The Positive Effects of Interactive Advertising on Brand Attitudes

MSc.EBA Brand and Communications Management
Master's Thesis

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i. Abstract

i.i. Purpose

The purpose of this research paper is to examine the relationship between interactive advertising and attitude formation. It is hypothesized that when an individual interacts with the brand, the attitudes that are formed in the process will be more positive compared to when there is no interaction, as in passive advertising.

i.ii. Approach

This paper takes a quantitative research approach. The hypotheses are tested through an experimental design. First, a pre-test of a possible manipulation is conducted with 50 participants. Then a thorough experiment is conducted on the basis of this. The experiment is designed as a two-group after-only experiment with 79 participants. The experimental group received the experimental treatment where they had to choose between four phones and four attributes. The control group received a passive ad that did not encourage them to interact with the ad.

i.iii. Findings

The results from the experiment successfully supported two of the four posited hypotheses. The findings show that interaction with a brand through the ad had a significant positive affect on the formation of attitudes toward the brand compared to an ad without interaction. Furthermore, the interaction with a brand also had a significant positive effect on the formation of attitudes toward the ad. The results also show that involvement with the product category does not have any interaction effects with the interactive advertisement.

i.iv. Originality

This study successfully builds a framework that can be used to research the relationship between interactive advertising and attitude formation. The framework is constructed

through gaps found in the current research on different areas that all relate in some way to the concept of interactive advertising. This paper can therefore be used by other researchers who wish to continue diving deeper into the concept of interactive advertising. The results in this research are therefore valuable as a starting point for further research. Positive results are demonstrated in this paper on what is a yet under-researched area of marketing. This research also has value for advertisers deploying interactive advertising.

1. Introduction

"Action changes attitude faster than attitude changes action" (Ferrier, 2014).

The area of marketing and advertising has seen many great leaps and the traditions have changed greatly of what is considered the norm within this field. New and different ways to conduct marketing is imagined every single day by innovative and creative companies and advertisers all around the world. These new ways do not always have the impact that the makers are hoping for; however, they do their best to revolutionize the marketing and advertising practices through innovative ideas. Many of these new approaches are not grounded in theory. This is necessary in order to stay innovative, since practice cannot wait for science to keep up and demonstrate the effectiveness of those methods. For many years now it has been the common practice for companies to be involved in a dialogue with their customers. This has become common sense among advertisers and it is no longer questioned that two-way communication has a lot of advantages compared to one-way communication. This is mainly the case because consumers are no longer viewed as fully rational beings, who need information to process in order to make their purchase decisions. Instead, humans are irrational beings and are driven by emotions and subconscious feelings.

Research within marketing has therefore for a very long time been interested in understanding what lies beneath the surface of human consciousness and decision-making. The drive to understand what goes on in the subconsciousness of an individual has been of interest for marketing researchers ever since marketing was invented. The reason being is that marketeers and scientists alike are interested in understanding the deeper workings of the human mind in order to better anticipate how consumers react (e.g., Ajzen and Fishbein, 1980).

In the present global marketing scenario, the battle for consumers' attention, interests, and desires is continually evolving and getting harsher. The still rising amount of ways to reach the consumer has meant that the battle has tightened and the effort it takes to get the consumers' undivided attention and interest is still getting harder. The everyday

life of the consumer is therefore filled with such a massive overload of information in the form of marketing that it takes a big effort for companies to shine through and get the true attention of the consumer. This means that the customer has been placed in the center of marketing. Building strong and lasting relationships with the consumer is therefore of high interest for every marketeer. These relationships, that are build to last, are able to shine through in the myriad of information that the consumer sees every day, and are therefore a reason for companies to aim for.

The main interest of marketeers is therefore to gain an advantage in the advertising through strong relationships with the consumers. With these relationships follow a special bond between the company and the individual, who are connected because of emotional bonds based on attractiveness and positive evaluations of the brand. This attractiveness comes from the construction of attitudes toward the brand, which are established when the individual subconsciously makes continuous evaluations of each brand. Marketeers are therefore interested in getting the consumers to evaluate their brand more favorably than their competitors in order to establish more positive relationships with the consumers. These positive attitudes make it much more likely for the consumer to end up choosing the brand that they hold positive attitudes toward.

The latest developments within advertising have changed a lot within the last decade. Since the digital revolution, many things that were not possible previously are now available in the toolbox of the advertisers. The digital era has brought with it a vast amount of new channels for the advertisers to take advantage of. These new tools also mean that the advertisers are able to reach the consumers in places they haven't been able to before, and reach audiences that are highly niche in terms of interests and desires. This means that the communication can be targeted very specific people based on their usage of the channels.

What the digital age has also brought are very different and new ways for advertisers to communicate with their audience. Such new ways allow for very customized connections between the brand and the consumer, e.g., when the platform allows for the consumer to customize the communication message itself. This in particular means that there has been a transition from passive communication to a still growing interest

in interactive communication in the real world practice of advertising. This area of active and involving advertising is still so new that there have not yet been established any common best practice in the field. Many advertisers are therefore still exploring the possibilities of involving the consumers in the communication through the different creative ways they use and deploy the media. This also suggests that there are some uncertainties about the effects and benefits of deploying involving communication. Since this area is still so new in practice, scientific research has not yet been able to keep up and test the effects of such engaging communication. This is what this research sets out to do.

What these active and involving new ways of engaging in dialogue with the consumer has in common, is a desire to create an experience for the customer. These experiences take many different shapes and sizes, and some are more dedicated than others to give the consumer a truly unique and customized feel with the experience. The use of digital media allows marketeers to design the advertising so that it becomes unique for each individual. These individual experiences allow for the consumer to engage in custom co-created experiences in which he is the co-creator and he makes the decisions as to what the story should be.

This introduction has shed some light on this new area of advertising, which still lacks strong argumentation for its validity, which is what scientific research can provide. It is therefore necessary to take a scientific approach to these new methods of communicating with the consumers, in order to get a better understanding of the effects of such a customized and experiential type of marketing. If science can demonstrate its effectiveness and provide strong arguments for its validity, then it can give merit to the continuous development of such innovative new approaches in marketing practices. This makes interactive and experiential advertising of great interest for scientists to research, and this is what has inspired this present research to take on the challenge to test the concept. This research is initially inspired by the book "*The Advertising Effect*" by Adam Ferrier (2014), which argues for the practical advantages of interactive advertising.

The ambitions of this present research are therefore to study the relationship between

interactive advertising and the formation of attitudes toward the brand. The goal is to get a much better understanding of what interactive advertisements are, but much more importantly to understand how interactive advertisements can contribute to the goals of the marketeers by demonstrating their effects on the formation of attitude. This research therefore sets out to examine the cause-effect relationship between interaction with a brand through advertisements, and the formation of attitude toward the brand.

1.1. Research Question

What effects do interactive advertisements have on the formation of attitudes toward the brand and the ad, compared to non-interactive ads; and how does involvement with the product category affect the reaction to the interactive advertisement?

The research purpose of this paper is therefore to dive into the vastly unexplored area of experiential and interactive advertising as a new and yet under-researched area of advertising. This also means that there does not exist any common practice for a framework to investigate what this research sets out to do. In order to research such a complex research question and without having any previously established frameworks to build upon, this paper will spend a lot of effort on constructing a framework that would work best for the present research through the literature review chapter.

The big question is, whether action-based advertising is better at changing the attitudes of the subjects than traditional advertising and this is hence the goal of this research to answer this question. In order to examine this, an experiment is designed and conducted in which the interaction is manipulated in order to compare it to a control situation in which there is no interaction with the brand beyond the simple presentation of a passive ad. Through the experiment it is expected to gather data that supports the hypothesis that action-based advertisements are more effective at changing the attitude toward the brand compared to non-interactive advertisements.

Before getting to the methodology section this paper will briefly set the limits of the research in the delimitation section followed by a clear definition of interactive advertising in order to help the reader understand the topic better.

1.2. Scope

This type of research requires a sharp delimitation given that it is a new research area, and it touches upon several areas of research that have each been researched from a vast amount of different ways. However, the focus of this research is to look at interactive advertisements, which have gained popularity with the recent rise of digital media in particular. Advertising campaigns using new digital media to involve the receivers of the communication is on a steady climb. This is mainly the case because the technology allows for a growing number of new ways to reach the audience. This thesis wishes to explore what this interactive advertising does to consumers' attitudes toward the brand and the ad, and then compare it to a situation that resembles the traditional passive approach, in which consumers do not interacted with the brand through the advertisements.

This thesis is concerned with the concept of interactive advertising, and not the specific media used. Therefore, this paper will limit itself to study the concept using imitations of the opportunities of these new digital media. The methods used will therefore not study the new communication channels directly in action.

This paper limits itself to the theories that are deemed relevant for the ambitions of this research. Therefore, the literature review is designed to give the theoretical background for this research by going through the relevant theories. Since this is a novel area within marketing research, there is drawn knowledge from several different areas of research. Only the relevant information that will be outlined in the literature review is included in this research. Other concepts that are associated with the mentioned theories but not included in the review, are therefore not of the interest of this research.

The research area of experiential learning is only covered to an extent that makes sense for this paper's research question. A basic knowledge of the most relevant theories from this area is necessary in order to understand how attitudes can be changed through the experiential nature of the interactive advertisements. Therefore, the entirety of the experiential learning is not of interest to this paper for example in the sense that the endurance of the attitudes are outside the scope of this research.

This paper does not wish to explore all facets of behavior change theory, since this area

has been covered through decades of research and from multiple different approaches. This research therefore limits the area of behavior change theory to a few researchers' work, which makes most sense for the problem investigated in this thesis. Therefore, only the relevant knowledge and concepts that can assist this paper's ambitions are included in and limited to in this paper.

This paper is furthermore not interested in discovering what is the most optimal way to make sure that the desired action is undertaken in order to facilitate attitude change. The research purpose is purely scientific in a way that this paper wishes to examine whether the hypotheses can be supported, and whether attitudes can be changed more effectively through action-advertising compared to passive advertising approaches. Therefore, the experiment is not designed in a way that allows for the testing of alternative manipulations of interaction in order to test different interaction types. Instead, the scope of this research is merely to demonstrate the initial effects of interaction with a brand on attitude formation.

This research is also not interested in understanding the effects of action-advertising on consumers' purchase intentions or willingness to pay. This is outside the scope of this research. Therefore, the only effect this paper is interested in is that on attitude change in the sense of consumers' feelings and beliefs toward the brand post exposure to action-advertising.

Therefore, the scope of this present research limits itself to exploring the effects of interaction with a brand through the medium of advertisements with the ambition to demonstrate the initial cause-effect relationships that are hypothesized in this research. Anything that is not encompassed in this limitation is outside of the scope of this research.

This next part of the introduction is included in order to clearly define how this paper understands and defines interactive advertising. This is necessary in order to comprehend the subject of this research properly and the outcomes of the experiment.

1.3. Definition of Interactive Advertising

1.3.1. Example

To properly define interactive advertising, an example will be used as the offset. In 2014 Mercedes-Benz started a new campaign to show their new car, the Mercedes-Benz GLA (Dua, 2014). Together with an agency, they build an Instagram account with a single picture of the car. When consumers clicked on the picture, they could click themselves further to another account. This account allowed them to choose the color of the car and this continued with other customization options until, in the end they had built their own Mercedes-Benz GLA. This is a great example of interacting with a brand in the sense that it is understood in this research. Merging oneself with a brand and being a part of it, either as a part of the story, or simply owning the story through endowment and co-creation.

1.3.2. Delimitation

With this example of interactive advertising it is also possible to delimit what interactivity or interactive advertisement is not. Said in the simplest way, it is not non-action. This means that any type of ad that has no active element to it in the sense that you can interact directly with the advertising is not what this research paper understands as action-advertising.

Interactivity is also not understood as a simple call to action in ads, say for example the call to action of going to a company's web page to find further information.

This research paper is also not defining interactive advertising as that related to brand sponsored, or otherwise organized, events such as sports events. Even though the individual is engaged indirectly with the brand at these events, they fall outside of what this research defines as action-advertising.

1.3.3. Definition

Interactive advertising is in this research paper defined as the engagement with the ad

as a part of the advertisement. That is, when the individual engages himself with the advertisement in a way that he becomes part of the advertising and in some way the co-creator of it. It is the act of being one with the brand for that period when the action takes place and actually being involved with the brand while either being aware or unaware of it. This is also in line with the definition of interactivity that Jonathan Steuer gives (Steuer, 1992). He sees interactivity as "*the extent to which users... participate in modifying the form and content of a mediated environment in real time*" (ibid.: 84). The interactive part is when the action that is performed becomes the conversation between the individual and the brand and this is shaped by the user in real time. It is more than just an act, but something the consumer actively engages in with the brand and himself. The interaction itself can be as complex as possible, but it can also be something very simple, such as in the example above. The only important thing is that the user is participating in modifying or customizing the content. In the example, the user shapes and modifies the content from the starting point to the final customized Mercedes from his own desires and wishes. This definition of interactivity makes it somewhat similar to the definition of brand experience. Brakus, Schmitt and Zarantonello (2009) define brand experience as the consumer's reaction to any brand related stimuli. This seems fitting to say that interactivity is one of such brand related stimuli. However, the definition of brand experience does not assume that attitude formation is necessarily created from such experiences (ibid.), which is where it really differs from the hypotheses in this research.

1.4. Thesis Structure

This research is written in a structure that naturally evolves as the reader goes through the entire paper. The thesis structure is visually presented in Figure 1 on page 11. The introduction introduced the subject and the reasons why it is of interest to this research. The methodology chapter outlines the methodology and the scientific approach of this research. This is followed by the literature review, which takes the reader through the theories that are of relevance in this research. From these theories, hypotheses are developed. The method and results chapter goes through the steps in the method that

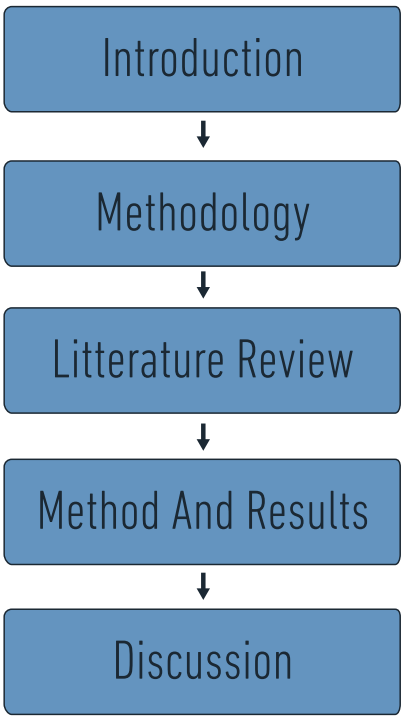

Figure 1: Thesis structure

is taken in order to test the hypotheses developed through the literature review. The analyses of the data are written down in this chapter. In the finalizing discussion chapter, the findings are summarized and discussed, as well as the contributions of this paper are discussed. Finally the conclusion follows in the end of the discussion chapter.

2. Methodology

This chapter will dive deeper in to, and present the underlying philosophy of science of this research. Understanding which scientific method is deployed in a research is crucial to understanding which view the particular research has on how humans and knowledge exist in this world (Fuglsang and Olsen, 2009). This has an influence on how the method is developed and how the results of the method can be interpreted and understood in order to answer the research question (ibid.). Without a specific philosophy of science, it is not possible to tell whether or not the correct methods have been applied, as there exist so many ways of knowing depending on what the philosophy of science is. The methodology can therefore be seen as the toolbox, which carries the

tools (i.e., the methods) (Moses and Knutsen, 2012). So this chapter is supposed to make it clear which toolbox the tools for this research should be taken from in order to provide reliable and valid knowledge.

The methodology also sets the limits and boundaries for the researcher in how he can go about gathering the necessary information, since knowledge and information gathering is so closely linked to each scientific approach. This small part of the paper is therefore dedicated to clearly identify the scientific method that is deployed throughout this research, and to give the reader an understanding of when something can be considered knowledge in this paper. It should help the reader to understand the choices of methods and help understand how the theories are applied in this research.

In scientific methodology the spectrum ranges from naturalism at one end and constructivism at the other end (ibid.). Everywhere in between exists a vast amount of different methodologies, leaning towards either one or the other end, combining the two extremes into different combinations. As such, no research is rarely a pure representation of either of the extremes, as it has its limits to rely purely on either one (ibid.). Every direction of research has its own criticism, which is necessary for the evolution of new directions. There is therefore no right or wrong scientific methodology to use, as it all depends on the goal of each individual research to find out which position works best. Some directions fit some research objectives while other directions fit other types of research agendas.

This paper adheres to the scientific methodology of positivism and objectivism, which exist toward naturalism on the mentioned spectrum. This choice of methodology is reflected in the way this present research is shaped and how it develops throughout this paper. As such, the tools that are deployed will reflect what is available and appropriate to use from the toolbox. Positivism is considered the best fit of scientific methodology for this present research subject because of its ontology and epistemology. Again, it all depends on the framing of the research question, as it could be possible to use for example interpretivism to look at the same subject in another way, had it for example been studied in a more socially constructed or exploratory way. The positivistic approach to data collection and its regard for reliable knowledge through observable occurrences

(ibid.) seems to be the most fitting choice for this research. The underlying assumption of positivism regarding its ontology, or its view of how the world exists, is that of common observable physical objects, activities, and occurrences (Fuglsang and Olsen, 2009). Science is therefore an explanation of the world, not a depiction. This means, that if something can be observed objectively and by human individuals, then it exists. The epistemological assumptions of positivism are based on the falsification principle (Moses and Knutsen, 2012). This assumption builds on the idea that knowledge should be tested in order to falsify it rather than verify it. If however, it is not possible to falsify what is observed, then it is considered true knowledge (ibid.). This is were statistics comes in, as shall be seen below.

