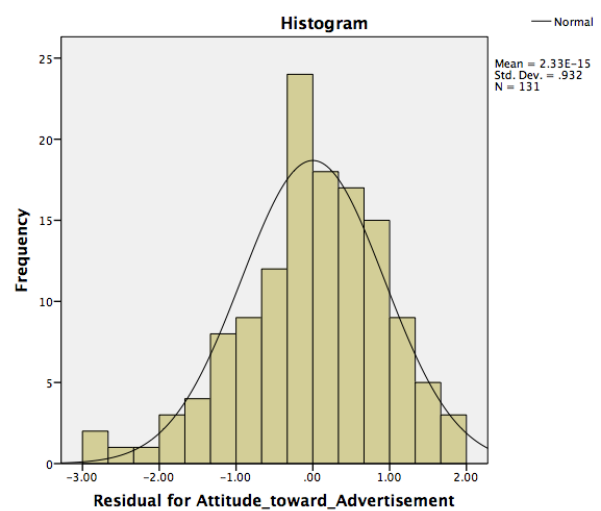
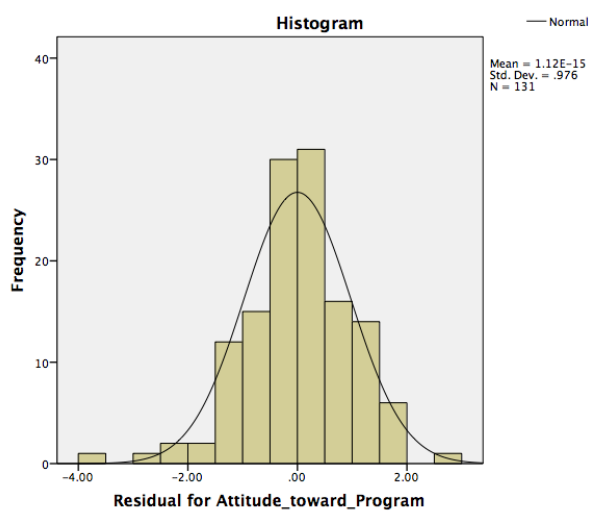
Distribution of dependent variables

