How can level of effort and decisional control in taking part of an ad influence brand attitude, ad attitude and purchase intention?

In contrast to the widespread assumption that consumer effort are bad for business, recent research has demonstrated that companies could in fact benefit from demanding *more* effort from their customers. Although equity and dissonance theory stipulates that consumers tend to justify increased levels of effort by cognitively inflating their perceptions of the product and brand, this effect has yet never been examined on online video advertising with real brands as stimulus. In order to test the concept of consumer effort for real life online video advertisements, a quantitative experiment was conducted. For a total sample of 388 respondents, we manipulated consumer effort in regards of decisional control, and used real life advertisements of both high and low advertiser effort as stimulus.

The findings demonstrate that consumer effort in general yields higher attitudes towards the ad and the brand, and that the effect is mediated by the consumer's perception of an equitable exchange. In addition, the study finds that the positive effect of increasing consumer effort in online video advertising is significantly greater when the consumers perceive themselves to be in control of the invested effort. The study contributes to the uncharted literature on consumer effort in advertising, and suggests that advertisers could fruitfully aim to incorporate elements of controlled effort to their advertising. In addition, the advertising industry in general would benefit if the concept of consumer effort were also introduced on a higher platform level.

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1. Introduction

This introductory chapter motivates why consumer effort within online advertising is chosen as a research topic, and why it becomes especially important within the online setting of today. The purpose of the study is presented together with the research questions and the expected knowledge contribution. Finally, an outline of the study at hand is provided.

1.1 Background - Online Advertising Threatened by Ad Avoidance

As the media landscape has evolved, online media users have increasingly become empowered and now obtain more control over media consumption than ever before (Chunsik Lee, 2011). With global competition, exploding advertising clutter and new media and technologies, consumers have become aware that they can both avoid and seek out advertising as they prefer, and that their attention has a high value to advertisers (Rosengren & Dahlén, 2013). This has resulted in an ad avoidance behaviour among consumers, who simply ignore or mechanically avoid ads.

The situation is especially alarming for online media houses, struggling to get profits from their advertising spaces while more than 5 per cent of the world's online population use software such as Adblock for mechanically avoid what they perceive as intrusive advertisements (Financial Times). To further stress the alarming situation, the number of people using blocking software rose by 70 per cent in 2014 (ibid). In an interview with Björn Wallenberg, digital editor at *Veckans Affärer*, he stressed that ad avoidance behaviour is one of the greatest challenges for the online media industry, and confirmed that many advertisers are asking for the development of new advertising experiences as a way to increase the efficiency of their advertising.

A common way among media houses and advertisers to tackle this rapidly increasing cognitive and mechanic ad avoidance behaviour has been to lower the effort for the viewer in taking part of the advertisement. This strategy has resulted in ad formats both despised and appreciated by consumers; auto playing advertisements, for instance,

demand zero effort from the consumer but may create negative emotions, while YouTube's TrueView format with skippable ads received more positive reactions.

Although the idea of lowering consumer effort might sound reasonable, some recent studies by Lala and Dahlén have demonstrated that it may actually be better to do the opposite: making consumer invest *more* effort.

1.2 Increased Consumer Effort as a Solution?

The strategy of lowering effort as a way to reach consumers is based on the assumption that asking consumers to devote more time and effort to the business could be nothing but bad (Lala et al, 2015). While academic literature consistently presents consumer expenditures of time and effort in shopping as having undesirable consequences on attitude toward the product and purchase intention, Lala et al demonstrated that making consumers spend more effort may actually yield *positive* consequences for the company. The difficulty in getting a product, like having to wait in line to enter a club, may in fact reflect quality (Giebelhausen et al., 2011), and those who do invest time and effort will thus be likely to pay a higher price. The authors argue that instead of aiming at reducing the consumer effort, companies would be better of doing the opposite; finding ways to get consumers to invest *more* effort in shopping.

In another study, Dahlén (forthcoming) examines the relationship between consumer effort and advertiser effort, by applying the notion of equitable exchange to advertising. Dahlén views the relation between consumer and advertiser as an exchange, and argues that individuals rate the exchange based on the relationship between what they give (time and effort) versus what they receive (their perceived value of the advertisement). In order for attitudes and intentions to be favourable, consumers must perceive the exchange as equitable or fair (Dahlén, forthcoming). The study finds that advertiser effort enhances perceived equitable exchange which, in turn, generates more favourable ad and brand ratings. Although the main focus in his study is advertiser effort, Dahlén concludes that the positive impact of advertiser effort is in fact influenced by the level of effort invested by the consumer.

1.3 Problematization and Research Gap

The effect of consumer effort on behaviour and intentions is far from agreed upon among researchers. While Lala et al (2015) argue that companies could successfully increase consumer effort as a way to enhance willingness to buy and amount to pay, other researchers make opposite predictions. For instance, Reczek et al. (2014) found that consumers who invested a large amount of effort in a shopping experience expected to pay a *lower* price and were *less* willing to buy new products, a prediction contrary to that made by Lala et al.

While much previous research on consumer effort has been focusing on shopping experiences and loyalty programs (Kivetz, 2003; Norton et al., 2012), Dahlén contribute by extending the research to the field of advertising. He examines how advertiser effort and consumer effort interrelates and influence consumers attitudes and intentions towards print advertisements, and argues that the perceived level of *equitable exchange* mediates the positive effects. Although Dahlén examines the effect of consumer effort in relation to advertiser effort for print ads, no one has yet - to the best of our knowledge - studied the effect of consumer effort in online video advertising.

While the findings from Lala and Dahlén are indeed as accurate as interesting, they do lack somewhat in generalizability. Lala uses a small student sample in a laboratory setting, and a single product category, while Dahlén only manipulate consumer effort in one way, without any element of decisional control. In addition, both studies use fake brands, which decreases the ecological validity of the findings. Both researchers suggest that further research should extend their finding by exploring the effects on real life brands with products from a broader range of categories, which is within the scope of this study.

In addition to striving for higher ecological validity, this study also aims at investigating the effects on a more topical type of advertising; online video advertisement. Digital advertising is growing rapidly and expected to account for 38% of global ad spending in 2018. Among digital advertising, videos are the fastest growing media with an expected CAGR of 23.8% to 2018 (PWC). This rapid growth in combination with increasing ad avoidance behaviour, makes the lack of knowledge about the effects of consumer effort

indeed alarming. The area of research for the study at hand should therefore be seen as highly important and topical.

As a result of this gap in the academic research, it is currently unknown whether or not online video advertisers could achieve higher brand ratings by demanding more effort from the consumer. Thus we have identified an important gap in existing research, which we with this study aim to fill.

Figure 1: Model of Research Gap



1.4 The Purpose of the Study

The main purpose of the study is to investigate whether the findings by Lala et al (2015) and Dahlén (forthcoming) are applicable for online video ads in an ecologically valid environment. Thus, the study at hand will set out to answer the following research question:

RQ1: Can an advertiser achieve higher consumer evaluations by increasing the level of consumer effort in taking part of the advertisement?

RQ2: How can consumer effort be manipulated to further increase the positive impact on attitudes and intentions?

RQ3: What is the underlying mechanism influencing the hypothesized effects from consumer effort on evaluations and intentions?

1.5 Expected Knowledge Contribution

We aim to answer the three research questions by conducting a between-subject experiment in which we manipulate consumer effort for three groups. Respondents will be exposed to a video advertisement of either high or low advertiser effort, and then

answer a questionnaire regarding their attitudes, intentions and perception of equity. The mean values will then be compared between the two manipulation groups and the control group, in order to examine the effect of consumer effort.