This paper takes a deductive approach to the research. A clear path is followed from a starting point in the theories from the literature review. Hypotheses are then developed based on these theories and then the data collection method is designed to provide data, which can be statistically tested according to the falsification principle. These results can then be used to infer answers about the hypotheses. The results from the findings are then used to develop new information and new knowledge on this specific area of research. This is a clear example of a deductive approach to research.

In the light of the chosen methodology, this paper deploys a quantitative research approach to the data collection. The decision for a quantitative research is made because of its ability to easily, and effectively infer knowledge from a large amount of quantitative data compared to qualitative research. This is also the most typical approach to the data collection in the scientific methodology of positivism since it is objectively observable occurences (ibid.). This makes it a great fit with the research question of this paper, as what is studied is a cause-effect relationship, which require sufficient quantitative data in order to make assumptions based on the hypotheses. The effects studied in this research are too fragile and work on a subconscious level to be properly researched with a qualitative approach, as what is of interest is not necessarily obvious to the participants themselves. Generally the human individual is not aware of all the irrational things going on in his subconsciousness. The effects studied here are produced on a subconscious level, and therefore explicitly researching this through e.g., in-depth

interviews would not be fruitful, simply because the answers would not necessarily represent the true picture, as an individual is very rarely aware of what happens at this level. The quantitative approach also allows for gathering a much larger dataset from a larger sample, which will give more reliability to the findings and make it possible to make generalizations based on the findings.

In regards to the question of validity and reliability, this present research is designed to live fully up to both the necessary needs for validity and reliability. In terms of the internal validity, it is safely assumed that the experiments in this research measure exactly what this paper sets out to research in terms of the research question. This internal validity is ensured through a thorough design and control of the variables. Every variable in the experiment is carefully constructed with items that ensure that they correctly measure what they are supposed to measure. This strong internal validity and control of the experiment might jeopardize the external validity of this research. There is generally a trade-off between strong internal validity, which exerts clear control, and the external validity (Moses and Knutsen, 2012). However, in this present research it is still believed that the results that are generated are generalizable and have strong external validity because the design of the experiment is as close to the real world as possible and less like a lab setting. The design of the experiment tries to imitate the marketing reality, as it exists today, as closely as it can while still controlling the extraneous variables in order to secure the internal validity. The reliability of this research is believed to be very high, since the method is clearly described below and allows any other researcher to replicate the approach taken in this research. The design of the experiment therefore allows for other researchers to easily duplicate the design, which should produce the same results as found in this research. Even though the participants have been picked from universities in Copenhagen, it is safe to assume that students in other places would give the same results, since nothing about the design of the experiment is specific for this sample. However, it should be noted that the sample group is students, so the reliability of the experiment in a very generalizable manner should be taken with caution, as it is a narrow group compared to the general population that includes everyone.

Another advantage of the quantitative approach is a decoupling of the researcher and

what he is researching. As long as the proper validity and reliability is ensured in the methods, the presence of the researcher and of his interpretations of the data is of much less influence to the results than compared to using qualitative methods, in which the researcher's own interpretations are what produce the findings (ibid.). Generally, the quantitative approach allows for much less free interpretations compared to qualitative approaches. However, as with any type of research it is hard to argue completely against the influence of the researcher. Even though it is easy to say that the researcher does not influence the interpretation of the results with his/her own opinions and viewpoints in the quantitative approach, it is still the researcher who decides on the method and who develops it. Therefore, some influence of the researcher is still present, even when the positivist methodology is chosen. In this present research for example, the researcher is from the beginning influencing the research in more than one way. When framing the questions and the sentences in the data collection as well as choosing the way to collect the data, it is also exerting influence over the outcome of the data. However, that is to a much less degree than when using qualitative approaches.

To be more specific, the quantitative approach that is taken in this research is in the form of an experimental method. Compared to the quantitative correlational method, which merely observe nature and infers knowledge from it, the experimental method allows for the researcher to manipulate the nature and observe the effects of the independent variable on the dependent variable (Field and Hole, 2003). This is the biggest advantage of experimental methods over other methods. This makes it possible to make observations specifically about the manipulated variable and compare it to its natural non-manipulated counterpart and hereafter infer knowledge based on the cause-effect relationships. The main interest in experimental methods is therefore to see how the independent variables changes the outcomes of the dependent variables and from this, understand what caused the change (ibid.). This ability to infer knowledge from the manipulation of the variables follows from the rules of causality. If the experiment is designed and conducted properly, it is possible to infer that there is a causal relationship between cause and effect, where the cause is the independent variable and the effect is the dependent variable that is measured (ibid.). The relationship that is of interest in this

present research is where the cause is interactive advertising, where some are exposed to interactive advertising and others are exposed to non-interactive advertising, and the effect is their attitudes toward the brand, which will be the implications of the cause. The goal of experimental research is therefore to find out how the cause and effect relates and interacts, which in this case is to see how interactive advertising affects attitudes toward the brand.

Some assumptions about causality should be in place before inferring knowledge about it. According to David Hume's (1748) ideas about causality, three criteria should be met. (1) The cause and effect should occur close to each other in time, (2) the cause should come before the effect, and (3) the effect should not exist without the cause also being present (Field and Hole, 2003). Although these are good guiding principles, they are not waterproof. There are some possible problems with Hume's criteria, such as for example that it doesn't take into account some extraneous variables that are impossible to account for (ibid.). Also, if followed strictly, it assumes that the effect can only be caused by one cause and not other causes. John Stuart Mill (1865) took Hume's ideas and made some minor changes to them in order to improve them (Field and Hole, 2003). He borrowed the first two criteria, but changed the third so that all other explanations of the cause-effect relationship should be ruled out (ibid.). This approach to the cause-effect relationship opens up the option to do a comparison of two controlled situations in which the researcher can be sure that he controls for as many extraneous variables as possible and make sure that the cause precedes the effect in order to infer causality (ibid.).

In causal experimental research, the causal relationships are corroborated through the exploration of the posited hypotheses (Moses and Knutsen, 2012). These hypotheses are constructed based on assumptions or possible relationships found in nature or theory and presented by the researcher. The experimental design and the manipulation of the natural condition then makes it possible for the researcher to infer knowledge about the relationships that can be used to either reject or support the hypotheses (Field and Hole, 2003).

Karl Popper (1959) was also very interested in the development of proper scientific

methods. Popper believed more in the disconfirmation of hypotheses rather than corroboration of them, similar to the falsification principle previously mentioned. This was simply because he believed that it merely takes one disconfirming observation to falsify an otherwise empirically corroborated theory (e.g., the well known example of the black swan). Because of this, statistics are deployed in order to justify the statistical significance of such observations, since it will almost always be possible to find some disconfirming evidence to any cause-effect relationships. Every experiment is therefore always a test to disconfirm the hypotheses, by comparing the cause-effect relationship with another situation, which do not include the cause (Field and Hole, 2003). Statistics is the objective tool for researchers to compare such two groups and based on the statistical findings infer knowledge about the hypothesized cause-effect relationships (ibid.). Statistics are therefore the natural tool to use in this type of positivistic methodology, as it is the best way to be most certain about the results found in the evidence.

The strength of this experimental method in this present research is therefore its ability to infer knowledge from the manipulation of a situation and compare it to a non-manipulated situation using statistical methods. This is an advantage in the present research, in which it is not possible to make pure observations in nature about the subject at hand, since it would be impossible to rule out all other extraneous variables and find two comparable situations. The comparison that is made between the non-manipulated control group with the manipulated experimental group makes it possible to research the relationship between interaction and attitude formation in the area of marketing and advertisements.

3. Literature Review

3.1. Active Versus Passive

As it has been established in the introduction of this paper and from the research question, the interest of this research is on active versus passive advertising and its effects

on attitude. There is a dearth of marketing research attention on this specific subject. However, some researchers have previously explored the effects of active on one side versus passive on the other side, though in other ways than how it is researched in this paper (Smith and Swinyard, 1983; Coyle and Thorson, 2001; Wang, 2006; Steinhart, 2012).

Their research resides in contexts that are different from the present research of this paper. Nevertheless, their research creates a good foundation for this paper to build upon. In this part, the theoretical background for this study is outlined through previous studies on the area of active versus passive. In the remaining review, further theories that are relevant for the present study will be included and elaborated on. The purpose with this structure is to start from the general ideas of active versus passive and then slowly narrow the subjects down to the most specific theories, which together contribute to this research paper. The goal for this entire chapter in the research paper is to build relevant hypotheses based on the theories that are reviewed as they are narrowed down from the general to the most specific. As the theories are narrowed down, the reader should get a better idea of the concepts and the knowledge that is required to answer the research question of this research.

Smith and Swinyard's (1983) research on direct and indirect experiences are a great example of research on what can be seen as active versus passive. They studied how direct experiences through product trial (i.e., the active part) affect attitudes differently than that of indirect experiences through advertising (i.e., the passive part). The indirect and direct experiences can be related to that of active and passive in this present research. Smith and Swinyard (1983) conducted an experiment where some groups tested the product through product trial and other groups saw an ad for the product. They found that when attitudes are based on active product trial it is a much stronger predictor of purchase behavior (ibid.). The attitude-behavior consistency is much more reduced when the attitudes are based on the passive reading of the advertisement (ibid.). This research therefore shows a relationship between action and attitudes. However, the focus is clearly different than from the present research in the sense that product trial and advertising can be seen as two different channels to reach the consumer. In that

sense, they are not similar ways to communicate with the consumer. This is where this research wishes to compare two situations that are equally similar in the way that both are a simple means of communication through an ad; one is just active while the other is passive. This is considered a gap in Smith and Swinyard's research.

Coyle and Thorson (2001) also researched active versus passive in a quite different way. Their research was on the vividness and interactivity of web sites, and how these two affected attitudes toward the web sites. Their hypotheses were that increased interactivity and vividness on a website increases the attitude toward the website. They manipulated interactivity by the number of clickable elements on the sites, while vividness was manipulated by including audio and video on the sites. They found that increasing the number of clickable links on the web sites was not significantly affecting the participants' attitudes toward the web sites (ibid.). However, they did find that increased levels of vividness significantly increased the positive attitudes toward the web site (ibid.). Their research shows a causal relationship between interactivity and attitude formation in the way that the more interactive the web sites (in terms of vividness) affected the formation of attitude positively. The results therefore support the notion that interactive web sites are able to create a more positive attitude formation toward the sites (ibid.). Coyle and Thornson's (2001) research differs from the present research because of the way the consumer interacts with the brand. In their research, the consumer interacts through the web site. This is a very different channel of communication with the consumer, as a web site can be seen as much more active from start, even when it is passive as in the way Coyle and Thornson used the definition in their research. This paper is therefore interested in discovering the differences in attitude formation between active and passive advertising in the case of advertisements.

Alex Wang (2006) has been interested in the effects of engagement (i.e., active versus passive) on message effects, attitudes, involvement, recall, and believability. His research focused on the specific context in which the engagement took place and furthermore the contextual relevance of the ad (i.e., the context which the ad is placed in). In his research, Wang (2006) demonstrates how engagement has an influence on all of these elements. He conducted his experiments with students who played a game in a web browser

while either seeing an ad that encouraged them to play another game (i.e., contextual relevancy) or a passive ad that did not invite them to play the game (i.e., contextual irrelevancy). His argument is that when a game is played online and an ad is shown that invites you to also play a game, the context fits and there is therefore contextual relevancy between the ad and the context in which the ad is placed. As a result of the experiments, Wang (2006) found evidence that engagement (in a contextually relevant setting) had a range of positive effects on attitudes, involvement, recall, and believability. The results of his study prove that there is a difference to whether active versus passive ads are deployed when it comes to the context it is placed in. Wang's (2006) research shows that deploying an active ad in the correct context improves, amongst other things, individuals' attitudes. However, this research only shows that activation in a restricted contextual relevant situation works. There is therefore a gap in this research in terms of whether the interactive ad would have the same positive effect in a non-contextual relevant situation. This present research therefore wishes to go beyond the context and instead understand how the implementation of action in the ad itself is a driver of positive attitude formation by not focusing on anything context specific.

Another interesting piece of research is Yael Steinhart's (2012) work on active versus passive ads, which is also of a different kind than the previously outlined research. Steinhart (2012) examined active versus passive ads in the context of motor activities. An example of such motor activities could be if a person smiles while reading and processing an ad message, perhaps the message even encouraged the person to smile. Other researchers have previously proved that motor activities have an effect on an individual's attitudes (e.g., Cacioppo, Priester, and Bernston, 1993; Wells and Petty, 1980). Even though the context of Steinhart's (2012) research is different, the same still applies with a distinction between active versus passive. Her intentions were to understand how the actual activation of the body through physical motor skills during the processing of an ad influenced how the individual perceived the ad. Specifically, Steinhart (2012) wanted to know how the perceived creativity and overall evaluation of the ad is affected by action versus non-action. The results of her research are noteworthy in several aspects. She found that depending on the type of motor activation, the

perception of the ad differed (ibid.). She found that when there is a compatible link between the message in the ad and the motor activity, the processing of the message is positively influenced, and the perceived creativity of the ad is also positively affected (ibid.). It is considered a compatible link when the motor activity supports the ad message in a way that makes sense (e.g., a message that reads "turns your world around" and the copy is written up-side-down so the reader needs to turn the ad on its head). Interestingly enough, Steinhart (2012) also found that when the motor activity is incompatible with the message, the activity lowers the evaluations of the message. This research is a good example of ad processing with a distinction between active versus passive. However, as mentioned, its ambitions are much different from the present research. First of all, Steinhart is only interested in attitudes toward the ad, and not toward the brand. Also, Steinhart looks at active in physical terms, while the present research is more interested in the cognitive aspect of the activation by connecting with the brand.

As it has been established in the above review on active versus passive advertising, the topic of this paper is yet very under-researched in terms of the specific context, which this paper desires to investigate. However, in the real world of marketing and advertising, it is becoming still more regular practice to see marketing initiatives that wish to involve the consumer and get them to interact with the brand or the ad (such as the example given in the definition of interactive advertising, see chapter 1.3). It is therefore assumed that research within this field could have great managerial implications for advertisers. In the world of marketing research, however, there exist no commonly used and accepted frameworks for researching what this paper desires to dive deeper in to and understand. Therefore, the goal of the literature review is to establish and build a framework that will work toward the goals of this paper. This specific area of research requires a custom build framework, which is why this literature review exists.

In the following sections of the literature review this paper will go through and roll out the theories that it relies heavily on to build the proper framework to examine the subject of interactive advertising. These theories constitute the framework of this

research, which is summarized in chapter 3.7.

3.2. Experiential Learning

The area of experiential learning is where the construction of the framework that is constructed in this research takes its starting point. At the very center of the subject at hand is the concept of experience. The research question states clearly that action is at the focal point of this research, and experiential learning is all about interacting with something as shall be seen. This interaction is exactly what this research paper is interested in understanding better. Experiential learning clearly makes a distinction between interaction and non-interaction just as the present research does and so does the research that has been outlined in the review on active versus passive.

This interaction with the brand can also be viewed as an experience the consumer has with a brand. The experience is something that the consumer shares with the brand. It is in this experience with the brand that it is assumed that the attitude formations are happening. Hence, in order to talk about changing behavior and attitude through interaction it is necessary to understand how individuals learn through experience with something. This paper will therefore make a short literature review of the most important developments within experiential learning in the past century and couple the theories of experiential learning to the concept of action advertising before further continuing with other theories.

Most learning theories' focus on learning in an educational setting such as in schools, at work, or in college. This research is not interested in this aspect of the theory, as it is not a question of formal learning that is of this paper's concern. However, the principles that are found to exist in these areas also apply to learning in general, as shall be seen in the following literature review on experiential learning.

Learning theories have evolved a lot over a long period. Some of the first theories on learning focused on the cognitive element of learning and emphasized learning through that of studying and reading (hereon referred to as 'traditional learning') (Kolb, 1984). In the 20th century, however, the first formulations of the change in learning came from John Dewey (1938), who believed, that there was a need to shift the focus from

external learning to internalization through first hand experience with what is to be learned. Essentially, Dewey saw experiential learning as the process that links education, work, and personal development through what he called action experience (ibid.). His work focused on methods that included apprenticeships, internships, and work/study programs. What all of these have in common is that the learner is in touch with what is being studied, and that is what Dewey calls action experience (Kolb, 1984). As previously mentioned, this thesis is not interested in the formal educational aspect of the experiential learning theories as much as it is interested in the basic principles of merely learning through being in touch with what is being learned by action experience. This is an important aspect in understanding how an individual learns when he/she is in touch with, and interacts with a brand.

With his model, Dewey makes the developmental nature of learning explicit as a feedback process by describing how the learning transforms impulses, feelings, and desires of concrete experience into higher-order purposeful action (Kolb, 1984). According to his model, the immediate impulse from a concrete experience that is observed, leads to knowledge creation, which then ends up in a judgment, and then the circle is repeated infinite times with the newly acquired knowledge (i.e., feelings, thoughts, impulses, and desires). This suggests that when an individual interacts with his environment and surroundings, he learns through changes in his knowledge. This knowledge is not restricted to his intelligence, but just as much accounts for his knowledge on life and is able to change his thoughts and feelings in general (ibid.). Common for most experiential learning theories is a deep interest in the purpose of life and seeing learning as a life-long process aimed towards higher-order purposeful action (ibid.). Important to notice about experiential learning theory is that what is considered as ideas (i.e., the thoughts, feelings, and knowledge in general) can be shaped and re-shaped continuously through experience (ibid.). To understand the concept of experience, Dewey explains it quite well: "*experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment*" (Dewey, 1938: 42). Experiential learning theory can therefore be summed up as the process of transforming experience in to knowledge, which can take many

different forms, as he writes (Kolb, 1984).