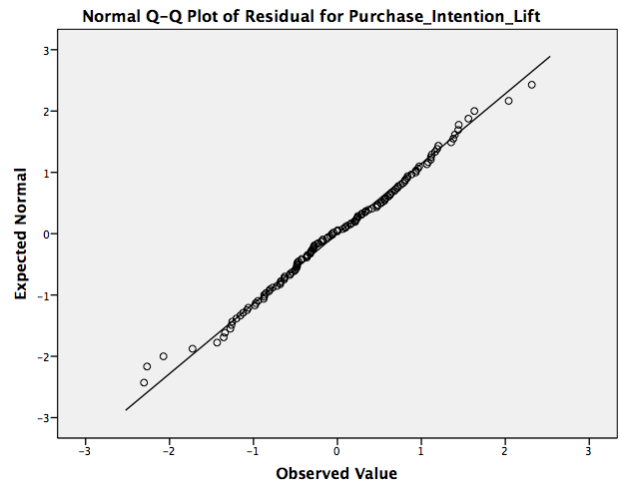
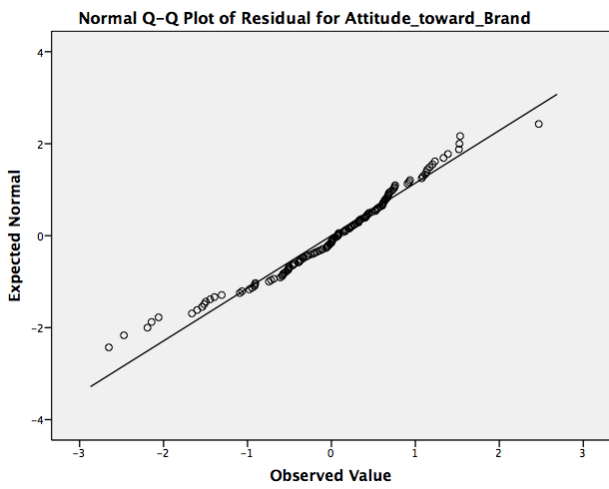
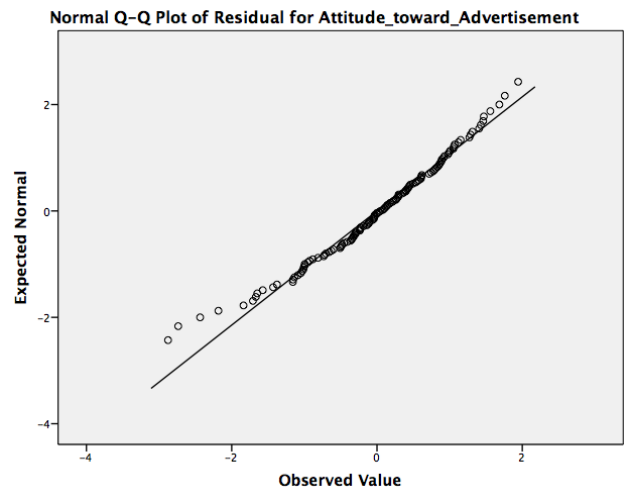
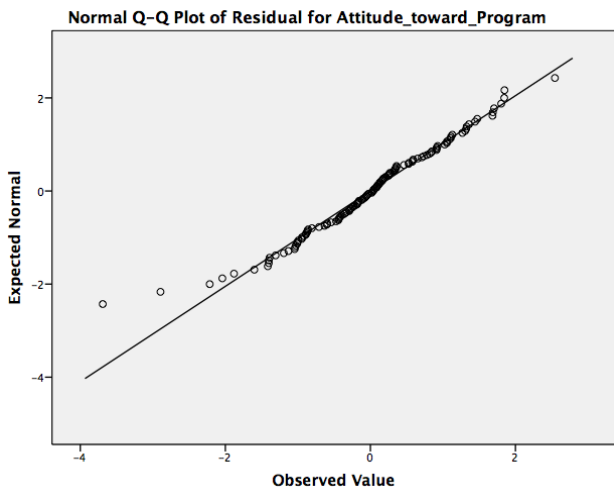
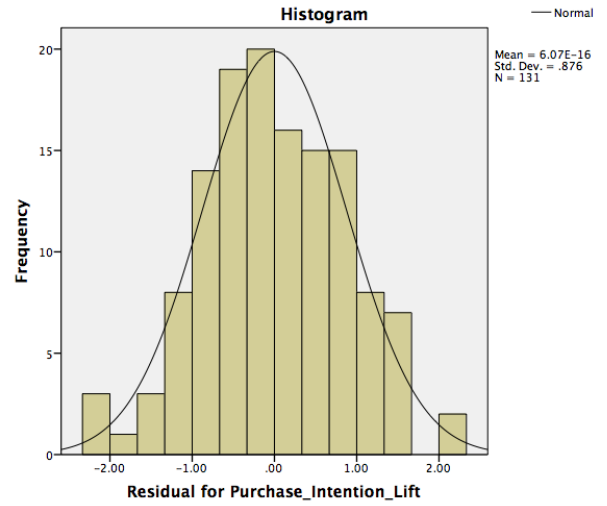
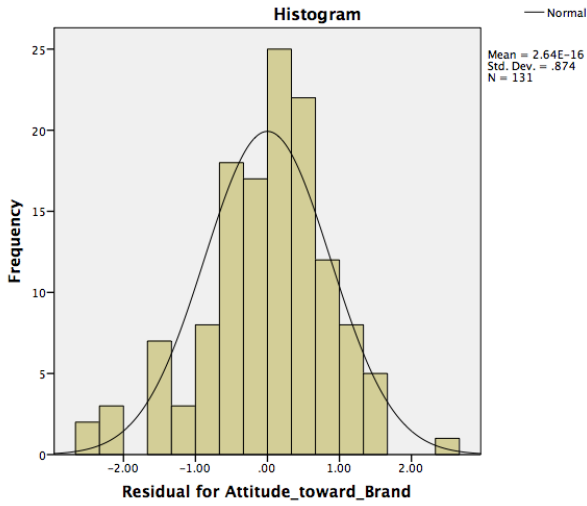
Tests of Normality