By doing so, we expect to be able to contribute to the rather unexplored area of consumer effort in online advertising. Drawing on recent research by Lala and Dahlén, we hope to increase the understanding of how consumer effort influences consumer responses for (i) real brands in (ii) online video advertising. With our findings from the study, we expect to be able to give valuable practical support to practitioners within advertising on how to stimulate and manipulate consumer effort as a strategy to increase the efficiency of their advertising. Finally, we also hope that this study will inspire other researchers to invest some effort in future investigations within the uncharted field of consumer effort in advertising.

1.6 Delimitations

Due to restrictions in resources and time, the study at hand has some delimitations which we will account for in this section. Given the main purpose of the study, we focused on investigating consumer effort's influence on consumers' evaluation of online video advertisement. In order to assess the effect of consumer effort, we designed two manipulations in line with previous research. However, this reduces the generalizability to these specific manipulations. Therefore, we cannot draw any general conclusions for consumer effort as such, but rather state that the effect from these particular manipulations of consumer effort may have positive influence on attitudes towards the advertisement and the brand. In addition, although we used a total number of 15 advertisements of high or low advertiser effort as stimuli, we are not entitled to state that the identified positive effect from our manipulations of consumer effort will be valid for all types of online video advertisements. For instance, the stimuli used in the study ranged in length of between 30 - 70 seconds, and it is not unlikely that both shorter and longer ads could generate different outcomes than the ones identified. Furthermore, the experiment was conducted with a representative sample of the Swedish population, and we can thus not draw any conclusions regarding whether the effects from consumer effort should be expected to yield the same results for other nationalities as well. A final limitation regards the measurements used to examine the effects of consumer effort, as

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we limited the number of measurements to only include consumers' perceptions of equity, attitudes towards the brand and advertisement and their purchase intentions.

1.7 Thesis Outline

In this introductory chapter we have introduced the purpose of the study, identified an important research gap and presented the three research questions which we aim to answer. The following chapter presents the theoretical framework on which the study is based, with a review of previous relevant research. Thereafter the hypotheses of the study are generated and further described. In the third chapter we discuss the methodology of the study, and present the scientific approach and research design. In addition, we describe the preparatory work involving two pre-studies, and also account for the collection and quality of data. In the subsequent chapter we present the results of the empirical analysis, from which we decide whether to accept or reject the seven hypotheses. Finally, we discuss our findings and elaborate on suggested implications for practitioners. Thereafter we conclude by discussing relevant criticism of the study and present our suggestions for future research.

2. Theoretical Framework and Hypotheses Generation

The following chapter outlines the theoretical framework for this study. Previous research and findings will be presented followed by a review of the theoretical foundation of consumer effort, equitable exchange and dissonance theory, from which the hypotheses are derived. Lastly all hypotheses will be summarized in a comprehensive table.

2.1 The Consumer Effort Construct

Previous research on consumer effort as a resource has mainly focused on the purchasing process, suggesting that effort could be both physical and cognitive (Saini et al., 2010). While physical effort could for instance involve transporting oneself to a specific store, cognitive effort may appear when a consumer actively evaluates a set of alternative brands (Lala et al, 2015). Although the distinction between time and effort is sometimes blurred - such as walking for an hour to a store -, Lala et al argue that time and effort are ecologically confounded, as it commonly takes time to put in effort and vice versa. Based on this reasoning, research on consumer effort tend to not make a distinction between time and effort (Okada, 2005).

Recent research has examined the signalling effect from effort on choices made *before* the effort is invested, and found that consumers sometimes counterintuitively seek more effortful experiences, for instance when they perceive a task as too easy (Schrift et al., 2011), when higher levels of effort is signalling higher quality (Giebelhausen et al., 2011) and when effort signals greater meaning of the activity (Olivola & Shafir, 2013).

In contrast, Lala et al examined how the consumer behaviour in the purchase decision is influenced *after* the effort has been invested, and found that respondents who spent more effort in evaluating different computer brands had higher purchase intention - although not statistically significant - and were willing to pay significantly more for the product. In addition, the authors revealed that the effect of consumer effort was influenced by the level of control over the effort.

2.2 The Role of Decisional Control

Decisional control is defined as the opportunity to choose freely among various possible actions (Lala et al, 2015), and has been found to have great influence on consumer behaviour. In an experiment by Schoorman and Holahan (1996), a sense of control over the decision to spend money was found to make participants more prone to commit sunk cost errors, i.e being biased by previous investments when taking new investment decisions.

The relation between decisional control and cognitive distortion was demonstrated in an experiment by Zhang et al (2011), who examined how participants' perceptions of a personal goal was influenced by whether or not their investment in pursuing that specific goal was made voluntarily (high control over the decision) or imposed. The authors found that participants who had control over the decision to invest effort in achieving their goal, subsequently valued the goal higher as they invested more effort, while the effect was the opposite for participants that were imposed to invest (Zhang et al, 2011). Drawing on these findings, Lala et al hypothesize and also attest that the buying behaviour of consumers who don't perceived themselves to have control over the effort is not influenced by invested effort to the same extent as when decisional control is present.

2.3 Equity and Dissonance in Attitude Formation

An important field of research for the thesis at hand is to understand how affective and conative behaviour is influenced by higher consumer effort levels. Lala et al argue that the effect from consumer effort on buying behaviour within a purchasing situation is influenced by "self-justification", i.e consumers justifying their invested effort as a strategy to fulfil the desire to make good decisions. In addition, Staw (1981) demonstrates that when decisional control is high, individuals have even greater need to be correct and may thus cognitively distort their perceptions as a way to justify effort investments.

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Dahlén on the other hand, explains the identified effect from advertiser effort and consumer effort by applying equity theory, which was developed by Adams (1965) drawing on dissonance theory. Equity theory stipulates that people judge the outcome of an exchange by comparing the ratio of their outcomes and inputs to the corresponding ratio of the other part in the exchange. When the focal person's ratio between outcome and inputs is lower than the exchange partner's, s/he is under rewarded and is thus expected to feel anger and resentment, while the opposite situation (over reward) is anticipated to generate feelings of guilt (Lapidus & Pinkerton, 1995).

While dissonance theory do not make the same distinctions between inputs and outcomes as equity theory, the expected effects of an inequitable exchange are rather similar for both theories (Ajzen, 1982). A perception of inequity (positive or negative) is thought to result in distress and tension, which the person will aim to reduce in order to reach a balanced and equitable exchange (Adams, 1965). According to Ajzen (1982) the tension is a function of the perceived inequity; the more inequitable the exchange is perceived to be, the more motivated will the person be to restore an equitable exchange.

Dissonance theory and equity theory stipulates three viable strategies for reducing inequity and tension: increase or reduce one's own inputs or outcomes, increase or reduce the exchange partner's inputs or outcomes or decide to leave the inequitable exchange (Adams, 1965; Webster et al, 2010). In the context of the study at hand however - consuming an advertisement - neither distortion of the exchange partner's ratio nor leaving the exchange are viable strategies. Instead, we are focusing on how consumers may use cognitive distortion as a strategy to restore equity.

In the case of over reward, one can reduce the perceived dissonance and inequity by developing more favorable attitude towards the task or product in the exchange. By inflating one's perception, the under rewarded effort becomes justified. In contrast, a situation of over reward can be resolved by cognitively distorting the perceptions and develop more negative attitudes toward the exchange (Ajzen, 1982).