3.2.1. Experiential learning and action-advertising

The theory of experiential learning connects with the concept of action-advertising in the way that, when a consumer interacts with a brand as one does in interactive advertising, the consumer is at the center of an experience he shares with the brand. The theory of experiential learning proposes that the individual, whom is exposed to the interaction, will in one way or another learn through an experiential dimension that shapes and reshapes his ideas. This learning will possibly be in the acquisition of knowledge (i.e., thoughts and feelings) about the brand itself. This is not possible in the same way with traditional advertising, which can be seen much more as in the sense of traditional learning, where no involvement occurs. This is key to the research of this paper in order to understand how experiences and interaction with brands can be able to shape and re-shape the ideas (i.e., the thoughts and feelings) the consumer has about the brand.

The theory of experiential learning also has connections to another theory. This is the theory of behavior change, as shall be seen in the next section. There is a connection between the two in the sense that they both theorize on behaviors in different ways.

3.3. Behavior Change

In order to better understand behavior change, it is necessary to first conceptualize behavior. Behavior is perhaps taken very much for granted in the sense that one might think it does not need to be defined. However, often people mix up behaviors with occurrences. For example, whereas one's success on exams might be used as a measure of behavior, in fact those results are merely occurrences that are outcomes of other behaviors (e.g., attending lectures or studying for the finals) (Ajzen and Fishbein, 1980). Therefore, there needs to be a distinction between behaviors and occurrences. Behaviors can hence be understood as direct intentional or otherwise unintentional acts, while occurrences are the outcomes that follow from other behaviors (ibid.). Furthermore,

Ajzen and Fishbein (1980) make a distinction between single actions and behavioral categories. Single actions are those single acts of a specific behavior performed by an individual. Behavioral categories are those larger groups of acts, which can be classified together because it is not possible to observe those acts (e.g., showing aggression, which is not a behavior, but a category used to describe for example someone throwing a book) (ibid.). Behavioral categories are therefore sets of actions rather than a single action. Most often, behavioral categories require the observation of more than one of the single actions that are in the set in order to observe and identify the entire behavioral category (ibid.). In order to observe a single action it, however, requires one to define said action properly. For example it is much easier to observe whether an individual is eating an ice cream than it is to observe whether a student is listening to what the lecturer says in class. With this knowledge on behaviors in place, it is possible to move further into the theory of behavior change.

Behavior is in this research very much important in order to even be talking about interactive advertising. As it has been mentioned before, action (i.e., behavior) is in the center of this research. Given the nature of the research question of this thesis, this theoretical area is highly important in order to understand how behavior change happens.

The most commonly acknowledged approach to behavior change theories is where beliefs, intentions, and motivations always come before behavior change, as seen in Fishbein and Ajzen's theory of reasoned action, which is used to predict and influence human behavior (Fishbein and Ajzen, 1980). These theories therefore assume that attitude is a necessary prerequisite for behavior. In the sense of consumer behavior, this is most likely the case, and therefore also the approach taken considering the behavior change that is most often desired to happen is purchase, which demands certain attitudes and beliefs to be present in the purchasing individual (ibid.). That is where the theories of behavior change does not fit into the framework of this paper, as this research hypothesizes that behavior can come before attitude formation, and in this case shape and reshape attitudes. That is because the goal of the outcomes of the behavior in the case of this research is not purchase; instead it is effective attitude formation. Despite

the somewhat reverse approach that this research is taking, it is still possible to draw from these theories in order to understand what it takes for a human being to interact and take on a certain behavior.

Fishbein's first three conditions for adopting a behavior are: motivation, capacity, and opportunity (Fishbein et. al, 2001). Those three conditions should all be met to some extend, depending on the severity of the behavior to be adopted. Motivation consists of; individual incentives, which means those incentives inherently in the person that drives her, and social norms, which are socially constructed by society and institutionalized (ibid.). Capacity consists of individual skills, which can be elaborated as the person's own actual ability to perform the behavior (ibid.). Opportunity consists of environmental constraints, and relates to external objective measures, which determine how difficult it is to perform the behavior (ibid.). Other researchers have done similar work, such as Vlek et. al's Needs-Opportunities-Abilities model (Gatersleben and Vlek, 1997), which concludes that needs, opportunities, and abilities are the drivers of behavior change. This strongly supports the idea that the individual requires to be somewhat motivated, have the ability, and opportunity to perform the action in order to adopt it.

Research show that the easier and more accessible an action is, the more likely it is that someone will actually carry out the action (Painter, Wansink and Hieggelke, 2002). This confirms that the ease of the action is an equally important notion to keep in mind together with motivation, in order to change people's behavior. BJ Fogg (2011) has also done research on the area of behavior change and proposed similar results, which show that motivation, ability, and triggers are key to changing behaviors.

Other evidence of how action changes attitudes comes from behavioral research, in which people where asked to pose in powerful poses, such as having their feet on the table or their hands to their sides (Carney, Cuddy, and Yap, 2010). The results showed that when taking on these poses, the subjects' attitudes changed, and they felt more dominant and powerful. This implies support for the idea of this research paper that action has an influence on attitudes.

3.3.1. Behavior change and action-advertising

In the case of this research paper, these behavior change models are applied in a somewhat different way. Since the action element that is required in action-advertising is not purchase related, the concepts are applied to understand some of the prerequisites for the consumers to take the action intended in the action-advertising.

As has been uncovered in the literature review, it is important to choose an action for the action-advertising that fulfills the conditions for adopting a behavior in order to make sure that people are even able to perform it. This means that the more difficult the behavior asked to perform is, the fewer people will be able to or motivated to perform it.

In the case of interactive advertising, the theories on behavior change can be related to the hypotheses of this paper, which is that action can change an individual's attitudes. This research will apply these ideas in its framework in order to test whether this is also true about brand attitudes, when actions with the brand is performed.

3.4. Cognitive Dissonance

The previous sections of this literature review has established that there is a connection between actions and cognition in the sense that individuals learn from their experiences and actions can change attitude. However, Leon Festinger (1957) found that there is also another connection between actions and cognitions through humans' formations of feelings and attitudes. Festinger's work on cognitive dissonance has for many obvious reasons received great attention after the publication of his book, *"Theory of Cognitive Dissonance"* (Festinger, 1957). The main finding in his book is that the human as an individual will always try to establish harmony and consistency within his or her opinions, attitudes, knowledge, and values. As the concept suggests, this is all happening inside the mind of the individual, as it is a question of the cognitive elements that make up the mind (ibid.). This is therefore a purely mental construct in the sense that the cognitions are affected and shaped by the human aim for harmony within. However, despite this being a mental construct, what goes on inside the human mind in the case of cognitive dissonance can also have influence on the actions as shall be seen.

According to Festinger, it is human nature to constantly try to make sure that this consistency exists, otherwise we will experience what he has called cognitive dissonance (ibid.). Festinger sees cognition as composed by clusters or groups of cognitive elements. These cognitive elements are created from memory through thoughts and feelings, but also from actions and experiences (similar to the experiential learning). Cognitive dissonance occurs when two or more of these related elements lack a level of consistency in the mind of the consumer, e.g., if an action has been taken by an individual that is contrary to his beliefs related to this action, or if there is inconsistency between an individual's thoughts and his feelings (ibid.). The magnitude of the cognitive dissonance depends on the perceived weighted importance of the clusters in question. This means that if it relates to something that is very important to the individual, the cognitive dissonance will be greater for that person (ibid.). However, the cognitive dissonance will be of much lesser magnitude if the elements, between which inconsistency exists, are not deemed important to the individual (ibid.).

The theory of cognitive dissonance comes into play when an individual experience dissonance (i.e., inconsistency) between his or her thoughts, feelings, or actions (ibid.). When this dissonance occurs, there are, according to Festinger, three different ways it can be reduced (ibid: 264); (1) either by changing one of the elements involved (e.g., changing ones beliefs or actions), (2) by adding new cognitive elements that are consistent with the existing cognition, or (3) by decreasing the importance of the elements involved. Furthermore, Festinger relates these options to post-decisions and elaborates by saying that post-decision dissonance may be reduced by e.g., increasing the attractiveness of the chosen alternative by adding additional cognitive elements or reshaping them (e.g., after an action, such as purchase, has been made) (ibid.).

Cognitive dissonance theory has many branches of closely related research, and one such is the theory of effort justification (Klein, Bhatt and Zentall, 2005). One of the ways to reduce cognitive dissonance, is as mentioned, to change one's behavior (Festinger, 1957). Knowing that an individual will reduce the dissonance between his or her actions, thoughts, and feelings, the theory of effort justification suggests that, when an individual has spend a lot of effort on something that she has different feelings about prior to the

action, she will justify this effort by changing her thoughts and feelings about the subject in question, in order to justify the action and bring back consistency in her cognitive elements (Aronson and Mills, 1959).

3.4.1. Cognitive dissonance and action-advertising

The theory of cognitive dissonance is a big part of the underlying idea behind the assumption that interactive advertisements are able to change attitudes more effectively than passive advertisements, given that the theory of cognitive dissonance says that an individual will reduce any cognitive dissonance that occurs through her actions, thoughts, and beliefs. The theory of effort justification says that an individual will evaluate high effort and severity higher than that of low effort and severity. In terms of interactive advertising this can be compared to when an individual interacts with the ad. The effort that the individual exerts must be justified in order to establish consistency. Despite what his or her feelings were before the action, this could mean that the individual will justify the action by changing his or her thoughts and feelings about the action, and hence about the brand in question.

Cognitive dissonance connects with the next part of this literature review. As has been established, cognitive dissonance is when there is a lack of consistency between one's thoughts and feelings. As shall be seen in the next part, attitudes are a big part of these thoughts and feelings.

3.5. Attitudes

In this part of the literature review, the relevant theories on attitudes are reviewed. Special focus is given to attitude toward the brand and attitude toward the ad given their importance to this paper. Since attitude toward the brand is the final outcome of what is researched in this paper, this area should receive great focus in the literature review of this paper. It is also the final dependent variable that is of the most interest in the final experiment.

Attitude as a concept has been studied widely for many years, in many different fields

of research, and applies not only to marketing but also social science in general (e.g., Spencer, 1862; Baldwin, 1901; Thomas and Znaniecki, 1918). Thomas and Znanicki (1918) were among the first to explain social behavior through the use of attitude as a concept. They viewed attitudes as a determination of a person's actual and potential responses (ibid.). Although in the early years of attitude research it was believed that attitudes were a perfect predictor of behaviors, the last half of the 20th century proved that attitudes are just one of many factors that influence an individual's behavior (Ajzen and Fishbein, 1980). Ajzen and Fishbein define the attitude construct as "*a person's evaluation of any psychological object*" (Ajzen and Fishbein, 1980: 26-27). Attitude is therefore purely a mental construct in the sense that it exists in the mind of the person holding those evaluations. This is therefore the conceptualization of attitudes, which this research paper adheres to. Attitudes are hence conceptualized as the sum of all the evaluations, beliefs, and opinions about any particular object of interest a person holds.

3.5.1. Attitude toward the brand

Taking this knowledge about attitudes further, this paper is deeply interested in the attitudes toward the brand. Attitude toward the brand is a construct that has been the focus of much research, and researchers have continually tried to reach the best conceptualization and deepest understanding of this construct (Voss, Spangenberg, and Grohmann, 2003). There exist almost just as many different takes on attitudes toward the brand as there exist researchers who have looked in to it. That is because, it is a very complex concept to fully grasp and understand. However, from the previous part it was found that attitudes are the sum of all evaluations about any particular object. So in the case of attitude toward the brand, the object of evaluation must be the brand when discussing attitude toward the brand. Therefore, the attitudes toward the brand must be the sum of all the evaluations that one individual has toward the brand in question. The biggest problem with this concept is, however, how one goes about measuring it. In their research, Voss et al. (2003) adopt a two-dimensional conceptualization of consumer attitudes. The two dimensions are mainly based on the research of Batra and Ahtola (1990: 159), who state that consumers purchase goods for two reasons: 1) personal

gratification (hedonic), and 2) for instrumental and utilitarian reasons. According to Voss et al., measures on these two dimensions are able to "*test the effectiveness of advertising campaigns that stress experiential or functional positioning strategies*" (Voss et al., 2003: 310). This encapsulates most of all marketing strategies, which can be seen in the modern day life. In their research, Voss et. al. (2003) found that the two dimensions are indeed distinct (i.e., they measure two different types of information) but together they are also able to tell something about common higher-order construct (i.e., consumer attitude) (ibid.). Therefore, they conceptualize that the two constructs are dimensions of brand attitude. This means that taken together, it is possible to infer about a person's attitudes toward a brand, through their evaluations of the brand on these two dimensions. As mentioned in the introduction chapter, positive attitudes toward the brand are often linked to a more preferable positioning in the mind of the consumer, which makes purchase decision more likely, which is why it is considered so important to marketing researchers.

Voss et al. (2003) are, however, far from the only ones who have researched attitude formation and attitude toward the brand. Whereas Voss et al. conceptualized attitude toward the brand as a two-dimensional construct, other researchers looked at it in a different manner, which resemble more of a one-dimensional construct (e.g., Wu, 2000; Hallahan, 1999). Wu (2000) also deployed the construct in his doctoral dissertation and created a scale to measure attitude toward the brand based on the works of amongst others MacKenzie and Lutz (1989). His approach to the construct was more one-dimensional, but based on his findings proved just as useful by encapsulating the more general thoughts about a brand in his measurement.

The differences between the measurement that Voss et al. (2003) develops and the ones that Hallahan (1999) and Wu (2000) develops in their research, are that whereas the Voss et al. (2003) scale measures the attitude toward the brand indirectly though a common higher-order construct, the ones that Hallahan (1999) and Wu (2000) come up with measure attitude towards the brand much more directly through general thoughts about the brand. It is therefore possible that the measurements have each their own strengths and weaknesses in terms of their approach of inferring the attitude

towards the brand from their measurements.

This research draws its knowledge on attitude toward the brand from all of the above researchers in order to build a solid construct to measure attitude toward the brand in the most simple, yet sufficient way.

3.5.2. Attitude toward the ad

Another attitudinal construct that is often in the interest of marketing researchers is the attitude toward the ad. Taking the conceptualization of attitude into mind again, the object of evaluation here is naturally the ad itself. Therefore, it is the subject's evaluations of the ad that is at the center. Often when the goal of the research is to understand attitudes toward the brand, the construct of attitude towards the ad is also of interest (e.g., MacKenzie, Lutz, and Belch, 1986; Gardner, 1985). Both of these constructs are centered around a change from the status quo when they are being researched, and in this sense are often concerned about which ad or situation creates the most positive evaluation. The objective is therefore most often to understand how something affects these two constructs of attitude in one way or another. It is therefore also quite common practice to incorporate both of these constructs when the overall desire is to understand how the formation of attitude is influenced. That way it is possible to see whether the manipulation affects both attitudinal constructs in the same way, or whether they are affected in different ways.

Attitude toward the ad and attitude toward the brand is in research often in the sense that both of them are a measure of an individual's evaluations of the brand, and therefore also affect the person's purchase intentions (Shimp, 1981). This means, that both concepts are able to affect an individual's overall evaluations of a brand, and hence their brand choice in the end. Therefore, attitude toward the brand and the ad are important constructs in marketing research, since a positive measure is preferable (ibid.).

3.5.3. Attitude and action-advertising

Attitude as a construct, which is conceptualized as an invididual's evaluations toward an object of interest, is central to this research. That is clear from the research question

of this paper. The effects of interactive advertisements on the formation of attitudes (i.e., the evaluations of an object) is hence critical here. Attitude toward the brand and attitude toward the ad are the dependent variables that this paper wishes to examine the effects on, whereas the interactive advertisement (i.e., the action element) is the independent variable that influences the attitudes. The interactive advertising is in this research thought to change the individuals' evaluations of the ad and the brand in total through the ideas revealed previously in this literature review. The attitude toward the brand is therefore the final and most definite outcome of all of the above theories and how they influence each other. It all starts with the introduction of the action element in the advertisement leading to the cause-effect relationship that will be tested in this research. The attitude toward the ad is at the same time of interest, however less so than the attitude toward the brand. Together, these two constructs are very important in marketing research, and so in this too, because they are able to indicate whether the consumers' brand choice is affected by preferable evaluations of the two constructs. Based on the above knowledge, this paper proposes the following hypothesss that is tested in the experiment:

H1a: An interactive ad with a simple cognitive activation task has a positive effect on attitude toward the brand compared to an ad with no activation.

H1b: An interactive ad with a simple cognitive activation task has a positive effect on attitude toward the ad compared to an ad with no activation.

3.6. Involvement

Involvement is the last construct to be reviewed in this paper. The fact that action is such a big part of this paper, suggests that some involvement from consumers is necessary, since action cannot occur without involvement in some form. The theory on behavior change also evolves around the idea of motivation (i.e., involvement), which influences the likelihood of behavior change.

The area of involvement has been studied from many different approaches, and with

different research agendas in mind (e.g., Celsi and Olson, 1988; Sherif et al., 1973; Bloch and Richins, 1983). Many of these angles on involvement are noteworthy in their own ways, however, they are not all of interest to this paper. Those that are helpful in the present research are those that focused on the effect of varying involvement on attitudes and behavior.