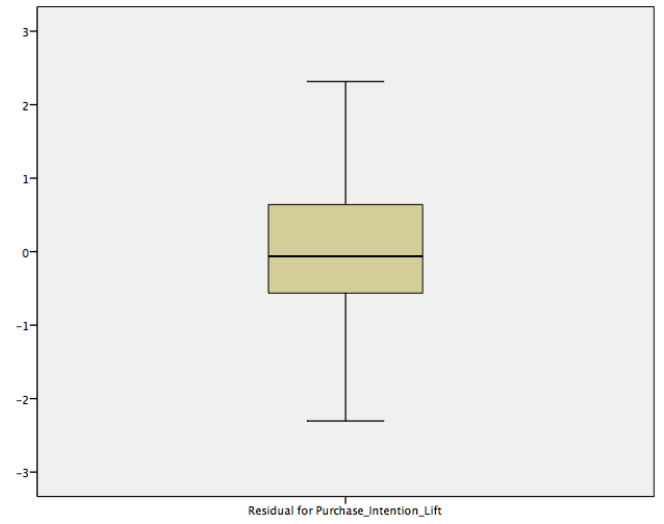
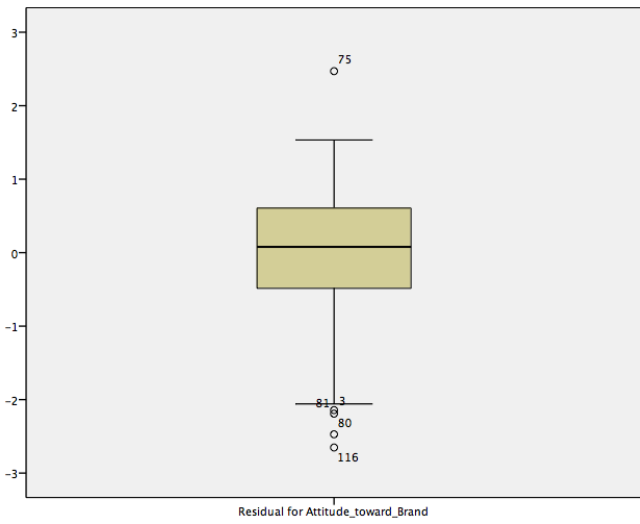
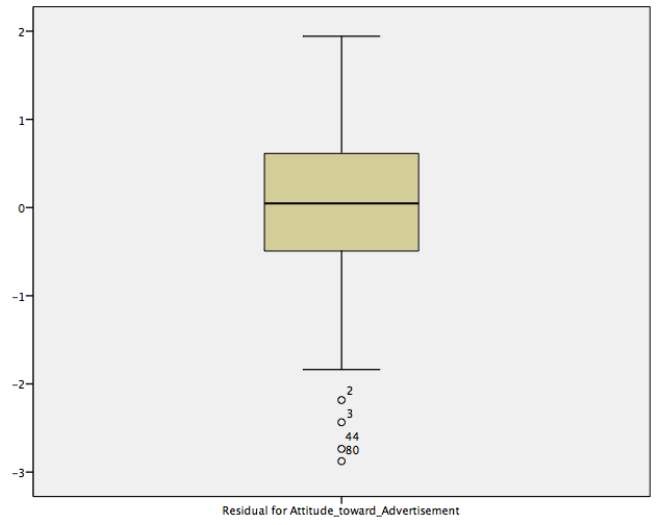
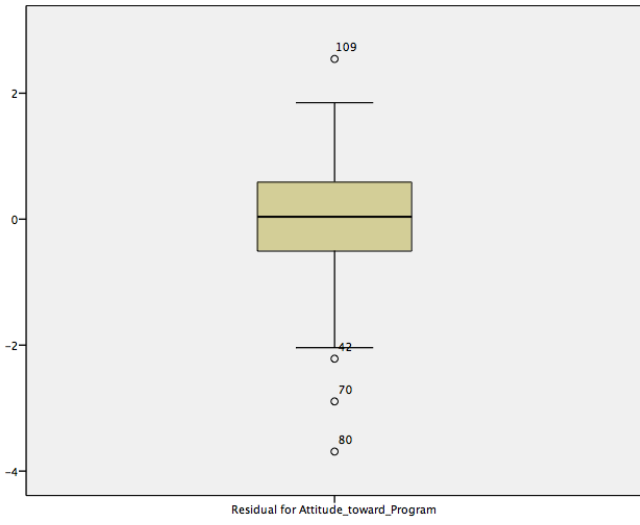
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
RES_5 Residual for Attitude_toward _Program	.066	131	.200*	.980	131	.053
RES_6 Residual for Attitude_toward _Advertisement	.066	131	.200*	.979	131	.044
RES_7 Residual for Attitude_toward _Brand	.082	131	.032	.973	131	.009
RES_8 Residual for Purchase_Inten tion_Lift	.051	131	.200*	.994	131	.859

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction







Appendix 5

ANOVA between appeal congruity and attitude toward the program

Robust Tests of Equality of Means

Attitude toward the Program

	Statistic ^a	df1	df2	Sig.
Welch	17.255	1	122.923	.000
Brown-Forsythe	17.255	1	122.923	.000

a. Asymptotically F distributed.

Appendix 6

ANOVA between appeal congruity and attitude toward the advertisement

ANOVA

Attitude toward the Advertisement

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.299	1	16.299	13.747	.000
Within Groups	152.941	129	1.186		
Total	169.240	130			

Appendix 7

ANOVA between appeal congruity and attitude toward the brand

Robust Tests of Equality of Means

Attitude toward Brand

	Statistic ^a	df1	df2	Sig.
Welch	17.448	1	124.446	.000
Brown-Forsythe	17.448	1	124.446	.000

a. Asymptotically F distributed.

Appendix 8

ANOVA between appeal congruity and purchase intention

Robust Tests of Equality of Means

Purchase Intention Lift

	Statistic ^a	df1	df2	Sig.
Welch	14.795	1	123.603	.000
Brown-Forsythe	14.795	1	123.603	.000

a. Asymptotically F distributed.

Appendix 9

Independent-samples t-test between attitude toward the program and attitude toward the advertisement

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Attitude_toward_Advertisement	Equal variances assumed	.410	.523	8.585	129	.000	1.38246	.16103	1.06386	1.70105
	Equal variances not assumed			8.721	126.417	.000	1.38246	.15852	1.06876	1.69615

Appendix 10

Independent-samples t-test between attitude toward advertisement and attitude toward the brand

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Attitude_toward_Brand	Equal variances assumed	2.898	.091	9.286	129	.000	1.35043	.14542	1.06270	1.63815
	Equal variances not assumed			9.280	127.697	.000	1.35043	.14552	1.06249	1.63837

Appendix 11

Independent-samples t-test between attitude toward brand and purchase intention

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Purchase_Intention_Lift	Equal variances assumed	15.885	.000	5.337	129	.000	.87127	.16326	.54826	1.19428
	Equal variances not assumed			5.591	128.843	.000	.87127	.15583	.56295	1.17959