Thus, equity theory and dissonance suggest that over reward could yield lower attitudes toward a task or product, while a situation of under reward should generate higher

attitudes. These effects was demonstrated in early research, as Weick (1964) showed how under reward generated positive attitude towards the specific experiment, and Adams (1965) found under rewarded subjects to inflate their attitude towards the task in the experiment.

2.4 Hypotheses Generation

As previously stated, the main purpose of the study at hand is to examine the effects from consumer perceived effort on consumers' brand and ad evaluations, as well as action intentions in consuming advertisements. With regards to previous research by Lala et al (2015) and Dahlén (forthcoming), it is expected that higher levels of consumer perceived effort will have a positive influence on affective and conative responses. Affective responses are evaluations and emotions related to the advertisement while conative responses are behavioral responses such as purchase and purchase intention (Djikstra et al, 2005).

For the study at hand, the affective stage of consumers' evaluations are conceptualized through the following constructs: (i) Ad Attitude and (ii) Brand Attitude, while the conative stage is represented by (iii) Purchase Intention. In addition, it is anticipated that the hypothesized effect from consumer effort is mediated by consumer perceived equitable exchange. The choice of these constructs is based on the study by Dahlén (forthcoming), which found that consumer perceived equitable exchange significantly mediated the manipulation effect from both advertiser and consumer effort on these particular efficiency measures.

In the following section we first argue for why the theoretical concepts of consumer effort and equitable exchange, identified by Dahlén for print advertising, is expected to be applicable also in consumption of online video advertisement. Thereafter each hypothesis and its' respective theoretical foundation will be accounted for. At the end of the chapter all seven hypotheses are summarized and illustrated.

2.5 Applying Previous Research to Online Video Advertising

While Dahlén applied the notion of equitable exchange to the consumption of print advertising, the purpose of this study is to examine the same concept for online video

advertising. Thus, it is important to understand if the media channel in itself may influence affective and conative consumer responses, i.e whether it is reasonable to expect similar effects for online video ads. Although research has provided evidence of differences between media channels in consumer responses, some results have been somewhat conflicting (Djikstra el al, 2005). For instance, Chaudhuri (1996) demonstrated that video ads evoked more positive emotions and attitudes than print ads, independent of type of product advertised, while Dijkstra et al (2005) found no significant difference between video and print ads on evaluations and attitudes, and failed to show any superiority of video ads in evoking affective responses. However, since the theoretical debate concerns whether or not video is *superior* to print ads in affective and conative responses, we are confident in anticipating that the concept of consumer effort and the notion of equitable exchange demonstrated by Dahlén for print ads are applicable also for video advertisements.

2.6 Hypotheses

2.6.1 Interaction Effect between Consumer Effort and Advertiser Effort

The overall purpose for the study at hand is to examine the effect of consumer effort on evaluations and intentions. The study draws on the forthcoming study by Dahlén, in which he applied the notion of equitable exchange and found that advertiser effort significantly influenced evaluations and intentions when consuming print ads. He also examined the effect of different consumer effort levels, and found an interaction effect between advertiser and consumer effort. Thus, we expect that the effects from consumer effort will be influenced by the level of advertiser effort.

H1: The anticipated effects from consumer effort are moderated by advertiser effort.

2.6.2 Effects of Consumer Effort on Perceived Equitable Exchange, Evaluations and Intentions

The relation between consumer perceived effort and evaluations and intentions has been demonstrated by both Lala et al and Dahlén. Lala et al (2015) studied the effects of consumer effort in shopping, and found that the amount of effort invested had a positive influence on willingness to buy and a significant influence on the amount paid. While

Dahlén did not focus on consumer effort in itself but rather on advertiser effort, he demonstrated that consumers indeed assess their own effort as well as the advertisers effort, which in turn influences their perception of an equitable exchange (Dahlén, forthcoming). In addition, he also found that consumers reward a perceived fair exchange with higher scores for both ad attitude, brand attitude and purchase intention, constructs frequently measured and perceived as important among marketing academics and practitioners (Low & Lamb 2000).

Compared to the study by Dahlén, which used printed advertisements for fake brands, this study uses video advertisement with real brands. Though, as previously argued, the shift from print to video stimulus should not confound the effect on evaluations and intentions. However, although the use of real brands as stimuli is likely to influence responses, this effect will be controlled for in the analyses. Thus, we hypothesize that the effects found in Dahlen will be found in the study at hand as well. Therefore we make the following hypotheses:

H2: Consumer effort increases consumer perceived equitable exchange

H3: Consumer effort increases brand attitude

H4: Consumer effort increases ad attitude

H5: Consumer effort increases purchase intention

2.6.3 Differences Between Types of Consumer Effort

While the main purpose of the study at hand is to examine the effect of consumer effort in consuming video advertisements, we also aim to investigate how consumer effort should be manipulated in order to gain the greatest effects. Lala et al argue that an important aspect of the consumer effort is the level of decisional control. He found that the behaviour of consumers that did not perceive themselves as having control over the effort invested was not influenced by the amount of effort invested to the same extent as consumers that did perceive decisional control (Lala et al, 2015).

The manipulations of effort in the study at hand are in essence replications of the manipulations in Lala et al; respondents must invest effort by either opening and closing pop-up windows (no decisional control), or by choosing which advertisement to see

(high decisional control). Since Lala found a significantly greater effect for the latter group, we hypothesize that the effect of consumer effort also in this study will be greater for the controlled effort group.

H6: The effect of consumer effort is greater when the consumer effort is perceived as controlled and voluntary.

2.6.4 The Proposed Mediator - Perceived Equitable Exchange

While Lala et al found the positive effect from consumer effort in a shopping process to be mediated by self-justification, Dahlén successfully revealed a mediating effect by equitable exchange on efficiency measures in advertising. Although the two mediation constructs are similar and in fact both derived from dissonance theory, this study uses equitable exchange as proposed mediator, since it has previously been successfully applied to the area of advertising.

The conceptual idea for the study at hand is to examine the effect from increasing consumer effort in consumption of advertising. Based on equity and dissonance theory, we argue that consumers who invest higher levels of consumer effort will resolve potential inequity by cognitively distorting their perception of the brand and the advertisement as relatively more favorable. Drawing on equity theory and the findings by Dahlén, higher levels of consumer effort is expected to generate higher perceived levels of perceived equitable exchange, which in turn is expected to generate the positive effects on attitudes and intentions. Thus we hypothesize:

H7: The positive impact from consumer effort is mediated by consumer perceived equitable exchange.

2.6.5 Summary Of Hypothesis

In the table below, the hypotheses are summarized together with their corresponding Research Question in order to facilitate interpretation.

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Research Question	Hypothesis		
Can an advertiser achieve higher consumer evaluations by increasing the level of consumer effort in taking part of the advertisement?	H1: The anticipated effects from consumer effort are moderated by advertiser effort H2: Consumer effort increases consumer perceived equitable exchange H3: Consumer effort increases brand attitude H4: Consumer effort increases ad attitude H5: Consumer effort increases purchase intention		
How can consumer effort be manipulated to further increase the positive impact on attitudes and intentions?	H6: The effect of consumer effort is greater when the consumer effort is perceived as controlled and voluntary		
What is the underlying mechanism influencing the hypothesized effects from consumer effort on evaluations and intentions?	H7: The positive impact from consumer effort is mediated by consumer perceived equitable exchange		

3. Methodology

The following chapter will outline the research methods applied in this study. There will first be a presentation of the initial work and the scientific approach of the study. Thereafter the research process, consisting of pre-studies and the main study, will be presented. This chapter will then present the research design continued by a discussion regarding the data quality, including the reliability and validity.