Although there are many different variations of definitions on involvement, Petty and Cacioppo (1981) give the definition of involvement that this paper agrees with. They define involvement as personal relevance toward a given object (ibid.). Research on involvement has found that a consumer can be either high involved and low involved (Zaichkowsky, 1985; Engel and Blackwell, 1982). When involvement is high, it means that there is a high degree of relevance to the recipient, and when involvement is low, it means that there is a low degree of relevance (Petty and Cacioppo, 1981). Involvement is furthermore conceptualized as having three major antecedent factors (Bloch and Richins, 1983). The first is related to the characteristics of the person, the second is related to the characteristics of the stimulus, and the third is related to the characteristics of the situation (ibid.). This extends the definition of Petty and Cacioppo (1981) to go beyond just the object and to include external factors as well as the internal factors.

Just like the theory on behavior change mentions that a level of motivation in a consumer is required in order to facilitate the desired action, the theory of involvement is of interest. Judith Zaichkowsky (1985) wrote that a person can be involved with more than just an object. She goes as far as saying that a person can be involved with advertisements, products, or with purchase decisions (ibid.). The important thing to notice about involvement is that it leads to different response outcomes based on each individual's level of involvement (ibid.). This is therefore of particular interest to this paper, as different levels of involvement could lead to different responses. This suggests that an individual, who is highly involved with a specific product category, might respond different than one who is less involved.

Celsi and Olson (1988) found that involvement has an impact on the individual's level of motivation in attention and comprehension processes. This means, that depending of the level of felt involvement (i.e., the individual's own feeling of involvement toward

something) the motivation to process information will differ (ibid.). Furthermore, this means that a person who is highly motivated with something will engage in a more elaborate information procession compared to a person who is less involved with that object. In practice this means that a person who is highly motivated with an object will catch more of the information and therefore might also be more affected by the information that he is processing and therefore be more persuaded by it (Petty and Cacioppo, 1979). Petty and Cacioppo (1979) also found that the level of involvement affects the recipient's persuasion. They found that high involvement can either increase or decrease persuasion depending on the arguments, and this tends to be the reverse when involvement is low.

3.6.1. Involvement and action-advertising

With this knowledge on involvement, this paper proposes that involvement is an important measure to keep in mind when it comes to each individual's response to interactive advertising. The concept of interactive advertising requires a certain level of effort from the individual. Given that research on involvement has found that different levels of involvement produces different response outcomes, the big question is, whether this affects the outcomes of the action-advertising depending on whether the person is more or less involved with the product category when he interacts with the brand.
As the research has found, involvement influences the recipient's motivation, which in turn influences the processing of information. One might therefore imagine that an individual with low involvement with the product category will react differently toward the interactive task, which could affect the attitude toward the brand in a slightly different manner. On the contrary, it is similarly possible to imagine a person with high involvement, who will react relatively more desirable toward the required effort, which could affect the attitude toward the brand in a positive manner. This could lead to some interaction effects in which the level of involvement determines the consumer's reaction to the interactive task, which could affect the attitude outcome.
Based on that, this research hypothesizes the following about involvement, interactive advertisements, and attitudes, which will be tested in the experiment:

H2a: The relationship between the formation of attitude toward the brand and interaction with the brand is moderated by the person's level of involvement with the product category.

H2b: The relationship between the formation of attitude toward the ad and interaction with the brand is moderated by the person's level of involvement with the product category.

3.7. Literature Review Summary

The literature review is the foundation of the framework, which has been constructed through the above review on the relevant literature. The framework is composed of all the theories covered in the literature review of this paper, and each of them contributes to the building of the final framework as seen in Figure 2.

This framework takes its outset in the interaction with the advertisement itself. This is what starts the whole process as it is proposed in this research. The first step is to get the individual consumer into performing the action that is encouraged in the action-advertising. Such an action can be many different things, such as customizing your own car through the use of new digital media or creating your own hero story through your own combination of choices. The action-advertising encourages the recipient to engage with and interact with the advertisement and hence become an active part of

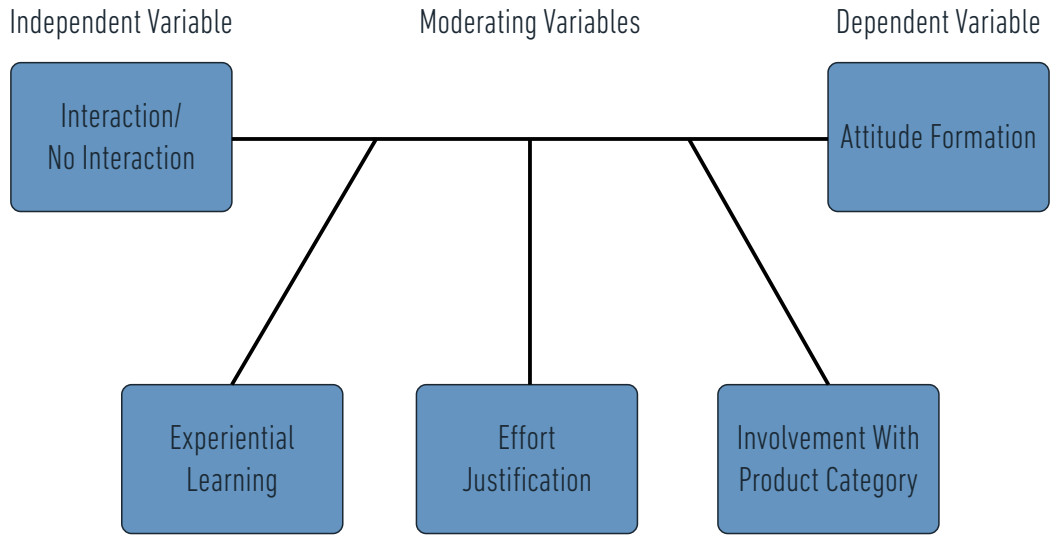

Figure 2: Theoretical model

the advertising and become a co-pilot in creating the story, instead of being a passive observant, who merely process the information, as in traditional advertising.
As can be seen in Figure 2, following the initial action engagement, the individual is now in the process of experiential learning because of his involvement with the brand and the experiences he shares with it. This experience leads to an effect in the mind of the consumer, as he creates a need to justify the effort he has spent. This leads to a need for reducing the cognitive dissonance that has been created in the mind of the consumer because of this effort spent, which has created inconsistency between his feelings and actions. This occurs unconsciously during the action behavior that is being performed. The outcome of this effort justification and reduction of cognitive dissonance will lead to the formation of more positive attitudes toward the brand and the ad, which he is involved with, compared to when no interaction has happened. However, the person's involvement with the product category works as a moderator by either increasing or decreasing the final formation of attitude.

4. Methods and Results

This next part is concerned with the methods that are deployed in this research. This chapter will go through each step of the data collection and present the results that come from these data. The methods that are used in this research support the methodological direction of this entire paper and are deployed in order to answer the research question in the best possible way. This chapter should therefore show the reader the approach and steps taken in order to test the hypotheses and present what has been found in this paper.
The method that this paper deploys is, as mentioned previously, quantitative in the shape of experimental research. The reason for this is its ability to infer knowledge about the hypotheses from the statistical results that can be generated based on the collected data. Experiments also have the advantage of being able to infer knowledge about cause-effect relationships because of its ability to manipulate a situation and compare it to a non-manipulated. In this research, this is essential, since the hypotheses are constructed

on relationships between independent and dependent variables, which there is a wish to understand better. Using an experimental approach will therefore allow to test such relationships in order to see whether the hypothesized causalities could possibly exist or whether the hypotheses cannot be supported (i.e., there are no significant differences between the results). To test the posited hypotheses, it is necessary to manipulate a situation in a controlled manner and compare it with a control situation.

This research will collect data during three different rounds. The first round of data collection is a survey in order to test for people's involvement with six different product categories. This is to ensure the most appropriate category is chosen for the remaining rounds. The second round of data collection is a pre-test of a possible manipulation of the interaction (i.e., the independent variable). This round is designed to test whether a certain type of manipulation will work as intended and succeed in making the participants feel engaged. The third round of data collection will be the actual experiment. This round is designed based on the knowledge gathered from both previous rounds. The objective of this experiment is to collect data that can be used to test all four hypotheses, and thereby also answer the initial research question of this paper. First, the survey of the right fit of product category for the other rounds will be described and the results will be presented. Following this, the method for the pre-test of a possible manipulation is described and the results are presented. Finally, the method for the experiment is described and the data and the results are presented. After this, the findings that have been collected through the methods are discussed in the final discussion chapter.

4.1. Survey: Product Category

Prior to the manipulation pre-test and the final experiment, this paper wants to establish which product category will be most suitable to be at the center of the research. The level of suitability is in this research determined by the consumers' level of involvement towards the product categories. Therefore, a survey is conducted to examine the sample's level of involvement with six different product categories, and then determine the best fit for the experiment.

4.1.1. Design

This test was designed as an online questionnaire survey. Since it is designed as a questionnaire to determine the right product category, no independent variables are manipulated. The six predefined product categories were selected by the researcher based on assumptions about which product categories are generally most important and popular within the sample. These assumptions are based on non-scientific observations from looking at people and from conversations with people. No scientific method was deployed in deciding which six categories should be included in the survey. The dependent variable that is of interest in this product category questionnaire is the involvement with the product category measured by the Revised Personal Involvement Inventory (Zaichkowsky, 1994).

4.1.2. Measures

The only dependent variable that is of interest in this survey is to measure the participants' involvement with each product category. The dependent variable is therefore product involvement measured by the Revised Personal Involvement Inventory (RPII) 10-item seven-point semantic differential scale (Zaichkowsky, 1994) for each of the six predefined product categories (watches, phones, shoes, laptops, perfumes, and furniture). The ten items in the RPII are: important/unimportant, boring/interesting, relevant/irrelevant, exciting/unexciting, means nothing to me/means a lot to me, appealing/unappealing, fascinating/mundane, worthless/valuable, involving/uninvolving, not needed/needed.

The reliability of the scale that measures involvement is found to be relatively high for every product category, i.e., the Chronbach's α is above .89 for all six product categories. This suggests that the scale informs about the same construct, which is the involvement with the product category.

4.1.3. Participants

Twenty-six subjects participated in the survey. 14 of the subjects are female and 12 male. The subjects were selected by random at the premises of Copenhagen Business School

and volunteered when they were approached with a request to be a part of the survey by the author. All participants were currently studying at the time of the survey.

4.1.4. Procedure

All subjects were approached and handed a slip of paper with a web-link to the survey, which they could then complete at their own convenience. The participants completed the test online in their own pace. All participants answered the RPII scale for each of the six product categories in turn. In the data processing, the items that were reverse scored, were reversed back to the correct score. The respondents' data for each product category was then added and then divided by 10, as the number of items on the RPII scale, to give a mean index. This is to get each participant's measure of involvement for each product category.

4.1.5. Results

All analyses are performed in IBM SPSS with the raw data from the survey extracted directly from the survey tool, Qualtrics. All of the results from the survey are found in appendix A. All the participants' scores for each category are then analyzed with descriptive statistics. The results from the survey show that phones and laptops had the highest sample means out of the six tested product categories (M = 5,66, SD = 1,14 and M = 5,65, SD = 1,17 respectively), while perfumes and shoes had the lowest means (M = 4.2, SD = 1.13 and M = 4.8, SD = 1.39 respectively). As mentioned previously, the goal is to choose the product category that has the highest mean in order to make sure that a suitable amount of subjects will be involved with the product category in the final experiment. Therefore, this paper will choose phones as the product category for the experiment, based on the fact that it was found to have the highest level of involvement among the sample in the survey. No inferential statistics are run on the data, as there are no tests that would not provide any further information to which category should be chosen. The means are also too similar to expect any significant results from inferential statistics.

4.2. Pre-Test: Manipulation

This paper is conducting an experiment in order to test the posited hypotheses. However, before the final experiment, a pre-test of a possible manipulation of the independent variable is conducted in order to test whether this manipulation is suitable for the final experiment. After the manipulation pre-test the final experiment is conducted in order to test all the hypotheses previously posited. The final experiment is designed based on the results from the pre-test of the manipulation so to ensure that the final experiment will yield the best results. Both studies are completed through online surveys manufactured to generate data that can since be analyzed and finally infered knowledge from, which can be used to answer the hypotheses. Even though the studies are conducted through an online survey tool (i.e., Qualtrics), they do not have the design of a normal questionnaire. The studies' designs will be elaborated further in each following section.

This thesis wants to understand how interactive advertising can influence attitudes toward the brand and the ad. Therefore, in the manipulation pre-test and the final experiment, it has been deemed best to choose a brand that is as neutral as possible. In this case, neutral is understood as the participants not having any prior thoughts and feelings about the brand that they are exposed to. Therefore, a fictitious brand has been made up for the purpose of this research. The brand does not exist anywhere in the world. However, the visuals (i.e., the look and design of the product) have been picked from an existing Chinese phone brand called Oppo. This product does not exist anywhere in the western world and is also a very small manufacturer where it exists. This is why it is safe to assume that none of the participants in the pre-test and the experiment could have any prior knowledge of it or attitudes toward it.

4.2.1. Design

This pre-test is designed as a two-group after-only independent-measures experiment. This design allows for a test of one possible manipulation of the independent variable (i.e., the interaction). This pre-test furthermore allows the testing of one scale to measure attitude toward the brand. The reason for doing an after-only experiment as

compared to a before-after experiment is to avoid any interaction effects that might follow from the subjects being able to figure out what the study is about. This could lead to an undesired change their reactions (Aaker, Kumar, Day, and Leone, 2011). This is very important to avoid, as it might otherwise affect and pollute the results of the pre-test. However, this also means that a accomodation to the data has to be made, since it is not possible to measure both before and after in order to get more precise comparable results, and thereby better account for possible extraneous variables. In a before-after design, it is possible to be more certain of the effects measured, as they are measured both before and after (Field and Hole, 2003).

The independent variable in this pre-test is the manipulation of interaction with the brand. Two variables are introduced in the pre-test. One is the control group, who will not interact with the brand. The other is the experimental group, who will receive the experimental treatment and interact with the brand. Two dependent variables are also included. The first one is the manipulation check, which is designed to test whether the manipulation was successful. The second dependent variable is the attitude toward the brand.

4.2.2. Stimuli

The stimuli for this experiment are separate ads for each condition (see appendix B). The ads are designed to look as a professional ad and are very similar to each other. The background is of a free climber hanging on the side of a cliff. As mentioned in the beginning of this chapter, the visuals of the brand are kept as neutral as possible and it is safely assumed that no one will have any prior knowledge about the phone brand, since it is fictitious. All visuals are the same for the two ads. The only difference is a slight change in the copy on the experimental version. The copy is created based on actual attributes of phones that are currently available on the market. The ads are similar in every way, except for one sentence that makes them apart. The experimental group ad had an additional sentence that encouraged the participants to get involved with the brand by coming up with a slogan for the brand.

4.2.3. Manipulation check

The manipulation in this pre-test is designed as a cognitive task, in which the participants in the experimental group are asked to perform a cognitively demanding task. They are required to come up with a new slogan for the imaginary brand and argue for their decision. The manipulation check measure scale is designed by drawing inspiration from the scale used by Babin, Boles, and Darden (1995). It is adjusted to a three-item seven-point semantic differential scale designed to measure whether the tested manipulation had the desired effect on the experimental group. The three items are: boring/exciting, uninvolving/involving, not engaging/engaging.

A reliability analysis was conducted of the scale on the three items. The manipulation check scale was moderately reliable with a Chronbach's α of .85. This means that the scale is considered reliable and can inform about the same construct, which is the manipulation of the pre-test. However, one of the three items scored correlations below or around .6 with the other two items. This item was the boring/exciting. This suggests that this item does not exactly measure the same thing as the other two, which both score a correlation of around .7.

4.2.4. Measures

The dependent variable of interest in this pre-test is the attitude toward the brand. This is measured using the scale developed by Voss et al. (2003). This scale has proven useful in measuring attitude toward the brand indirectly through a higher-order construct. The scale that Voss et al. developed includes ten items that are all measured on a seven-point semantic differential scale. These ten items are: effective/ineffective, helpful/unhelpful, functional/not functional, necessary/unnecessary, practical/impractical, not fun/fun, dull/exciting, not delightful/delightful, not thrilling/thrilling, enjoyable/unenjoyable (ibid.). This scale will be used as a test to see how it performs as a measure of attitude toward the brand. The scale is split in two according to the two dimensions (hedonic and utilitarian) theorized by Voss et al. (2003).

The attitude towards the brand scale measured by the hedonic and utilitarian factors have a moderate reliability with a Chronbach's α of .83. Despite having just above

moderate Chronbach's α the reliability analysis showed that some of the items scored negative correlations, which is not a good sign considering that it should measure the same thing. The item that scored negative correlations on the scale is the last item on the hedonic part (enjoyable/unenjoyable). Other items too scored really low correlations below .6 while others had much lower correlations of around .2. This makes it of concern whether it can be considered representative to measure attitude toward the brand in this type of research, since it suggests that it does not measure the same thing despite the moderate Chronbach's α. Results using this scale should therefore be taken with caution.

4.2.5. Participants

Fifty subjects participated in the pre-test. All participants are Danish speaking. 26 of the subjects are female and 24 are male. The subjects were selected at the premises of Copenhagen Business School and volunteered when they were approached with a request to be a part of the test by the researcher. The participants were given a note with a web-link to the experiment so they could decide when they wanted to do the experiment and they could decide the pace themselves. All subjects were studying at the time of the experiment.

4.2.6. Procedure

The entire pre-test was conducted in Danish for the purpose of avoiding misunderstandings and misinterpretations of the questions in case the participants' English proficiencies were not sufficient. This also means that all scales and measurements have been adapted from their original version in English to Danish. These translations have all been done with great considerations to replicating the same reliable scales in terms of their abilities to infer the correct and desired knowledge from them. The two groups in this pre-test are a control group and an experimental group, which will receive the experimental treatment that is to be tested. The two groups are completely randomized by a random dispersion created by the survey tool when each participant entered the web-link. Both groups first see the respective ad for their group.

The control group was shown a passive ad for the imaginary Phone X Y1. Right after the ad, the manipulation check is measured in order to isolate and test the effect of the manipulation. They were then asked to evaluate the brand in terms of the two attitude-dimensions (hedonic and utilitarian) on the ten-item semantic differential scale. It was randomized which of the two dimensions they answered first in order to control for the influence of which appeared first. The final part of the pre-test is the demographic questions.

The experimental group on the other hand, was exposed to the experimental treatment, which involved them being encouraged to engage with the advertisement. More specifically, this group was asked come up with a new slogan for the imaginary Phone X Y1 brand and then argue for their choice. Before they reached this task, they were shown an ad similar to the ad in the control group. However, this ad encouraged the subjects to be involved through an additional sentence. The interactive part is where the participants were asked to come up with a new slogan for the imaginary brand. This task is a cognitively demanding task, since it requires one to be creative and original. After the subjects had come up with a new slogan and argued for their decision, the manipulation check was measured. After this, they were then asked to evaluate the brand in terms of the two attitude dimensions (hedonic and utilitarian) on the ten-item semantic differential scale, which appeared in random order. Finally the pre-test was completed with the demographic questions.

4.2.7. Results

All analyses are performed in IBM SPSS with the raw data from the pre-test extracted directly from the online tool, Qualtrics. All the results from the analyses of the data from the pre-test are found in appendix B. The first analysis of the data is concerned with the manipulation of the experimental group. In order to find out if this possible manipulation worked (i.e., whether the participants felt more activated and involved with the brand in the experimental group compared to the control group), an independent-samples t-test is conducted on the manipulation check. This check allows to test whether the two groups' means are different from each other and then to see if

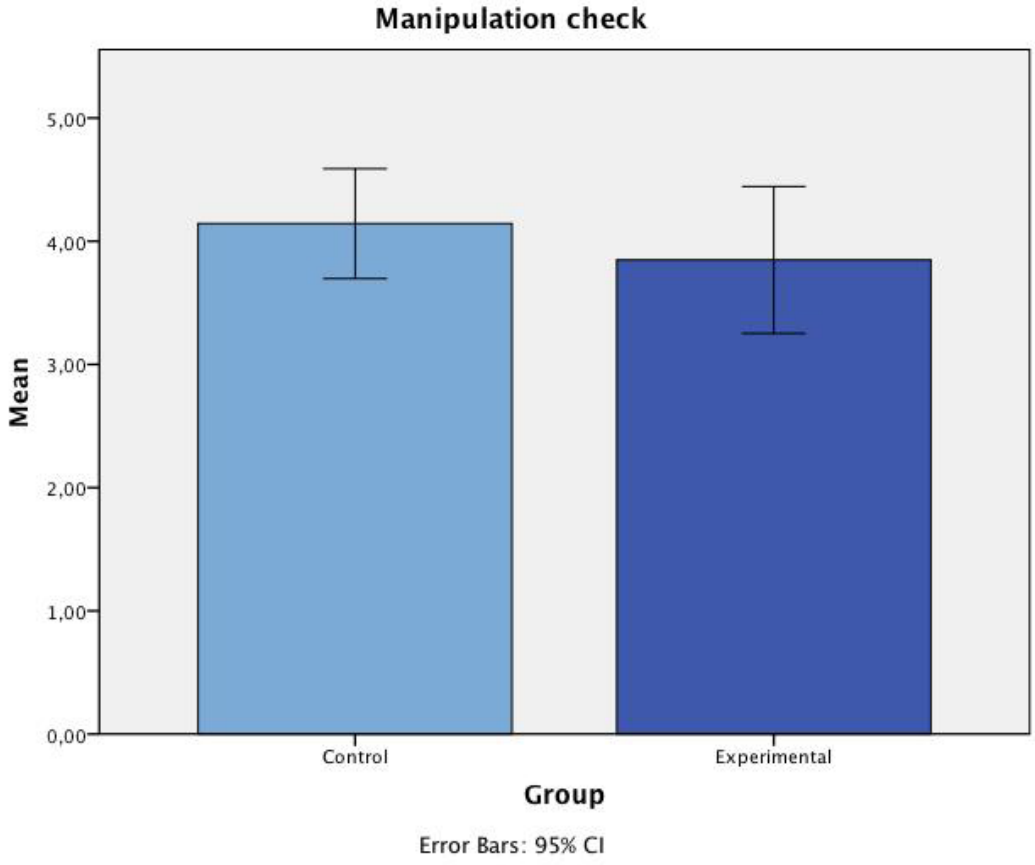

Figure 3: Survey manipulation check means

the experimental group felt more activated than the control group.

The independent-samples t-test shows that there is no significant difference between the two groups, $t(48) = .83$, $p > .4$, while the effect size was also very small, $r = .06$. On average, the control group felt more activated (M = 4.14, SE = .22) than the experimental group, who received the experimental treatment (M =3.85, SE = .29). The results are visually presented in the error bar graph in Figure 3. The error bars illustrate the 95% confidence interval. This indicates that the manipulation of the experiment failed to work as planned, and the difference between the groups are just accidental and not useful to infer anything from. The remaining analysis of the pre-test is still conducted in order to test whether the scale to measure attitude toward the brand is appropriate for this type of research.

The next test is to see whether the scale to measure the groups' attitudes toward the

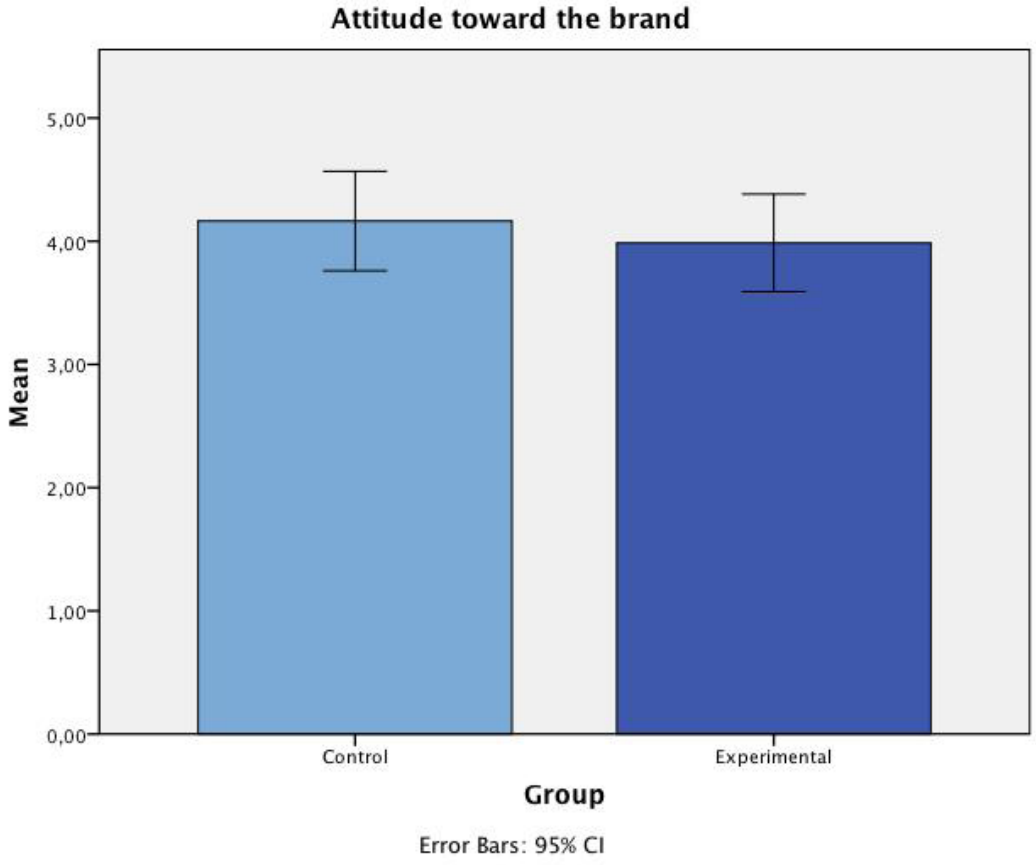

Figure 4: Survey attitude toward the brand

brand is the proper one for this type of research. The reliability analysis showed that the results from an analysis should be taken with caution due to negative correlations. However, an ANOVA is conducted in order to test whether the failed manipulation had any effect on the attitude toward the brand. The ANOVA found no significant effect of the manipulation on the groups' attitudes, $F(1, 48) = .41$, $p > .5$. On average, the control group's attitude toward the brand was higher (M = 4.16, SE = .20) than the experimental group's (M = 3.99, SE = .19), who received the experimental treatment. These results are presented visually in Figure 4. The error bars illustrate the 95% confidence interval. This, together with the results from the reliability analysis suggests that the scale tested in this pre-test to measure the participants' attitudes toward the brand is not appropriate in this present research. Another scale should therefore be developed for the final experiment.

4.2.8. Temporary findings

The aim of the pre-test was to test one possible manipulation of the interaction. However, the analysis showed no statistical significance to support the assumption that the manipulation was successful.

The first indication that the pre-test of the manipulation was unsuccessful is in the t-test of the manipulation check. The results from the t-test showed that there was no statistical significance that the means were different ($p > .4$). This is an issue, as this means that it is not possible to infer that either group is different from the other based on the data that was gathered in the pre-test in terms of their felt involvement with the brand. The goal was that the test of the experimental treatment would make the experimental group feel more activated than the control group, who were not asked to get involved with the brand. Since there is no statistical significance that the groups' scores are different, it is not possible to assume that the manipulation was successful. It suggests that the manipulation failed to work. The exact reason is unknown, since no other information is possible to infer from the data, which could give an indication for why the manipulation failed, and it is not possible to ask the participants for further explanations. Therefore it is only possible to guess why this was the case and use the assumptions to improve the design of the final experiment.

There might be several reasons why the manipulation failed. Perhaps the manipulation did not succeed in replicating a realistic example of an ad with the chosen interaction. The action that was chosen was a cognitively demanding task, which is rarely seen in true marketing praxis. Most often this type of activation is only seen in connection with a competition. In the pre-test, there was offered no such incentive for the participants' completion of the task.

Another reason could be that the action that was chosen for the experiment was not one that managed to involve the participants in a way that made them perceive themselves as being activated and involved with the brand. Along the same lines, there is also the possibility that the task that was asked of the participants was not perceived as being a part of the ad.

Perhaps the task that was chosen was too far from a realistic ad setting to make the

connection between the ad they looked at and the task they were asked to do, which could have created a disruption in the formation of attitude toward the brand. Since the manipulation test was unsuccessful and not statistically significant it makes it impossible to infer any knowledge about the results on the participants' attitudes toward the brand. These findings are, however, crucial for the development of the final experiment, as the goal is to avoid this possible disconnection and create a manipulation that works better with the desired goal; to test whether a connection between interactive advertising and attitude formation exists. The findings from the pre-test show that perhaps more than one thing went wrong and these findings are therefore useful for the design of the final experiment. The pre-test is hence a great test of the manipulation in order to ensure that the final experiment is properly designed and features a better manipulation to test the cause-effect relationship.

All the findings from the pre-test are used to design the final experiment. The learning that was acquired in the pre-test are applied to the final experiment in order to ensure that those things that should be corrected in one way or another are changed, in order to get proper measurements in the final experiment.

4.3. Experiment

4.3.1. Design

This experiment is designed to test all the hypotheses posited previously. Based on the findings from the pre-test, the experiment has been designed around those changes that were required in order to improve the overall experiment and gather the right findings. The design of the final experiment is also a two-group after-only independent measures design. The reason for this choice of experimental design is the same as the pre-test of the manipulation – to avoid any interaction effects that might come from a two group before-after design due to the participants being able to figure out what the experiment is about (Aaker et al., 2011). The only disadvantage of the after-only design compared to the before-after design is that it does not account for possible maturation and history effects (ibid.). However, this is not considered as a potential problem in the present

research, as the period of the experiment is only very short and lasts no more than 5-10 minutes.

Besides the control group there is also an experimental group. The control group will not be exposed to any experimental treatment and therefore the subjects in this group will only receive a traditional passive advertisement as the natural setting. The experimental group will be exposed to the experimental treatment, which requires their involvement with the brand (i.e., the interactive advertisement). The experimental group is therefore a manipulated natural setting that allows testing the cause-effect relationship between interaction with the brand and the formation of attitude, and compare it to the natural non-manipulated setting.

The independent variables in this experiment are the manipulation of interaction with the brand, and the level of involvement with the product category. The first independent variable is split in two. The control group, as mentioned, will not interact, while the experimental group will interact with the brand. The second independent variable is the measure of involvement with the product category, which will serve to test the hypotheses related to involvement. The experiment includes three different dependent variables. The first one is the manipulation check designed to test whether or not the manipulation had significant effects on the participants' felt interaction with the brand. The second dependent variable is the measure of attitude toward the brand, which is the main test of this research experiment. The third dependent variable is the measure of attitude toward the ad, which is a secondary test in this research.

4.3.2. Stimuli

Each of the two groups will be presented to an ad in the experiment. The two ads used in the experiment have been produced to mimic a professional ad as closely as possible (see appendix C). The two ads are completely similar except for one small change in the experimental group version. As mentioned in the beginning of this chapter, the visuals of the brand are kept as neutral as possible and it is safely assumed that no one will have any prior knowledge about the phone brand, since it is fictitious. Different from the pre-test, there are no brand names presented in the ads. Only the visuals of the phone that

has been borrowed from the assumed unknown Oppo brand.

The passive ad for the control group shows four different colored versions of an unnamed mobile phone, which all wear a cape so to imitate a super hero. Each phone is labeled with its respective color name (black, white, gold, and blue). On the opposite side of the ad, four "evil" attributes are presented. These represent four of what is assumed to be the biggest trade-offs for phones (bad battery, bad for the environment, fragile screen, and high prices). The copy text that is shown reads: "Every story has a good hero... And a bad villain" The only change in the interactive ad is the addition of the following copy at the bottom of the ad: "Choose your hero and the villain you want to fight the most".

4.3.3. Manipulation check

The manipulation in the experiment is, opposed to the manipulation in the pre-test, designed to be fun, entertaining, and enjoyable for the participants. Since the manipulation check in the pre-test did not show the most optimal results for the effect of the manipulation, it is believed that the manipulation did not work out as intended. Therefore, another manipulation is conducted in the final experiment. This manipulation is of a different kind than the cognitively demanding task in the first experiment. A fun task was therefore constructed for the final experiment. Since one of the items of the manipulation check showed less than optimal correlations in the pre-test, this items was also changed in the measurement of the manipulation check in this final experiment.

The manipulation check measure is composed of a three-item seven-point semantic differential scale. The three items are: not engaging/engaging, inactivating/activating, and uninvolving/involving.

A reliability analysis is conducted on the three items of the scale in order to test if the scale is reliable. The Chronbach's α for the scale is very high, being .88, which means that the scale is highly reliable and it is able to infer knowledge from it in the analysis.

4.3.4. Measures

Based on the findings about the attitude toward the brand scale from the pre-test, a new scale is constructed based on items selected from different scales that have previously measured attitude toward the brand.

The dependent variable, attitude toward the brand, is measured on a four-item seven-point semantic differential scale. This scale is constructed by drawing inspiration from previous scales used by other researchers to measure attitude toward the brand (Hallahan, 1999; Voss et al., 2003; Wu, 2000). The four items are: I don't like it/I like it, low quality/high quality, not positive/positive, and not appealing/appealing. The items have been picked from scales that measure attitude toward the brand with different items, but all on semantic differential scales. The items have been selected based on the assumptions that the chosen ones fit the design of this research better than other items. The four items therefore represent evaluations that together shape the consumers' overall evaluations of the measure of attitude toward the brand through the four different items. A test of the reliability of the scale shows that the Chronbach's α is very high, being .94. This means that the scale is very reliable and that it informs about the participants' attitudes toward the brand. It is therefore appropriate to use it in the inferential statistical analysis.

The dependent variable, attitude toward the ad, is measured on a six-item seven-point semantic differential scale. This scale is also constructed with inspiration from other attitude toward the ad scales (Madden, Allen, and Twibble, 1988; MacKenzie and Lutz, 1989; Hallahan, 1999). The six items are: not creative/creative, dull/exciting, unaesthetic/aesthetic, tasteless/tasteful, uninteresting/interesting, and bad/good. A reliability analysis of the scale shows that the Chronbach's α is very high, at .91. This means that the scale is very reliable and it is therefore possible to infer knowledge about the participants' attitudes toward the ad based on this scale. It can therefore be used in the inferential statistical analysis.