3.1 Initial work

As described, the inspiration for this study was initiated by the recent study on equitable exchange by Micael Dahlén, professor at Stockholm School of Economics and the study by Lala et al (2015), who effectively questioned the assumption that consumer effort are always bad for business.

Given the alarming situation for online media regarding ad avoidance and importance of video advertisements, we perceived the idea that consumer effort in fact could increase the efficiency of advertising, to be of high interest. The idea was further discussed with Nicole Haman, partner at United Screens, who has deep knowledge and experience from online advertising as a former executive at the largest online environment in the world, namely YouTube. Haman confirmed our belief that it is of highest importance for the industry to find ways to increase the efficiency of online advertising, and stated that our hypothesized effects from consumer effort would be rather ground breaking for the industry. In addition, Elias Nilsson, consultant at the well renowned pr-firm Prime, confirmed that the aim for efficiency is indeed a widespread phenomenon within the industry of online advertising in Sweden.

Further discussions were also held with Micael Dahlén regarding the subject and potential directions of further research within the field. While he in his study focused more on advertiser effort, he confirmed the proposed research gap and actively supported our aim to investigate the role of consumer effort in advertising.

3.2 Scientific Approach

This study is designed with a deductive research approach applying existing theories on a new field of research. The hypotheses of this study are derived from current theories that hence are guiding the research (Bryman and Bell 2011). The study at hand draws on existing findings by Lala et al (2015) and Dahlen, and previous research in the field of equity theory and dissonance theory.

The authors of this study aim to search for cause and effect relationships between the level of consumers' effort in taking part of an online commercial and their evaluations and intentions, hence the study at hand is of causal nature.

When the aim is to achieve general conclusions through statistical analysis it is according to Bryman and Bell (2011) both recommended and necessary to use a quantitative approach. The intention for the study at hand is to achieve generalizations and therefore a quantitative set up for the experiment was chosen to answer the research questions. The experiment was conducted together with the well renowned research company Nepa and their consumer panels. This should be seen as a manufactured reality rather than a real life experience, hence the experiment is of a laboratory type (Söderlund, 2010). According to Neisser (1976), though, stimuli of an artificial kind critically differ from the real world meaning that artificial stimuli often is irrelevant to understanding the phenomena in which one is interested. As the advertisements used as stimulus in this study are true and authentic commercials from the real world, the ecological validity of the study should be characterized as high.

3.3 Preparatory Work

To make sure that the results of the main study become accurate we performed two prestudies. The aim of the first pre-study was to select a proper set of advertisement (stimulus), which would reflect both high and low advertiser effort. The purpose of the second pre-study was to test that the questionnaires, which were to be used in the main study, were interpreted in the correct way without any misunderstandings. The results from the pre-studies will be presented in the following section.

3.3.1 Pre-study 1 - Selection of High- and Low Effort Advertisements

Since we hypothesize that there is an interaction effect between consumer effort and advertiser effort, in line with the findings by Dahlén, we wanted to manipulate the stimulus (i.e the advertisements) to reflect both high and low advertiser effort. Thus, we chose 21 commercials to test in this pre-study after an extensive and thorough research of commercials that subjectively represented both high- and low advertiser effort as

well familiar and unfamiliar brands for a Swedish population. The pre-study was conducted with the online marketing tool Qualtrics, where 21 different questionnaires were formed, one for each commercial that was tested. These 21 commercials were then individually tested in this pre-study with the average number of respondents being 28 for each questionnaire summing up to a total of 592 responds for the pre-study as a whole. The different questionnaires all contained one unique commercial together with five questions that were identical for all questionnaires. Three of these questions were multi-items measures testing how the respondent perceived the advertiser effort (this construct is further described in section 3.4.2). The fourth question measured the level of brand familiarity while the fifth and last question controlled whether the respondents had seen the commercial before. The results of the pre-study showed that 6 out of the 21 commercials were not clearly perceived as either high or low in advertiser effort, and were thus removed from the study. This means that the remaining 15 advertisements were selected as stimulus in the main study; 8 with high advertiser effort and 7 that were perceived as low.

3.3.2 Pre-study 2 - Testing the Questionnaire

According to Bryman and Bell (2011) it is important to conduct pre tests of a questionnaire before it is used in an actual study. Thus, in order to ensure the quality of the questionnaire and the survey experience in the main study, we conducted a prestudy with the aim to terminate any unclear questions or uncertainty regarding the questionnaires and instructions. In addition, we also discussed the survey design and the questions together with Hanna Poutanen, survey manager, and Frida Wallsbeck, account consultant, from the research company Nepa, who both supplied valuable input on how to optimize the questionnaires.

As described, the respondents in the main study are randomly assigned to one of three consumer effort groups (controlled effort, uncontrolled effort and the control group). Although the questions are identical for all groups, the manipulation of consumer effort are in fact part of the survey (i.e opening the ad in a separate window or choosing which ad to watch), thus we pre tested the three surveys separately.

Each pre-test consisted of 12 respondents, of different age and gender. The main concern that was put forward by the respondents was regarding the survey for the

uncontrolled effort manipulation, where it was a bit unclear in what way they would close down the pop up window with the commercial. This potential risk for misunderstandings was therefore adjusted with an additional explanation.

The updated questionnaire was further tested on another six respondents per survey, who did not state any unclear elements of the improved questionnaire. Thus, we were confident that the questions in the questionnaire were easy to understand and that the instructions regarding the manipulation of consumer effort were clear.

3.4 Main Study

The main experimental study was carried out between the 13th and 18th of March and was distributed via e-mail by the research company Nepa to their panel of respondents. Data was collected via a web-based, self-completion survey. The participants were randomly assigned to one of the three consumer effort groups that this study is based on.

3.4.1 Research Design

The experimental study was tested quantitatively, using a 3 (level of effort: Controlled, Uncontrolled vs control group) x 2 (advertiser effort: low vs. high) between-subjects design. While respondents in the control group were automatically exposed to a random advertisement (high or low advertiser effort), respondents in the uncontrolled effort group were instructed to click on a link in order to play the video advertisement (randomly high or low advertiser effort) in a separate window and then return to the questionnaire. This manipulation was similar to the manipulation of uncontrolled effort in the study by Lala et al, and identical to the manipulation used by Dahlén. The manipulation in the third group involved an element of decisional control in the same fashion as used by Lala et al, as respondents were asked to actively choose one out of four different commercials, based on short texts that briefly described the options.

To make sure that the respondents carefully took part of the advertisement and manipulation, a box with the following text had to be ticked to be able to continue, "I have seen the full movie". Thereafter, the actual questionnaire followed with all questions referring to the movie and the manipulation made in connection with this. This questionnaire was identical for all three groups, enabling us to isolate the effect of the manipulation examined in the study.

3.4.2 Survey and Questionnaire

In consultation with Micael Dahlén, professor at Stockholm School of Economics, the questionnaire of the study was developed. Through discussions with Dahlén the structure of the various parts of the questionnaire were outlined and the research approach and the general focus of the questionnaire were reviewed, including discussions of what items to include.

The questionnaires were created in the online software program Easy Research, provided by Nepa. Nepa is a Stockholm based research firm and a partner of this thesis assisting with their consumer panel to accomplish the data collection for this experiment. The panel used for these questionnaires consisted only of people speaking Swedish, hence the language of the questionnaires was decided to be Swedish. Upon recommendation by Micael Dahlén, confusing words were also transferred into comprehensible expressions to avoid misunderstandings.