An independent variable is also included to measure each participant's level of involvement with phones. This measure is the same RPII scale (Zaichkowsky, 1994) as in the product category survey. It is a 10-item seven-point semantic differential scale

and the items are: unimportant/important, boring/interesting, irrelevant/relevant, unexciting/exciting, means nothing to me/means a lot to me, unappealing/appealing, mundane/fascinating, worthless/valuable, uninvolving/involving, not needed/needed. Contrary to the product category survey, the RPII scale has been reversed in this experiment. This means, that all the negatives are on the one side and all the positives are on the opposite side. This has been done in order to make the experiences much smoother and more harmonious for the participants, and will make sure that fewer mistakes are made when answering the scale. The scale has a very high reliability with a Chronbach's α of .93, which means that it is possible to infer knowledge about the participants' involvement with the product category from it. It is therefore possible to use it in the analysis.

4.3.5. Participants

All the participants were gathered through the use of the social media Facebook. Messages were posted on several groups dedicated to university students. Two messages were posted on groups related to Copenhagen Business School, one message was posted on a group associated to The University of Copenhagen, and the last message was posted in a group associated with the IT University of Copenhagen. All participants chose to participate out of their own free will and no incentives were offered to the participants. Seventy-nine people participated in the experiment and out of the 79, 18 (22.8%) are male and 61 (77.2%) are female. 54.4% of the participants are between 21-25 years old, 29.1% are between 26-30 years old, 12.7% are between 31-35 years old, and 3.8% are between 18-20 years old. 57% are currently studying and have a job, 24.1% are studying without a job, 11.4% are working full-time, 5.1% are unemployed, and 2.6% are either part-time or something else.

The control group contained 39 out of the 79 participants while the experimental group contained the remaining 40 participants.

4.3.6. Procedure

The entire experiment was conducted in Danish for the purpose of avoiding

misunderstandings and misinterpretations of the questions due to the nationality of the participating individuals being Danish. The entire experiment was conducted through the online questionnaire software Qualtrics. The design of the experiment was designed so that, when an individual clicked himself to the web-link of the experiment, the software placed him in either the control group or the experimental group based on a balanced randomization. The randomization was balanced in order to ensure that there would be an equal amount of participants in the two conditions. All participants were met with a message telling them not to discuss the experiment with other people and informed them that their participation was completely anonymous.

The control group first saw the traditional passive ad that was created for the purpose. This ad did not ask them to interact with the brand, only to look at the ad. After the ad was shown, the manipulation check measure was filled out. After this, the control group answered the attitude toward the brand scale. When this was completed, the next scale they answered measured the attitude toward the ad. This was followed by the independent measure of involvement toward the product category. The control group finished by filling out the demographic questions.

The experimental group was similarly met with an ad first. However, they saw the ad with the experimental treatment, which asked them to interact with the brand. The interaction was conducted by requiring the group to answer which of the four phones they would pick as their hero, and which of the four attributes they would pick as their villains to create the story. After this interaction, they were measured on the manipulation check. This was followed by the attitude toward the brand scale. The next measure was the attitude toward the ad scale. Next, the experimental group was met with the scale that asked them to rate their involvement with phones on the RPII scale. Lastly, the experimental group answered the demographic questions.

Both groups finished the experiment by seeing a message that informed them that they had unknowingly participated in an experiment. This message also informed them about what the experiment was about and also what the ambitions of the research.

4.3.7. Results

All analyses are performed in IBM SPSS with the raw data extracted from Qualtrics. All the results and statistics associated with the analyses of the experiment are found in appendix C.

The very first analysis of the data is concerned with the manipulation. The manipulation check was included in the experiment in order to test whether or not the manipulation of the experimental group was successful in making the experimental group feel more activated with the brand, and feel like they have interacted with the brand. The interesting thing is therefore to see whether the analysis shows that the results of the manipulation check for the two groups are the same or different, using statistics. An independent-samples t-test is therefore the appropriate test for this purpose. As the reliability analysis has shown, the manipulation check has a high reliability, which

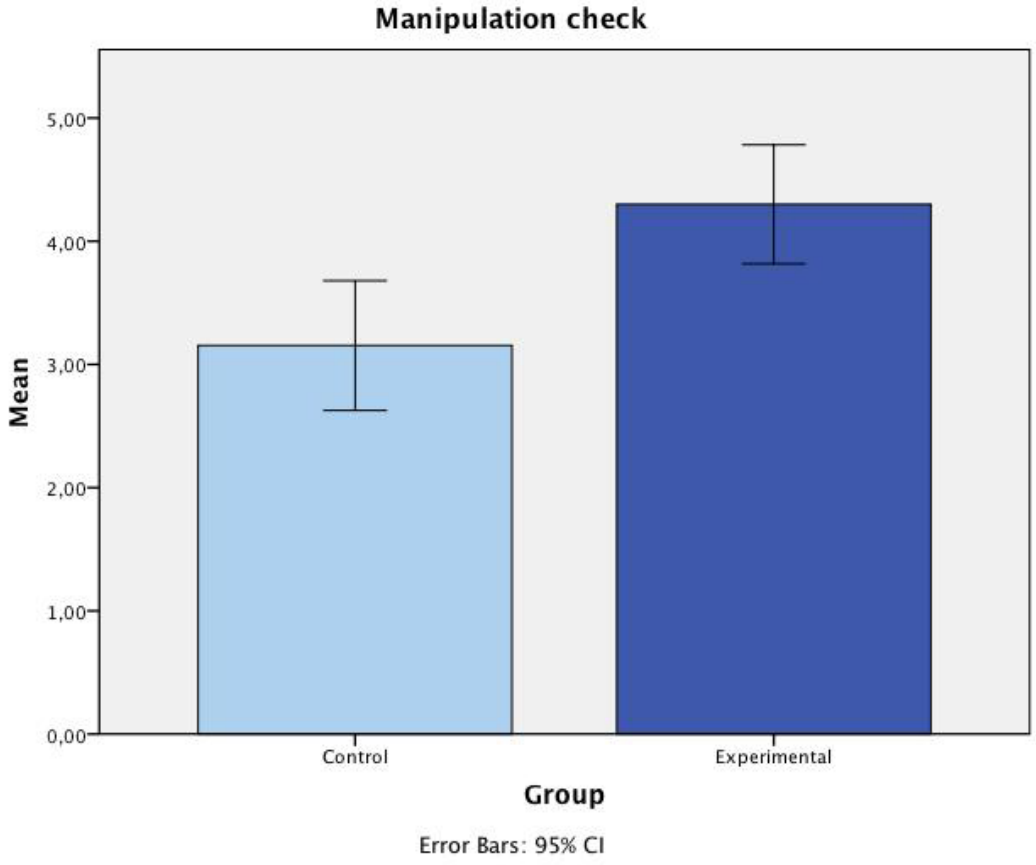

Figure 5: Experiment manipulation check

means it can be used to infer knowledge from.

The results of the independent-samples t-test show that the difference in the means is statistically significant at, $t(77) = 3.25$, $p < .005$, and the effect size is just above medium, $r = .35$. On average, the experimental group felt more activated (M = 4.3, SD = 1.51) than the control group (M = 3.15, SD = 1.62). The results are visually presented with an error bar graph in Figure 5 on page 55. The error bars illustrate the 95% confidence interval. As the figure shows, the two groups' means are clearly different. This indicates that the manipulation was successful and the participants in the experimental group felt significantly more activated than the participants in the control group.

Now that the results have shown that the manipulation was successful, the next test is to find out whether or not the posited cause-effect relationship exists between the interactivity and the attitude formation. The main objective with this experiment is to test the hypotheses previously posited. Hypothesis H1a posits that an ad with an interactive task has a more positive effect on the formation of attitude toward the brand compared to an ad with no activation. An analysis of variances (ANOVA) is therefore conducted on the data in order to test the relationship between the independent variable (i.e., the manipulation) and the dependent variable (i.e., the attitude toward the brand). As the reliability analysis has shown, the scale scored a very high reliability, which means it can be used to infer knowledge from.

The ANOVA shows that there is a significant effect of the manipulation on the groups' attitudes toward the brand, $F(1, 77) = 6.0$, $p < .02$. The size of the effect is just below medium, $r = .25$. On average, the experimental group had more positive attitudes toward the brand (M = 3.85, SD = 1.17) than the control group (M = 3.08, SD = 1.6). It should also be noted that Levene's test of the homogeneity of the variances is significant. This means that the assumption that the variances are equal has been broken. This means that the results should be taken with caution. However, the Brown-Forsythe F-test also show a significant effect of the manipulation on the group's attitudes toward the brand, $F(1, 69.5) = 5.97$, $p < .02$. The results are visually presented in an error bar graph in Figure 6 on page 57. The error bars illustrate the 95% confidence interval.

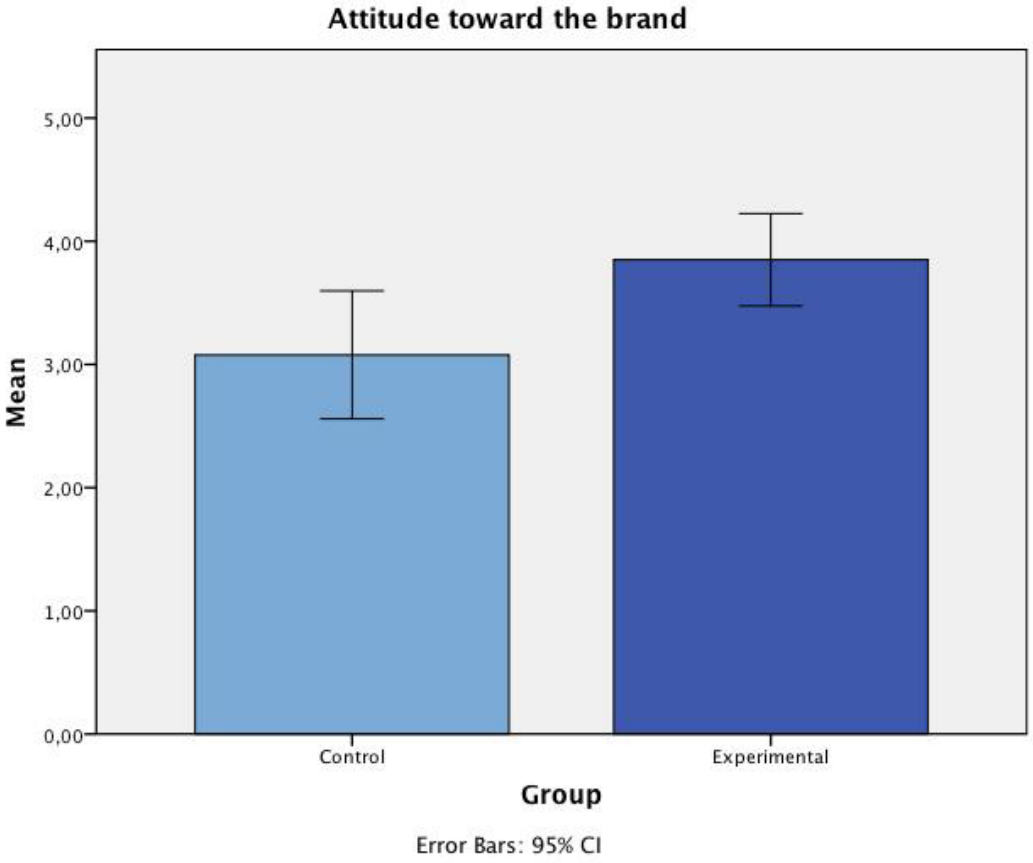

Figure 6: Experiment attitude toward the brand

As can be seen in the figure, the two groups' means are clearly different. These findings therefore support the research question of this paper and the hypothesis H1a, being that interaction with an ad leads to a more positive formation of attitudes toward the brand compared to a non-interactive ad.

Besides the ANOVA, an analysis of covariance (ANCOVA) is also conducted. The purpose of this analysis is to test whether the independent variable (i.e., involvement with the product category) as a covariate, has any effect on the formation of attitude toward the brand, testing hypothesis H2a. H2a posited that involvement works as a moderator on the relationship between the formation of attitude toward the brand and the interaction with the brand. The important test here is therefore to see if there exist any interaction effects between the manipulation and involvement toward the product category. Before conducting the ANCOVA, however, an ANOVA test is run with the

covariate as the dependent variable and the grouping (i.e., control/experimental) as the independent variable. This is done to test whether the means in the two groups are the same or different. In order to be able to use the variable as a covariate, the test has to be insignificant, which means that the means should be the same. The ANOVA shows that the involvement with the product category is not significant, $F(1, 77) = .44, p > .5$. This suggests that the covariate's means are roughly equal in both the control group and the experimental group. It is therefore possible to use it as a covariate in the ANCOVA. The results of the ANCOVA show that the covariate, involvement with the product category, is significantly related to the attitude toward the brand, $F(1, 76) = 6.94, p < .01$, $r = .29$. The manipulation still had a significant effect after the control of the covariate, $F(1, 76) = 5.47, p < .03, r = .26$. The coefficient B gives a rough estimate, which suggests that if involvement is increased by one unit then attitude toward the brand is increased by .35 units since the direction of the relationship is positive. However, the test of the homogeneity of the regression slopes shows that there are no interaction effects between the manipulation and the covariate ($p > .8$). This means that the effect of the covariate does not interact with the manipulation in any significant way. This suggests that the manipulation has the same effect no matter if the recipient is high or low involved with the product category. This therefore does not support hypothesis H2a, which posited that involvement works as a moderator on the formation of attitude toward the brand through the manipulation. Hypothesis H2a is therefore rejected.

With the tests for hypotheses H1a corroborated and H2a rejected, the next test that is of interest in this analysis is the test of the attitude toward the ad hypothesis, H1b. The hypothesis posited that an ad with an interactive task would affect the attitude toward the ad more positively compared to an ad with no interaction. This test is therefore to see what effect the manipulation had on the formation of the participants' attitudes toward the ad. Similar to the analysis of the attitude toward the brand, an ANOVA is conducted on the data. The ANOVA found a significant effect of the manipulation on the participants' attitudes toward the ad, $F(1, 77) = 12.17, p < .001$, with a an effect size between medium and large, $r = .38$. On average, the experimental group had more

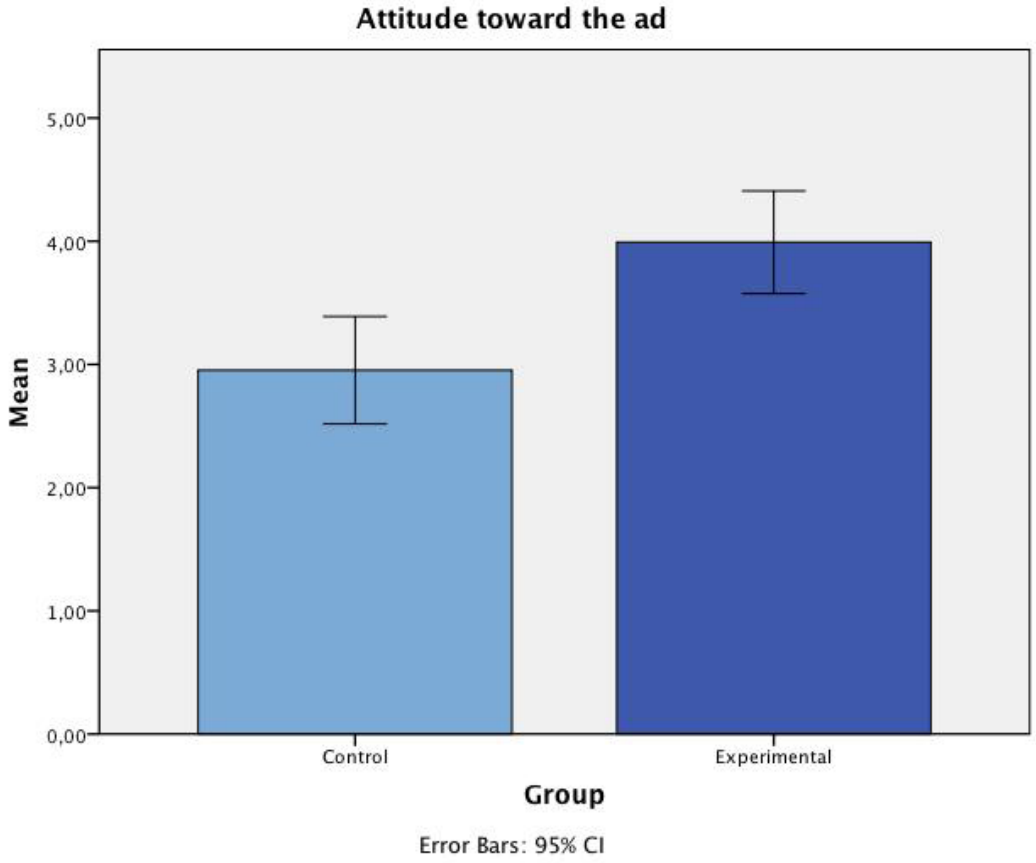

Figure 7: Experiment attitude toward the ad

positive attitudes toward the ad (M = 3.99, SD = 1.3) than the control group (M = 2.95, SD = 1.34). The results are visually presented in an error bar graph in Figure 7. The error bars illustrate the 95% confidence interval. As the figure shows, the two groups' means are clearly different. These findings show that the interaction with the brand and the ad also influenced the formation of the participants' attitude toward the ad itself and not just toward the brand. This supports hypothesis H1b.