According to Söderlund (2005) a questionnaire should be kept as short and comprehensible as possible to avoid tiredness of the respondents as well as reducing the risk of response bias. The study at hand therefore eliminated any unnecessary questions in order to achieve a high quality of the data retrieved from the experiment. In addition, as suggested by Malhotra and Birks (2007) we used structured multiple choice questions, where the respondents expressed to what extent they agreed with different statements on seven or ten point Likert scales. In order to achieve high internal consistency and increased reliability, several variables were measured using multi-item scales (Söderlund 2005). By use of Cronbach's alpha tests, the indexes computed from these multi-items measurements were tested for internal validity, with satisfying results for all measures. In addition, to test whether the respondent had actually read and understood the questions, a few questions were reverse coded as suggested by Bryman & Bell (2011).

The purpose of the questionnaire was to measure (i) the perceived equitable exchange (ii) the perceived advertiser effort (iii) the perceived consumer effort (vi) the level of brand familiarity (v) the level of ad attitude, (vi) the level of brand attitude and finally

(vii) the level of purchase intention. In the following section we further explain each measure.

Perceived Equitable Exchange

The *perceived equitable exchange* was measured with a three items measure based on the study by Micael Dahlén, professor at Stockholm School of Economics. Due to the novelty of equitable exchange research in the field of advertising, we did not find any other more suitable measurement. Thus, the respondents were asked to answer the following three statements: "The advertisement deserved my attention", "The advertisement was worth my time" and "I received an equitable exchange from the advertisement", which were to be answered on a ten-point Likert scale from 1 = 'Strongly Disagree' to 7 = 'Strongly Agree'. The three statements were then turned into an index, with a Cronbach's alpha of 0,96.

Perceived Advertiser Effort

We used a three item measure previously used by Dahlén for measuring perceived *advertiser effort*. The respondents were asked to answer the following questions: "How much money do you think the advertiser spent on the development of this advertisement?", "How much time do you think the advertiser spent on developing this advertisement?", which were to be answered on a seven-point Likert scale from 1 = 'Very Little' to 7 = Very much". In addition, respondents were to answer the following statement: "The advertiser put in a lot of effort in developing this advertisement", which were answered on a seven-point Likert scale ranging from 1 = Strongly Disagree" to 7 = "Strongly Agree". A Cronbach's alpha of 0,90 gave support to the computed index.

Perceived Consumer Effort

The *perceived consumer effort* was measured using the following three items: "I devoted a lot of effort in order to take part of the ad", "I devoted a lot of energy in order to take part of the ad" and "I devoted much time in order to take part of the ad". These items were based on the study by Dahlén, and answered on a ten-point Likert scale, ranging from 1 = Strongly Disagree, to 10 = Strongly Agree. The computed index showed a Cronbach's alpha of 0,81.

Brand Familiarity

The level of brand familiarity was measured with a well established three item

measurement developed by Kent & Allen (1994). The respondents were asked to answer the following question: "How familiar are you with the brand in the advertisement?", How much experience do you have of the brand in the advertisement?" and "How much knowledge do you have of the brand in the advertisement?". These questions were answered on a seven point Likert scale ranging from 1 = "Not familiar/experienced at all", to 7 = "Very familiar/experienced". The Cronbach's alpha for the computed index scored 0,75.

Ad Attitude, Brand Attitude & Purchase Intention

The purpose of the study at hand is to examine the effect from consumer effort on Ad Attitude, Brand Attitude and Purchase Intention. Commonly, these constructs are measured with three-items measurement. However, Bergkvist & Rossiter (2009) have developed a set of one-item measures for these constructs, which they recommend advertising researchers to adopt. Since these one-item measures are at least as valid as traditional three items (Bergkvist & Rossiter, 2009), we use them as a way of keeping the questionnaire as short as possible, as suggested by Söderlund (2005). Thus, on a scale ranging from 1 to 7, the respondents were asked to answer the following questions:

Ad Attitude:

"Thinking about the advertisement, which of the following statements best describes your feeling about the ad?". 1 = I disliked it extremely, 7 = I liked it extremely.

Brand Attitude:

"Thinking about the brand in the advertisement, which of the following statements best describes your feeling about the brand?" 1 = I think it is extremely bad, 7 = I think it is extremely good.

Purchase Intention (reverse coded).

"If you were going to buy the product of the kind in the advertisement, how likely would you be to try the advertised brand?". 1 = Certain or practically certain, 7 = No chance or almost no chance.

3.4.3 Data Sampling

The Stockholm based research firm Nepa AB acted as research partner of this thesis, as they arranged the data sampling of this experiment. Together with Nepa this study could arrange a representative sample of the Swedish population by using one of their consumer panels for the collection of data. This consequently led to a high quality of the data that this study is based upon. A total of 408 respondents participated in the experiment and 388 responses were considered of satisfactory quality (i.e watched the advertisement and answered all questions), resulting in a large sample of respondents for each of the 3 surveys. The final sample consisted of respondents between 18 and 65 years of age, with an average of 42 years. 52,8% of the respondents in the sample were female, and 47,2% were men.

3.5 Analytical Tools

The software program IBM SPSS Statistics (version 22) was used for analyzing the data. As described, we computed indexes for each multi-items measurement, which were successfully tested for internal consistency using Cronbach's alpha with results above the critical level of alpha = 0.7 (Malhotra 2010).

- For hypotheses H1-H5, we computed the dummy variable *Consumer Effort General* from the original factor *Consumer Effort*, with 0 = control group and 1 = Consumer Effort (i.e the two manipulations). We then examined multivariate effects by help of MANCOVA tests, and univariate effects with ANCOVA, and accepted p-values (p<0.05) on a significance level of 5%.
- For hypotheses H6 we examined group differences for the original factor
 Consumer Effort (three groups) by help of ANOVA tests, and followed up with
 Bonferroni adjusted post hoc tests. A significance level of 5% (p < 0.05) was used
 to accept the hypothesis.
- Hypothesis H7 was tested with the dummy variable *Consumer Effort General*, by conducting mediation analyses. We used the approach suggested by Zhao et al (2010), with Preacher-Hayes' (2004, 2008) regression-based bootstrap test. The tests were conducted by downloading the INDIRECT macro for SPSS (Preacher-

Hayes 2014).

3.6 Data Quality

It is of high importance that the study examines what it is meant to examine, therefore the two connected measurements of reliability and validity are crucial to discuss regarding the data quality the study.

3.6.1 Reliability

The *reliability* of a study refers to the consistency of the results. The results of the study should be persistent regardless of occasion (Söderlund 2005). The reliability is especially important in studies with a quantitative approach and can be evaluated with the *stability over time* and *internal reliability* (Bryman & Bell 2011).

3.6.1.1 Stability Over Time

The *stability over time* refers to how future researchers could accomplish the same results as we do in our study and that the same conclusions would be reached. The probability of obtaining this is achieved through the chosen questions and measurements in the study. Both the questions and the measurements used in the study at hand are established in this field of research hence entailing a higher reliability. Before we conducted the study we also pre-tested the questionnaire to ensure that the questions were comprehended in the right way. The probability of achieving the same results over time was therefore enhances as we then could state that the questions were perceived in a consistent way. To be 100% sure that the survey leads to the same results we would though need to remake the whole survey, which is out of the scope for this paper.

3.6.1.2 Internal Reliability

The *internal reliability* refers to whether multiple indicators for a respondent result in a coherent overall score for the measurement aimed to measure and that this is consistent and reliable (Bryman & Bell 2011). We used Cronbach's Alpha for the data collected from the experiment to test the internal consistency within the multi-item measurements used in the questionnaires (Malhotra 2010). The generally accepted level of the Cronbach Alpha is 0,70 and the values in this study were all above this level, hence implying internal consistency and a high internal reliability for the study. To achieve this

a thorough review of established multi-item measurements were made (see section 3.4.2)

3.6.2 Validity

The validity of the study refers to whether the study measures what it is intended to measure and according to Söderlund (2005) to what extent the measures are free from systematic measurement errors. There are two parts of validity; *internal validity* and *external validity*, which both should be high when creating the experimental design (Malhotra and Birks, 2007). Above this we are also taking ecological validity into consideration since a high ecological validity is making the study more relevant and improves the probability of understanding the tested phenomena (Neisser 1976).

3.6.2.1 Internal Validity

The *internal validity* evaluates whether the effects examined in the study are caused by the intended independent variables rather than other external factors (Malhotra & Birks 2007). For the study at hand this refers to what extent the different levels of consumer efforts cause the different evaluations of the attitude toward the ad, the attitude towards the brand, the purchase intention and the level of perceived equitable exchange. The study is designed to facilitate comparisons between the manipulations and a control groups, which according to Bryman and Bell (2011) s an important tool to increase the internal validity and a way to achieve confidence in the causal effects of the manipulations of the experiment.

In our pursuit of reaching high ecological validity, we use stimulus in form of real advertisements from existing brands. However, since the brand familiarity and length of the advertisement could confound the results, we aim to increase the internal validity by controlling for these variables.

Additionally, in order to reduce the risk of external factors affecting the results, we conducted manipulation controls for the stimulus (advertisements) as well as the manipulation of consumer effort, which ensured that the observed effects were indeed caused by the intended research stimulus.

3.6.2.2 External Validity

The *external validity* of the study refers to whether generalizations can be made of the cause and effect results accomplished in the study also outside the scope of this thesis (Malhotra & Birks 2007). The generalizability of the study may be reduced since the experiment was not completed in a real life setting hence a manipulated setting do not represent a real world environment in an accurate way (Bryman & Bell 2011). For our study this was improved though as we used real life commercials from authentic brands, making the study represent the real life better than if this study would be carried out with fictive brands and commercials.

To achieve the possibility of making generalizations from our research we co-operated with an external research firm, Nepa AB in Stockholm, who have their own panels. These panels are representing the Swedish population with not only big samples for each of the three different surveys but also samples of the population with a wide spread of age, gender and origin in Sweden. As the study is conducted with solely Swedish respondents the results should not be directly applied to other geographical areas and hence be carefully generalized to populations outside Sweden.

3.6.2.3 Ecological Validity

The last of the three validity concepts to be discussed is the *ecological validity*, which refers to whether the observations in the research reflects the real life and if real life generalizations can be made (Bryman and Bell, 2011).

According to Neisser (1976) stimuli of an artificial kind used in studies differ critically from the real world, why the study of such artificial stimuli is often irrelevant to understanding the phenomena in which one is interested. Therefore, this study is using real life commercials created by real life brands to achieve a high ecological validity, referring to what extent this study measures how attitudes are shaped in the real life setting. As previously argued, previous research in the field lacked in ecological validity, and we thus aim to contribute to the literature by having higher levels of ecological validity.

4. Results and Analysis

In the following chapter the results of the study are presented. First, the results of the manipulation controls and an assessment of the used covariates are presented. In the subsequent section the effects of consumer effort in general are revealed. Thereafter we present the results from the analysis of the two consumer effort manipulations. Lastly we test whether the anticipated effects from consumer effort are mediated by perceived equitable exchange. In order to facilitate interpretation, data has been illustrated in supplementary tables.

4.1 Manipulation Checks

As the purpose of this study was to investigate the effects of consumer effort on a set of efficiency measures, we aimed to manipulate the independent variable consumer effort in two groups which we then could compare to a control group. In addition, the stimulus used to generate any effect were a set of video advertisements which were intended to reflect both high and low advertiser effort as well as differ in brand familiarity and length. In order to assess internal validity and ascertain that the effects on dependent variables were caused by the intended manipulation in consumer effort and the intended stimulus, we must control the manipulations before examining the results of the hypotheses.

4.1.1 Manipulation Of Advertisements

To facilitate an analysis of the anticipated interaction effect between consumer effort and advertiser effort, the set of advertisements were deliberately selected to reflect both high and low advertiser effort. As described in section 3.3.1, a comprehensive pre-test was conducted which resulted in the selection of 15 advertisements that significantly differed in perceived advertiser effort among the respondents. However, since the perception of advertiser effort may be rather subjective we must assess whether the results from the pre-study also reflects the respondents in the main study. This was analyzed by conducting independent univariate ANOVA:s and post hoc analysis with the categorical variable advertiser effort as independent variable, perceived advertiser effort as dependent and brand familiarity and length as covariates. Since we hypothesize

that the effect of consumer effort is influenced by advertiser effort, we conducted separate analyses for each consumer effort group.

The results revealed significant differences between the two levels of advertiser effort in all three groups. Thus we can conclude that the stimuli were perceived as we intended to.

Table 1: Mean values for High Advertiser Effort and Low Advertiser effort (with standard deviation)

	High Advertiser Effort	Low Advertiser Effort	Mean Difference	F	P-value
Control Group	4,72 (0,18)	3,54 (0,20)	1,18	18,36	0,000***
Controlled Effort	5,29 (0,18)	4,04 (0,16)	1,25	38,61	0,000***
Uncontrolled Effort	5,19 (0,11)	3,97 (0,16)	1,22	25,54	0,000***

^{*}p<0,05 **p<0,01 ***p<0,001

4.1.2 Manipulation of Consumer Effort

The manipulations of consumer effort were based on previous manipulations done by Lala et al (2015) and Dahlén (forthcoming), who found them to be statistically significantly supported. However, before we conduct the analyses of differences between the manipulated groups and the control group, we must check that the manipulations of consumer effort were successful also in our main study, i.e that respondents in the two manipulation groups perceived themselves to have invested more effort in taking part of the advertisement.

The manipulation effect was assessed by conducting independent univariate ANOVA:s with the categorical variable consumer effort as independent variable and consumer perceived effort as dependent. Given the hypothesized interaction effect, we conducted separate analyses for the High Advertiser Effort group and the Low Advertiser Effort group.

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Table 2: ANOVA: Mean values (and standard deviation) for Perceived Consumer Effort

	Controlled n = 170	Uncontrolled n = 109	Control Group n = 109	F	P-value
High Ad Effort	3,81 (0,19)	3,54 (0,29)	2,81 (0,26)	4,79	0,000***
Low Ad Effort	4,01 (0,23)	3,57 (0,21)	2,39 (0,24)	13,19	0,009**

^{*}p<0,05 **p<0,01 ***p<0,001

The results show that perceived consumer effort indeed differed across the three groups. As intended, respondents in the controlled effort group scored highest, with significant differences compared to the control group for both high (p < 0,01) and low (p < 0,001) advertiser effort. Respondents in the uncontrolled consumer effort group also scored higher than the control group, although the difference was only significant for low advertiser effort (p < 0,005). The lack of significance for this manipulation in high advertiser effort (p > 0,05) is naturally alarming, as it reduces our possibility to draw conclusions. However, the design of the manipulation was in essence identical to the manipulation by both Lala et al and Dahlén, who found it to be statistically supported. In addition, as respondents in the uncontrolled effort group - in contrast to the control group - must actively click on a link, open a new window and then return to the survey, we are rather confident that the directional support reflects reality: that they do put in both more time and effort than the control group. However, this must be kept in mind for forthcoming analyses.