Same as with the attitude toward the brand, an ANCOVA is conducted to test whether involvement as a covariate has an effect on the formation of the attitude toward the ad. This test is supposed to help answer hypothesis H2b, which posited that involvement works as a moderator on the relationship between the formation of attitude toward the ad and the interaction with the brand. The same high reliability of the involvement scale as in the previous part still applies as same as the assumption that the two groups' means

of involvement are roughly equal. The ANCOVA shows that involvement as a covariate is not significantly related to the attitude toward the ad, $F(1, 76) = 1.32$, $p > .25$, $r = .13$. The manipulation still had a significant effect after the control of the covariate, $F(1, 76) = 11.55$, $p < .001$, $r = .36$. The test of the homogeneity of the regression slopes show that there exist no interaction effects between the covariate and the independent variable ($p > .6$). Because the ANCOVA found no interaction effects between involvement and the manipulation, it is possible to reject hypothesis H2b. This means, that involvement does not work as a moderator on the relationship between the formation of attitude toward the ad and the interaction with the brand. This suggest, that the person's level of involvement with the product category does not affect his reaction to the interaction with the brand in terms of its outcome on the formation of attitude toward the ad.

The analyses have shown that there exist cause-effect relationships between interactive advertisements and the formation of attitude toward the brand and the ad. Furthermore it has also shown that involvement with the product category does not affect how a consumer reacts to the interactive advertisement in terms of attitude outcomes. That is what has now been proved through the analyses of the experiment. The discussion chapter will take the results from the analyses of the data and discuss the findings. This means that the findings will be related to previous research, which was introduced previously. This is supposed to make sense of the results in a broader way and give the specific findings a more general applicability.

5. Discussion

5.1. Summary

The research question of this paper is interested in what effect interactive advertisements have on the formation of attitudes toward the brand and towards the ad compared to non-interactive advertisements. This research paper has therefore been interested in the relationship between interacting with or otherwise being activated by a brand through

an advertisement and how this interaction affects the formation of attitudes toward the brand and the ad. The hypotheses expected a positive effect of brand activation on the formation of attitudes toward the brand and the ad through the medium of an advertisement that engaged the receiver. It was furthermore hypothesized that involvement with the product category works as a moderator on the relationship between interactive advertisements and attitude formation. In order to test these relationships, an experimental method has been deployed. This method allows for manipulating the natural world in a way that makes it possible to compare to different situations that would not be easily comparable in the real nature.

In this research, there has been conducted a pre-test of one possible interaction and one final experiment with an alternative interaction that corrected the learning from the pre-test. The pre-test tested a strongly cognitive and creatively demanding task on the participants in which they had to use their brain to come up with a slogan for the fictitious brand and then argue for their choice. The analysis of the data from the pre-test showed that the manipulation was not successful in terms of significantly making the experimental group feel more engaged than the control group. The pre-test furthermore showed bad results toward the hypothesized relationship between interaction with the brand and the formation of positive attitudes toward the brand as well as bad results for the measure of brand attitude. The reasons for this lack of cause-effect relationship are assumed to be caused by an unsuccessful manipulation through the action task. It is also assumed that the task, which the participants engaged with was somehow decoupled from the ad itself and hence the brand too. This resulted in a manipulation, which failed to make the participants in the experimental group feel more engaged with the brand than the participants in the control group. Thus, the failed results were traced back to the manipulation itself, and an alternative interactive task was designed for the final experiment.

In the final experiment, the interaction was changed to one that involved the participants in the experimental group to be engaged in a more fun and entertaining task. Instead of using their brain to be creative and create something, they had to make decision choices on four different phones and four different attributes offered by the

phones. These phones and their attributes were presented in a fun and heroic way that imitates the popular culture of hero-villain stories. This manipulation allowed the participants to create their own stories. The results from the final experiment were much more positive and supported two out of the four hypotheses. Half of the hypothesized relationships were therefore supported in the experiment. The first two hypotheses regarding the cause-effect relationships between interaction and the formation of positive attitudes toward the brand and the ad were successfully corroborated. The two hypotheses that were rejected, were the ones that hypothesized about the relationships between interaction and attitude formation with involvement as a moderator of this relationship. These results therefore show that interaction with the brand does in fact affect the formation of attitudes toward the brand and the ad in a positive way. However, involvement with the product category does not affect how a person reacts to the interactive task, which suggest that someone less involvement will react in the same way as someone who is much more involved with the product category.

This present research has therefore successfully proven the initial effects of interactive advertising on the formation of attitudes toward the brand and the ad. These findings are very important considering the novelty of this research area that has not previously been researched in the way that this paper has now successfully done.

5.2. Theoretical Contributions

This research has contributed to the existing theories by establishing a solid framework for researching the formation of attitudes toward the brand through interactive advertisments, by drawing on theories from many different areas. These connections are made through grounded arguments based on the linkages that have been found in the gaps between the established theories. It was later demonstrated through the experiment conducted in this research paper that these linkages do exist in real life. This paper can therefore contribute to other researchers with the same interests within this field of research. Many more possible connections exist, but those applied in this research are a good starting point for other researchers.

The findings presented in this research paper have contributed to the theories in the field

of experiential learning, attitude formation, involvement, behavior change, interactive advertising, and cognitive dissonance theory (hereunder effort justification). Linkages that have not previously been made between the mentioned theories are in this research proven through the design of the experiment and the hypotheses that were made based on the literature review.

It has been proven that behavior change can precede attitude formation in the way that is demonstrated in the experiment. This can add to both the theories on behavior change and the theories on attitude, which assume that attitude precedes behavior change (Ajzen and Fishbein, 1980). The findings of this research contribute to the theories of behavior change in the way that it is demonstrated that the opposite relationship between action and attitudes exist. Whereas the existing literature on behavior change says that attitude comes before action (ibid.), it is in this research demonstrated that the opposite can also happen in the way that actions can shape attitudes. A clear cause-effect relationship is made between the individual interacting with the brand and the following positive formation of brand attitudes as well as attitudes toward the ad. The results of this research therefore provide initial evidence that interaction with a brand through an action such as one that is based on decisions about the brand itself, leads to the positive formation of attitudes toward the brand and the ad. This ads to the theories reviewed on behavior change (Ajzen and Fishbein, 1980; Carney, Cuddy, and Yap, 2010) and active versus passive (Wells and Petty, 1980; Coyle and Thorson, 2001).

Overall, this research has successfully put theories together in a combination that has not before been seen, and provided positive results that the suggested connections exist. This research therefore contributes to all the theories that have been reviewed in this paper, as these links have now been scientifically proven to exist. The theories that have been combined in this research have before been linked, but not previously as the present research has successfully done. This means, that the framework, which has been constructed in this paper, can be used by other researchers, who wish to take the findings from this research and examine them further, and perhaps add other theories to test other links.

5.3. Managerial Implications

The findings in this present research contribute to the real world by its clear results that show a cause-effect relationship between brand activation and attitude formation. The findings from this research are relatively easy to apply to real world cases, since the experiment was already based on a manipulation that imitates that of a professional real world advertisement. The results of this research are therefore more reliable for the marketeers and advertisers who wish to affect the formation of positive attitudes in their target group through interactive advertising.

The findings presented in this research are among the first of its kind to establish the relationship between interactivity and attitude formation in the area of marketing and advertisements in the way that this research has viewed interactivity between a brand and the consumer. These results can therefore be considered useful for practitioners as well as researchers. These findings show that if a marketer incorporates interactivity in his advertisements such as done in this research, he will be able to more effectively affect the formation of attitudes toward the brand compared to traditional non-interactive advertisements. This research therefore provides evidence for advertisers who already deploy this type of interactive advertising in the real world. This paper proves that if you wish to build strong positive attitudes toward your brand, a communication strategy that is build on a platform that allows for the consumer to interact with the brand is a great way to do this.

This research has therefore proven that by implementing interactivity in the form of decisions around the product or the brand through product related attributes, it is possible to influence the formation of attitudes toward the brand and toward the ad in a positive way. Furthermore, it was found that involvement with the product category affects the formation of attitudes toward the brand, though it did not show any interaction effects with the activation of the consumer. Practitioners can therefore rest assured that the level of involvement does not influence the recipient's reaction to the interactive element in the marketing. The attitudinal outcomes will therefore not differ depending on what the recipient's level of attitude is when he interacts with the brand.

5.4. Limitations

Like any other research, this paper also has its limitations, which limits its generalizability. One limitation is that it only involves static advertisements (i.e., print advertisements/banner ads). Its generalizability based on these grounds has to be taken with caution, as the effects might be slightly different on new digital media such as Instagram or Facebook. If there had been more resources for this research (i.e., time, competencies, and money), other experiments could have been conducted which could have tested brand activation with these new digital media. These experiments could have tested whether the effects would have been the same or different from the static options that were tested in this research.

Another natural limitation of a research with the resources as the present one is the scope of the experiment. The findings are based on a relatively small sample group of 79 students. As well as being a small sample size, caution should also be taken to the results found in this research, when it is only based on one experiment with one product category. Other possible cause-effect relationships might exist when the product category is changed.

A third limitation is related to the use of the fictitious brand. The cause-effect relationships that are presented in this research are based on the findings where a fictitious brand is used in the experiment. One should therefore be cautious when generalizing from the results in this research to real existing and well-established brands, as the cause-effect relationship might not be the same when the brand has already established attitudes in the minds of the consumers.

The last limitation is that the sample solely consists of university students, who cannot be considered as generalizable for the entire general population. This further restricts the generalizability of this research.

5.5. Directions for Further Research

This research has taken a great leap towards the beginning of research within the subject of brand activation and attitude formation. It has established a solid theoretical

framework for exploring the effects of brand activation, which can be applied by other researchers on their quest to dive deeper into this area of research on interactive advertisements. Many theoretical linkages have been established through the literature review. This research is therefore a good basis for more elaborate explanations on the relationship between interaction with a brand and the formation of attitudes toward the brand.

Researchers taking on this subject should look more in to how these effects occur in real life cases. A great start for this would be to find cases that apply brand activation in their campaigns. Especially, it would be of great interest to find cases that use the new digital media to create the brand activation experiences for the consumers. Such cases might be found on Instagram or other social media (e.g., the Mercedes case mentioned previously in chapter 1.3.1).

A real life test would also allow for the investigation of whether the cause-effect relationships that have been demonstrated in this research also apply to established brands. It is possible that the cause-effect relationships might change when the consumer already holds certain attitudes in his mind before interacting with the brand.

Similarly, future research should also study whether the effect differs depending on the media channel that the communication is provided through. Such tests could compare new digital and social media with other interactive media such as websites or other innovative interactive solutions such as out-door channels. This could shed light on whether the interaction has the same cause-effect relationships among all the different channels, or if they are different.

Another thing that future researchers within interactive advertising should take into consideration is testing different types of interactive tasks. This could be of interest in order to investigate whether different activation tasks have different cause-effect relationships compared to the one found in this research. It is possible to imagine that different types of tasks have different effects, also depending on what product category it is tested on. The initial findings in this paper does suggest that different tasks have different outcomes, as the results from the pre-test showed that the task used there did not have the same effect as the type of task used in the final experiment of this paper.

Future research could also test the endurance of the cause-effect relationships. It would be interesting to test how long the effects last. This was not tested in the present research as it was beyond the scope, but other researchers could take the studies from this research further and create a design that allows for the testing of attitudes over an extended time period, in order to see if the formed attitudes are able to stick better in the minds of the consumers, or if they dither after a short while.

5.6. Conclusion

This present research has been interested in understanding the effects of interactive advertisements on the formation of attitude. In the recent years, marketing has developed a lot, and advertisers have gradually tried to be innovative in ways that have involved a level of interactivity in their campaigns. This research therefore sat out to scientifically examine how such interactivity affects the formation of attitudes, and what happens underneath the surface in the consumers' subconsciousness when they interact with a brand.

A quantitative experimental approach was taken to answer the hypotheses related to the research question based on the reviewed theories. An experiment which manipulated the level of interactivity was designed. Two different ads were shown to the participants; one which encouraged the participants to interact by creating their own story from elements in the ad, and one that was passive. Two out of the four hypotheses were supported in the analysis of the data from the experiment. The findings showed that the formation of attitude toward the brand and the ad is significantly affected in a more positive way when the participants interacted with the brand compared to when they did not interact with the brand. This supported the first two hypotheses. It was also found, that the level of involvement with the product category did not have any interaction effects with the level of interactivity. This was found when rejecting the last two hypotheses.

This research has therefore successfully designed an experiment that demonstrated the effects of interactivite advertisements on the formation of attitudes. This research is therefore important to this new area of marketing research, and can be used in further

research on this area to broaden the findings from this research even more.

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7. Appedices

7.1. Appendix A: Survey

Frequencies				
		sex	age	prof
N	Valid	26	26	26
	Missing	0	0	0
Mean		1,54	2,92	1,85
Std. Error of Mean		,100	,156	,072
Median		2,00	3,00	2,00
Mode		2	3	2
Std. Deviation		,508	,796	,368
Variance		,258	,634	,135
Skewness		-,164	2,204	-2,038
Std. Error of Skewness		,456	,456	,456
Kurtosis		-2,145	8,674	2,328
Std. Error of Kurtosis		,887	,887	,887
Range		1	4	1
Minimum		1	2	1
Maximum		2	6	2
Sum		40	76	48
Percentiles	25	1,00	2,75	2,00
	50	2,00	3,00	2,00
	75	2,00	3,00	2,00

Sex					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	mand	12	46,2	46,2	46,2
	kvinde	14	53,8	53,8	100,0
	Total	26	100,0	100,0	

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20	6	23,1	23,1	23,1
	21-25	18	69,2	69,2	92,3
	26-30	1	3,8	3,8	96,2
	Over 35	1	3,8	3,8	100,0
	Total	26	100,0	100,0	

Profession					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Studerende uden job	4	15,4	15,4	15,4
	Studerende med job	22	84,6	84,6	100,0
	Total	26	100,0	100,0	

Product category frequencies							
		ure_total	mobil_total	sko_ total	computer_total	parfume_total	møbler_total
N	Valid	26	26	26	26	26	26
	Missing	0	0	0	0	0	0
Mean		4,973	5,658	4,804	5,654	4,196	5,381
Std. Error of Mean		,257	,224	,273	,229	,222	,198
Median		5,150	5,850	4,750	5,850	4,000	5,250
Mode		6,00	7,00	4,00a	7,00	3,80a	5,10
Std. Deviation		1,310	1,143	1,390	1,166	1,130	1,011
Variance		1,715	1,307	1,932	1,359	1,276	1,022
Skewness		-,554	-,833	-,385	-,376	,408	-,192
Std. Error of Skewness		,456	,456	,456	,456	,456	,456
Kurtosis		-,122	,448	-,163	-1,066	,748	-,124
Std. Error of Kurtosis		,887	,887	,887	,887	,887	,887
Range		5,20	4,30	5,20	3,60	4,90	4,00
Minimum		1,80	2,70	1,80	3,40	2,10	3,00
Maximum		7,00	7,00	7,00	7,00	7,00	7,00
Sum		129,30	147,10	124,90	147,00	109,10	139,90
Percentiles	25	3,975	5,075	4,000	4,750	3,775	4,750
	50	5,150	5,850	4,750	5,850	4,000	5,250
	75	6,000	6,750	5,850	7,000	4,650	6,275
a. Multiple modes exist. The smallest value is shown							

7.2. Appendix B: Pre-Test

Experimental group

Text copy: "Gør det muligt. Vis os din kreativitet - find på vores nye slogan. Den nye Phone X Y1 er et gennembrud i mobilverdenen. Med den hurtigste Snapdragon processor, seneste Android Lollipop og berøringsfølsomme krystalglas er den lynhurtig, men samtidig også bygget til at være hårdfør. Den 5,2" store skærm og kameraet på 20MP leverer de skarpeste bileder. Alt sammen lige ved hånden."

Control group

Text copy: "Den nye Phone X Y1 er et gennembrud i mobilverdenen. Med den hurtigste Snapdragon processor, seneste Android Lollipop og berøringsfølsomme krystalglas er den lynhurtig, men samtidig også bygget til at være hårdfør. Den 5,2" store skærm og kameraet på 20MP leverer de skarpeste bileder. Alt sammen lige ved hånden."