4.2 Interaction and Main Effects Of Consumer Effort

The overall purpose with the study at hand was to investigate whether consumer effort may have a positive influence on consumers' attitudes and evaluation towards the brand and ad, when consuming video advertisements. Based on previous findings by Lala et al (2015) and Dahlén (forthcoming), it was hypothesized that consumer effort generates the perception of a more equitable exchange (H2), as well as higher ad attitude (H3), brand attitude (H4) and purchase intention (H5). It was also suggested that these effects would be moderated by the level of advertiser effort through an interaction effect (H1). In answering Hypothesis 1-5, we are only interested in the difference from consumer effort *in general*, compared to the control group. Since the categorical variable *consumer effort* originally consists of two different manipulation groups (Controlled and Uncontrolled) and the control group), we computed the dummy variable *consumer effort*

general in which we collapsed the two manipulation groups into one general consumer effort group (denoted Effort) while keeping the control group intact (denoted Control). The approach of transforming the three-level variable *consumer effort* into the dummy variable *consumer effort general* was suggested by Professor Micael Dahlén, and will enable us to answer Hypothesis 1-5.

4.2.1 Interaction Between Consumer Effort General and Advertiser Effort

In order to examine the hypothesized interaction and main effects, a 2x2 MANCOVA was conducted with consumer effort general as focal variable, advertiser effort as moderator variable and perceived equitable exchange, ad attitude, brand attitude and purchase intention as dependent variables. In order to control for confounding effects from brand familiarity and length of movie, these variables were used as covariates in the model.

In Hypothesis 1 we anticipated that there would be an interaction effect between consumer effort and advertiser effort. However, the MANCOVA showed no significant multivariate effect for the interaction term, Pillai's Trace = 0.009, F(4.379) = 0.83 p = 0.504. Given the non-significant interaction, we must reject Hypothesis 1 regarding the expected interaction effect between consumer effort and advertiser effort on ad attitude, brand attitude, purchase intention and perceived equitable exchange. Finding a non-significant interaction however is not evidence of its absence in the population (Faraway, 2015; Fox, 2008; Searle, 2006). In fact it is rarely thought that there will be no interactions between two independent variables and (Searle, 2006). Given the rather low power to detect interactions generally (Aiken & West, 1991), this is particularly important to consider. Thus, we reject Hypothesis 1, although - as argued above - this is not the same as entirely ruling out the possibility of an interaction.

HYPOTHESIS 1

REJECTED

4.2.2 Main Effects of Consumer Effort and Advertiser Effort

Since there was no interaction between consumer effort and advertiser effort, we continued by examining potential main effects from the two independent variables.

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However, in addition to the non-significant interaction, the MANCOVA also revealed a non-significant main effect for advertiser effort, Pillai's Trace = 0.11, F(4.379) = 1.10, p = 0.358.

Thus, we investigated the main effect from the focal variable consumer effort general, which was expected to generate higher values for all dependent variables. The MANCOVA revealed a multivariate effect, indicating that there was in fact a statistically significant difference between the manipulation and control group on the combined set of dependent variables, Pillai's Trace = 0.04, F(4.379) = 3.629, p = 0.006. In order to assess for which of the dependent variables the main effect of consumer effort general was significant, independent univariate ANCOVA:s were conducted, generating the following results:

Table 3 - ANCOVAs: Mean values (and standard error)

	Effort n = 279	Control n = 109	F	P-value
Ad Attitude	4,35 (0,06)	3,98 (0,103)	9,45	0,002**
Brand Attitude	4,53 (0,06)	4,17 (0,09)	10,76	0,001***
Purchase Intention	3,29 (0,08)	3,10 (0,13)	1,39	0,239
Equitable Exchange	4,79 (0,15)	4,18 (0,23)	4,86	0,028*

^{*}p<0,05 **p<0,01 ***p<0,001

The results revealed that there was a statistically significant main effect of the focal variable consumer effort general on ad attitude, brand attitude and consumer perceived equitable exchange, but not on purchase intention. Since the dummy variable consumer effort general consists of only two groups (Effort vs Control), there was no need to conduct further post hoc tests. The results from the ANCOVAs thus support the expected positive effect of consumer effort in general for ad attitude, brand attitude and perceived equitable exchange.

Thus we can accept the following three hypotheses:

HYPOTHESIS 2	ACCEPTED
HYPOTHESIS 3	ACCEPTED
HYPOTHESIS 4	ACCEPTED

In Hypothesis 5, we anticipated that Consumer Effort also would have a positive influence on purchase intention. While the mean difference between consumer effort general and the control group of 0,19 gives directional support, the difference is not statistically significant (p < 0,05) and thus we must reject the hypothesis.

HYPOTHESIS 5

REJECTED

4.3 The Effect of Uncontrolled And Controlled Consumer Effort on Efficiency Measures

In the following section, we investigate the anticipated differences in the effect on efficiency measures between the two types of manipulation of effort. Based on the findings by Lala et al, it was hypothesized (H6) that the effect of consumer effort would be stronger for respondents who experienced decisional control over the effort invested, i.e the *controlled effort group*.

In contrast to previous analysis of consumer effort in general compared to the control group, we are now examining the two consumer effort groups individually. Thus, we conducted a new MANCOVA in order to confirm that there was still no interaction between the original variable consumer effort with three groups and advertiser effort. The results found no significant interaction (Pillai's Trace = 0,012, F(8,756)= 0,560 p = 0,811) or main effect of advertiser effort (Pillai's Trace = 0,018, F(4,377) = 1,749 p = 0,139), but a significant main effect of consumer effort (Pillai's Trace = 0,05, F(8,756) = 2,415, p = 0,014). Thus there was no need to keep the interaction term or the moderator variable in the model. This approach was suggested by SSE Professor Håkan Lyckeborg, and has found support by Iversen & Norpoth (1987) and Norušis (2011). Thus, forthcoming analyses of the effect from Consumer Effort are conducted on the total sample.

Hypothesis 6 is tested by conducting univariate ANCOVA:s for each dependent variable, with consumer effort (three groups) as independent variable and brand familiarity and length of ad as covariates. By help of Bonferroni-adjusted pairwise comparison, we will assess and analyze the differences between each manipulation group and the control group for each dependent variable.

4.3.1 The Effect of Uncontrolled And Controlled Consumer Effort on Perceived Equitable Exchange

A univariate ANCOVA demonstrated that there was statistically significant differences in perceived equitable exchange between the three groups, F(2,383) = 5,215, p < 0,05.

Table 4 - ANCOVAs: Mean values (and standard errors) for Perceived Equitable Exchange

	Controlled n = 170	Uncontrolled n = 109	Control Group n = 109	F	P-value
Equitable Exchange	5,09 (0,18)	4,41 (0,23)	4,18 (0,23)	5,21	0,006**

^{*}p<0,05 **p<0,01 ***p<0,001

A subsequent post hoc analysis with a Bonferroni adjustment revealed a statistically significant mean difference between the controlled effort group and the control group (p < 0,01). The difference between the controlled effort group and the uncontrolled effort group was significant at a 10% significance level (p < 0,10), while the difference between the uncontrolled effort group and the control group failed to reach significance.