Frequencies					
		Er du mand eller kvinde?	Hvor gammel er du?	Hvad er din profession?	Hvad er din senest afsluttede uddannelse?
N	Valid	50	50	50	49
	Missing	0	0	0	1
Mean		1,52	3,06	1,78	2,84
Std. Error of Mean		,071	,078	,059	,150
Median		2,00	3,00	2,00	2,00
Mode		2	3	2	2
Std. Deviation		,505	,550	,418	1,048
Variance		,255	,302	,175	1,098
Skewness		-,083	,041	-1,394	,680
Std. Error of Skewness		,337	,337	,337	,340
Kurtosis		-2,078	,489	-,061	-1,139
Std. Error of Kurtosis		,662	,662	,662	,668
Range		1	2	1	3
Minimum		1	2	1	2
Maximum		2	4	2	5
Percentiles	25	1,00	3,00	2,00	2,00
	50	2,00	3,00	2,00	2,00
	75	2,00	3,00	2,00	4,00

Er du mand eller kvinde?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mand	24	48,0	48,0	48,0
	Kvinde	26	52,0	52,0	100,0
	Total	50	100,0	100,0	

Hvor gammel er du?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20	6	12,0	12,0	12,0
	21-25	35	70,0	70,0	82,0
	26-30	9	18,0	18,0	100,0
	Total	50	100,0	100,0	

Hvad er din profession?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Studerende uden job	11	22,0	22,0	22,0
	Studerende med job	39	78,0	78,0	100,0
	Total	50	100,0	100,0	

Hvad er din senest afsluttede uddannelse?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Gymnasiel uddannelse	28	56,0	57,1	57,1
	Kort videregående uddannelse (2-3 år)	4	8,0	8,2	65,3
	Mellemlang videregående uddannelse (3-4 1/2 år)	14	28,0	28,6	93,9
	Lang videregående uddannelse (5-6 år)	3	6,0	6,1	100,0
	Total	49	98,0	100,0	
Missing	System	1	2,0		
Total		50	100,0		

Reliability Statistics - Manipulation check		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,846	,846	3

Inter-Item Correlation Matrix - Manipulation check			
	Kedeligt-Spændende	Ikke involverende-Involverende	Ikke engagerende-Engagerende
Kedeligt-Spændende	1,000	,532	,666
Ikke involverende-Involverende	,532	1,000	,740
Ikke engagerende-Engagerende	,666	,740	1,000

Group Statistics					
active_passive		N	Mean	Std. Deviation	Std. Error Mean
Manipulation check	Passive	28	4,143	1,149	,217
	Active	22	3,848	1,344	,287

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
Manipulation check	Equal variances assumed	,621	,434	,834	48	,408	,294	,353	-,415	1,004
	Equal variances not assumed			,819	41,420	,418	,294	,360	-,432	1,020

Reliability Statistics - Attitude toward the brand		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,825	,831	10

Inter-Item Correlation Matrix - Attitude toward the brand										
	Ikke effektivt-Effektivt	Ikke nyttigt-Nyttigt	Ikke funktionelt-Funktionelt	Ikke nødvendigt-Nødvendigt	Ikke praktisk-Praktisk	Ikke sjovt-Sjovt	Kedeligt-Spændende	Ikke fornøjeligt-Fornøjeligt	Ikke betagende-Betagende	Ikke underholdende-Underholdende
Ikke effektivt-Effektivt	1,000	,840	,742	,324	,457	,253	,234	,398	,325	,064
Ikke nyttigt-Nyttigt	,840	1,000	,792	,266	,451	,233	,342	,321	,308	,068
Ikke funktionelt-Funktionelt	,742	,792	1,000	,221	,536	,104	,378	,222	,206	-,234
Ikke nødvendigt-Nødvendigt	,324	,266	,221	1,000	,519	,301	,190	,412	,433	,033
Ikke praktisk-Praktisk	,457	,451	,536	,519	1,000	,278	,229	,383	,235	-,068
Ikke sjovt-Sjovt	,253	,233	,104	,301	,278	1,000	,567	,672	,578	,201
Kedeligt-Spændende	,234	,342	,378	,190	,229	,567	1,000	,447	,547	-,009
Ikke fornøjeligt-Fornøjeligt	,398	,321	,222	,412	,383	,672	,447	1,000	,705	,258
Ikke betagende-Betagende	,325	,308	,206	,433	,235	,578	,547	,705	1,000	,060
Ikke underholdende-Underholdende	,064	,068	-,234	,033	-,068	,201	-,009	,258	,060	1,000

Descriptives								
Attitude toward the brand								
Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Control	28	4,164	1,041	,197	3,761	4,568	2,20	6,60
Experimental	22	3,986	,892	,190	3,591	4,382	2,00	5,80
Total	50	4,086	,973	,138	3,810	4,362	2,00	6,60

Test of Homogeneity of Variances			
Attitude toward the brand			
Levene Statistic	df1	df2	Sig.
,469	1	48	,497

ANOVA					
Attitude toward the brand					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,390	1	,390	,407	,527
Within Groups	45,990	48	,958		
Total	46,380	49			

Robust Tests of Equality of Means				
Attitude toward the brand				
	Statistica	df1	df2	Sig.
Welch	,423	1	47,595	,519
Brown-Forsythe	,423	1	47,595	,519
a. Asymptotically F distributed.				

7.3. Appendix C: Experiment

Control group

Experimental group

Statistics					
		Er du mand eller kvinde?	Hvor gammel er du?	Hvad er din profession?	Hvad er din senest afsluttede uddannelse?
N	Valid	79	79	79	79
	Missing	0	0	0	0
Mean		1,77	3,51	2,11	3,52
Std. Error of Mean		,047	,086	,122	,133
Median		2,00	3,00	2,00	4,00
Mode		2	3	2	4
Std. Deviation		,422	,766	1,086	1,186
Variance		,178	,586	1,179	1,407
Skewness		-1,323	,593	2,049	-,212
Std. Error of Skewness		,271	,271	,271	,271
Kurtosis		-,257	-,325	5,793	-1,497
Std. Error of Kurtosis		,535	,535	,535	,535
Minimum		1	2	1	2
Maximum		2	5	7	5
Percentiles	25	2,00	3,00	2,00	2,00
	50	2,00	3,00	2,00	4,00
	75	2,00	4,00	2,00	4,00

Er du mand eller kvinde?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mand	18	22,8	22,8	22,8
	Kvinde	61	77,2	77,2	100,0
	Total	79	100,0	100,0	

Hvor gammel er du?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20	3	3,8	3,8	3,8
	21-25	43	54,4	54,4	58,2
	26-30	23	29,1	29,1	87,3
	31-35	10	12,7	12,7	100,0
	Total	79	100,0	100,0	

Hvad er din profession?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Studerende uden job	19	24,1	24,1	24,1
	Studerende med job	45	57,0	57,0	81,0
	Fuldtidsarbejder	9	11,4	11,4	92,4
	Deltidsarbejder	1	1,3	1,3	93,7
	Arbejdsløs	4	5,1	5,1	98,7
	Andet	1	1,3	1,3	100,0
	Total	79	100,0	100,0	

Hvad er din senest afsluttede uddannelse?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Gymnasiel uddannelse	26	32,9	32,9	32,9
	Kort videregående uddannelse (2-3 år)	5	6,3	6,3	39,2
	Mellemlang videregående uddannelse (3-4 1/2 år)	29	36,7	36,7	75,9
	Lang videregående uddannelse (5-6 år)	19	24,1	24,1	100,0
	Total	79	100,0	100,0	

Reliability Statistics - Manipulation check		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,878	,878	3

Inter-Item Correlation Matrix - Manipulation check			
	Uengagerende-Engagerende	Ikke aktiverende-Aktiverende	Ikke involverende-Involverende
Uengagerende-Engagerende	1,000	,633	,708
Ikke aktiverende-Aktiverende	,633	1,000	,777
Ikke involverende-Involverende	,708	,777	1,000

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Manipulation check	Experimental	40	4,300	1,509	,239
	Control	39	3,154	1,624	,260

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Manipulation check	Equal variances assumed	1,089	,300	3,251	77	,002	1,146	,353	,444	1,848
	Equal variances not assumed			3,248	76,260	,002	1,146	,353	,443	1,849

Reliability Statistics - Attitude toward the brand		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,938	,938	4

Inter-Item Correlation Matrix - Attitude toward the brand				
	Jeg kan slet ikke lide det-Jeg kan rigtig godt lide det	Lav kvalitet-Høj kvalitet	Ikke positivt-Positivt	Ikke tiltalende-Tiltalende
Jeg kan slet ikke lide det-Jeg kan rigtig godt lide det	1,000	,731	,774	,839
Lav kvalitet-Høj kvalitet	,731	1,000	,744	,788
Ikke positivt-Positivt	,774	,744	1,000	,874
Ikke tiltalende-Tiltalende	,839	,788	,874	1,000

Descriptives								
Attitude toward the brand								
Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Control	39	3,077	1,603	,257	2,557	3,597	1,00	7,00
Experimental	40	3,850	1,171	,185	3,476	4,224	1,00	6,00
Total	79	3,468	1,445	,163	3,145	3,792	1,00	7,00

Test of Homogeneity of Variances			
Attitude toward the brand			
Levene Statistic	df1	df2	Sig.
7,870	1	77	,006

ANOVA					
Attitude toward the brand					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11,802	1	11,802	6,013	,016
Within Groups	151,119	77	1,963		
Total	162,921	78			

Robust Tests of Equality of Means				
Attitude toward the brand				
	Statistica	df1	df2	Sig.
Welch	5,967	1	69,497	,017
Brown-Forsythe	5,967	1	69,497	,017
a. Asymptotically F distributed.				

Reliability Statistics - Involvement		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,928	,929	10

Inter-Item Correlation Matrix - Involvement											
	Ikke vigtige-Vigtige	Kedelige-Interessante	Irelevante-Relevante	Ikke spændende-Spændende	Betyder ikke noget-Betyder meget for mig	Ikke tiltalende-Tiltalende	Trivielle-Fascinerende	Værdiløse-Værdifulde	Ikke involverende-Involverende	Ikke nødvendige-Nødvendige
Ikke vigtige-Vigtige	1,000	,601	,656	,567	,789	,613	,497	,588	,530	,578
Kedelige-Interessante	,601	1,000	,647	,890	,646	,683	,604	,422	,580	,264
Irelevante-Relevante	,656	,647	1,000	,582	,703	,525	,501	,632	,500	,517
Ikke spændende-Spændende	,567	,890	,582	1,000	,627	,751	,724	,473	,621	,294
Betyder ikke noget-Betyder meget for mig	,789	,646	,703	,627	1,000	,646	,555	,611	,492	,563
Ikke tiltalende-Tiltalende	,613	,683	,525	,751	,646	1,000	,762	,481	,570	,384
Trivielle-Fascinerende	,497	,604	,501	,724	,555	,762	1,000	,618	,436	,337
Værdiløse-Værdifulde	,588	,422	,632	,473	,611	,481	,618	1,000	,392	,642
Ikke involverende-Involverende	,530	,580	,500	,621	,492	,570	,436	,392	1,000	,339
Ikke nødvendige-Nødvendige	,578	,264	,517	,294	,563	,384	,337	,642	,339	1,000

Descriptives								
Involvement with mobile phones								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Control	39	5,072	1,237	,198	4,671	5,473	1,00	7,00
Experimental	40	5,245	1,084	,171	4,898	5,592	2,30	7,00
Total	79	5,159	1,158	,130	4,900	5,419	1,00	7,00

Test of Homogeneity of Variances			
Involvement with mobile phones			
Levene Statistic	df1	df2	Sig.
,231	1	77	,632

ANOVA					
Involvement with mobile phones					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,592	1	,592	,439	,510
Within Groups	103,978	77	1,350		
Total	104,570	78			

Robust Tests of Equality of Means				
Involvement with mobile phones				
	Statistica	df1	df2	Sig.
Welch	,437	1	75,150	,510
Brown-Forsythe	,437	1	75,150	,510
a. Asymptotically F distributed.				

Descriptive Statistics			
Dependent Variable:	Attitude toward the brand		
Group	Mean	Std. Deviation	N
Control	3,077	1,603	39
Experimental	3,850	1,171	40
Total	3,468	1,445	79

Levene's Test of Equality of Error Variances			
Dependent Variable:	Attitude toward the brand		
F	df1	df2	Sig.
5,243	1	77	,025
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + involvement_m + group			

ANCOVA Tests of Between-Subjects Effects						
Dependent Variable:	Attitude toward the brand					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	24,443a	2	12,221	6,707	,002	,150
Intercept	10,320	1	10,320	5,664	,020	,069
involvement_m	12,641	1	12,641	6,938	,010	,084
group	9,973	1	9,973	5,473	,022	,067
Error	138,478	76	1,822			
Total	1113,250	79				
Corrected Total	162,921	78				
a. R Squared = ,150 (Adjusted R Squared = ,128)						

Parameter Estimates							
Dependent Variable:	Attitude toward the brand						
Parameter	B	Std. Error	t	Sig.	95% Confidence Interval		Partial Eta Squared
					Lower Bound	Upper Bound	
Intercept	2,021	,726	2,783	,007	,574	3,468	,092
involvement_m	,349	,132	2,634	,010	,085	,612	,084
[group=,00]	-,713	,305	-2,340	,022	-1,319	-,106	,067
[group=1,00]	0a						
a. This parameter is set to zero because it is redundant.							

Estimates				
Dependent Variable:	Attitude toward the brand			
Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control	3,108a	,216	2,676	3,539
Experimental	3,820a	,214	3,395	4,246
a. Covariates appearing in the model are evaluated at the following values: Involvement with mobile phones = 5,1595.				

Pairwise Comparisons						
Dependent Variable:	Attitude toward the brand					
(I) Group		Mean Difference (I-J)	Std. Error	Sig.b	95% Confidence Interval for Differenceb	
					Lower Bound	Upper Bound
Control	Experimental	-,713*	,305	,022	-1,319	-,106
Experimental	Control	,713*	,305	,022	,106	1,319
Based on estimated marginal means						
*. The mean difference is significant at the						
b. Adjustment for multiple comparisons: Sidak.						

Univariate Tests						
Dependent Variable:	Attitude toward the brand					
	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	9,973	1	9,973	5,473	,022	,067
Error	138,478	76	1,822			
The F tests the effect of Group. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.						

Tests of the Regression of Slopes						
Dependent Variable:	Attitude toward the brand					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	24,537a	3	8,179	4,433	,006	,151
Intercept	10,401	1	10,401	5,637	,020	,070
group	,964	1	,964	,522	,472	,007
involvement_m	12,207	1	12,207	6,616	,012	,081
group * involvement_m	,094	1	,094	,051	,822	,001
Error	138,384	75	1,845			
Total	1113,250	79				
Corrected Total	162,921	78				
a. R Squared = ,151 (Adjusted R Squared = ,117)						

Reliability Statistics - Attitude toward the ad		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,912	,914	6

Inter-Item Correlation Matrix - Attitude toward the ad						
	Ikke kreativ-Kreativ	Kedelig-Spændende	Uæstetisk-Æstetisk	Smagløs-Smagfuld	Uinteressant-Interessant	Dårlig-God
Ikke kreativ-Kreativ	1,000	,758	,534	,521	,650	,689
Kedelig-Spændende	,758	1,000	,537	,547	,739	,737
Uæstetisk-Æstetisk	,534	,537	1,000	,667	,524	,552
Smagløs-Smagfuld	,521	,547	,667	1,000	,668	,693
Uinteressant-Interessant	,650	,739	,524	,668	1,000	,767
Dårlig-God	,689	,737	,552	,693	,767	1,000

Descriptives								
Attitude toward the ad								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Control	39	2,953	1,345	,215	2,517	3,389	1,00	5,33
Experimental	40	3,992	1,302	,206	3,575	4,408	1,33	7,00
Total	79	3,479	1,415	,159	3,162	3,796	1,00	7,00

Test of Homogeneity of Variances			
Attitude toward the ad			
Levene Statistic	df1	df2	Sig.
,556	1	77	,458

ANOVA					
Attitude toward the ad					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21,304	1	21,304	12,167	,001
Within Groups	134,828	77	1,751		
Total	156,132	78			

Robust Tests of Equality of Means				
Attitude toward the ad				
	Statistica	df1	df2	Sig.
Welch	12,156	1	76,742	,001
Brown-Forsythe	12,156	1	76,742	,001
a. Asymptotically F distributed.				

Descriptive Statistics			
Dependent Variable:	Attitude toward the ad		
Group	Mean	Std. Deviation	N
Control	2,953	1,345	39
Experimental	3,992	1,302	40
Total	3,479	1,415	79

Levene's Test of Equality of Error Variancesa			
Dependent Variable:	Attitude toward the ad		
F	df1	df2	Sig.
,757	1	77	,387
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + involvement_m + group			

Tests of Between-Subjects Effects						
Dependent Variable:	Attitude toward the ad					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	23,598a	2	11,799	6,766	,002	,151
Intercept	27,265	1	27,265	15,635	,000	,171
involvement_m	2,295	1	2,295	1,316	,255	,017
group	20,147	1	20,147	11,553	,001	,132
Error	132,533	76	1,744			
Total	1112,250	79				
Corrected Total	156,132	78				
a. R Squared = ,151 (Adjusted R Squared = ,129)						

Parameter Estimates							
Dependent Variable:	Attitude toward the ad						
Parameter	B	Std. Error	t	Sig.	95% Confidence Interval		Partial Eta Squared
					Lower Bound	Upper Bound	
Intercept	3,212	,711	4,521	,000	1,797	4,628	,212
involvement_m	,149	,130	1,147	,255	-,109	,406	,017
[group=,00]	-1,013	,298	-3,399	,001	-1,606	-,419	,132
[group=1,00]	0a						
a. This parameter is set to zero because it is redundant.							

Estimates				
Dependent Variable:	Attitude toward the ad			
Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control	2,966a	,212	2,544	3,388
Experimental	3,979a	,209	3,563	4,395
a. Covariates appearing in the model are evaluated at the following values: Involvement with mobile phones = 5,1595.				

Pairwise Comparisons						
Dependent Variable:	Attitude toward the ad					
(I) Group		Mean Difference (I-J)	Std. Error	Sig.b	95% Confidence Interval for Differenceb	
					Lower Bound	Upper Bound
Control	Experimental	-1,013*	,298	,001	-1,606	-,419
Experimental	Control	1,013*	,298	,001	,419	1,606
Based on estimated marginal means						
*. The mean difference is significant at the						
b. Adjustment for multiple comparisons: Bonferroni.						

Univariate Tests						
Dependent Variable:	Attitude toward the ad					
	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	20,147	1	20,147	11,553	,001	,132
Error	132,533	76	1,744			
The F tests the effect of Group. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.						

Tests of the Regression of Slopes						
Dependent Variable:	Attitude toward the ad					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	24,034a	3	8,011	4,549	,006	,154
Intercept	25,895	1	25,895	14,702	,000	,164
group	,105	1	,105	,060	,808	,001
involvement_m	2,504	1	2,504	1,422	,237	,019
group * involvement_m	,436	1	,436	,247	,620	,003
Error	132,097	75	1,761			
Total	1112,250	79				
Corrected Total	156,132	78				
a. R Squared = ,154 (Adjusted R Squared = ,120)						