Table 5 - Bonferroni's post hoc test for Equitable Exchange

Equitable Exchange	Mean	Mean	Difference	SE	p
Controlled Effort vs Control Group	5,09	4,18	,907	,300	,008**
Uncontrolled Effort vs Control Group	4,41	4,18	,230	,143	,243
Controlled Effort vs Uncontrolled Effort	5,09	4,41	,678	,297	,069

^{*}p<0,05 **p<0,01 ***p<0,001 Controlled Effort n = 170, Uncontrolled Effort n = 109, Control Group n = 109

The findings support the hypothesis that respondents who perceive themselves to be in control over their invested effort do find the exchange to be more fair than respondents with less control over their effort.

4.3.2 The Effect of Uncontrolled And Controlled Consumer Effort on Ad Attitude

The level of ad attitude was statistically significantly different for the three respondent groups, as demonstrated by the significant ANCOVA, F(2,383) = 6,479 p < 0,05.

Table 6 - ANCOVA: Mean values (and standard errors) for Ad Attitude

	Controlled n = 170	Uncontrolled n = 109	Control Group n = 109	F	P-value
Ad Attitude	4,46 (0,08)	4,23 (0,10)	3,98 (0,10)	6,48	0,002*

^{*}p<0,05 **p<0,01 ***p<0,001

In order to assess the differences between the three groups, post hoc-analysis with Bonferroni adjustment was conducted, generating the following results:

Table 7 - Bonferroni's post hoc test for Ad Attitude

Ad Attitude	Mean	Mean	Difference	SE	P
Controlled Effort vs Control Group	4,46	3,98	,48	,13	,001*
Uncontrolled Effort vs Control Group	4,23	3,98	,25	,14	,243
Controlled Effort vs Uncontrolled Effort	4,46	4,23	,23	,13	,255

^{*}p<0,05 **p<0,01 ***p<0,001 Controlled Effort n = 170, Uncontrolled Effort n = 109, Control Group n = 109

The results demonstrate that Ad Attitude was statistically significantly greater in the controlled consumer effort manipulation than the control group. The uncontrolled effort manipulation generated a higher mean than the control group, but the difference was not statistically significant. Further, while ad attitude was higher in the controlled effort group than in the uncontrolled group, the difference failed to reach significance (p > 0,05). Since the effect from consumer effort is significantly greatest for the controlled effort manipulation, the results are in line with Hypothesis 6.

4.3.3 The Effect of Uncontrolled And Controlled Consumer Effort on Brand Attitude

Given the hypothesized difference between controlled and uncontrolled consumer effort for all dependent variables, the positive effect of consumer effort on brand attitude was anticipated to be greater for the controlled effort group than the uncontrolled effort group. The univariate ANCOVA shows that brand attitude is indeed significantly different across the three groups, F(2,383) = 6,778 p < 0,01.

Table 8 - ANCOVA: Mean values (and standard errors) for Brand Attitude

	Controlled n = 170	Uncontrolled n = 109	Control Group n = 109	F	P-value
Brand Attitude	4,60 (0,07)	4,43 (0,09)	4,16 (0,09)	6,78	0,001**
*p<0,05 **p<0,01 ***p<0	,001				

A subsequent Bonferroni's post hoc test revealed directional support for all comparisons and a significant mean difference between the controlled effort group and the control group.

Table 9 - Bonferroni's post hoc test for Brand Attitude

Mean	Mean	Difference	SE	p
4,60	4,16	,436	,118	,001*
4,43	4,16	,269	,127	,106
4,60	4,43	,167	,117	,466
	4,60 4,43	4,60 4,16 4,43 4,16	4,60 4,16 ,436 4,43 4,16 ,269	4,60 4,16 ,436 ,118 4,43 4,16 ,269 ,127

^{*}p<0,05 **p<0,01 ***p<0,001 Controlled Effort n = 170, Uncontrolled Effort n = 109, Control Group n = 109

Although the mean difference between the two consumer effort manipulations was small and not significant, the results indicates that the effect from consumer effort compared to the control group is greatest for the controlled effort manipulation, thereby giving support to the hypothesis.

4.3.4 The Effect of Uncontrolled And Controlled Consumer Effort on Purchase Intention

So far, the results have been in support for the hypothesized difference between controlled and uncontrolled effort. The final ANCOVA, however revealed that there were no statistically significant differences in purchase intention between the three respondent groups, F(2,383) = 1,166 p = 0,313.

Table 10 - ANCOVA: Mean values (and standard errors) for Purchase Intention

	Controlled n = 170	Uncontrolled n = 109	Control Group n = 109	F	P-value	
Purchase Intention	3,33 (0,10)	3,15 (0,13)	3,10 (0,13)	1,17	0,313	

^{*}p<0,05 **p<0,01 ***p<0,001

As opposed to the hypothesis and previous findings by Dahlén (forthcoming), no significant difference in purchase Intention was observed between the different groups after controlling for brand familiarity and length of the ad. This is however in line with our previous finding that consumer effort *in general* did not have a significant effect on respondents Purchase Intention. A possible cause for the lack of significance might lie in the one-item construct used in the questionnaire. This is further elaborated in the final Discussion chapter.

4.4 Hypothesis conclusion

After establishing that consumer effort in general has a positive main effect on ad attitude, brand attitude and perceived equitable exchange, we hypothesized (H6) that the positive effect of consumer effort would be greater when respondents perceived themselves to be in control over their invested effort. Thus we expected that respondents that were able to choose which advertisement to consume out of four different advertisements (i.e the controlled effort group), would score higher on the dependent variables than respondents who invested effort but lacked control over the effort (i.e the uncontrolled effort group).

The results revealed directional support for the direct differences between the controlled and uncontrolled effort group, although it only reached significance for perceived equitable exchange. However, the controlled effort group scored significantly higher than the control group for all measures but purchase intention, while the corresponding effect for the uncontrolled effort group compared to the control group only reached non-significant directional support.

While there were no statistical significant differences between the three groups for purchase intention, we can conclude that *when* there is an effect from consumer effort *in general*, it is indeed greater for controlled effort manipulations than for uncontrolled effort manipulations. Therefore, we can accept the hypothesis.

HYPOTHESIS 6

ACCEPTED

5. The Proposed Mediating Effect Of Perceived Equitable Exchange

Finally, based on the findings by Dahlén, it was hypothesized that the positive effect from consumer effort *in general* was mediated by the level of perceived equitable exchange.

To test the hypothesis, we conducted a mediation analysis using Preacher & Hayes' regression based bootstrap test. In mediation, one examines the three paths a x b, b x c, and c (see figure below). According to Zhao et al (2010), the only requirement to establish mediation, is that the indirect effect of a x b is significant. Zhao et al (ibid) also argue that there can be mediation even when there is no significant effect to be mediated. Thus, we conducted a mediation analysis for ad attitude, brand attitude and purchase intention, even though the latter variable was not significantly influenced by consumer effort in general.

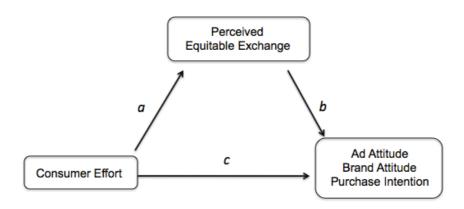


Figure 2: Mediation Model

Since the hypothesis concerns consumer effort *in general*, we use the dummy variable consumer effort general as independent variable and brand familiarity and length of ad as covariates. As the confidence interval for each dependent variable excluded zero, the mediation analyses confirmed that the perception of an equitable exchange indeed mediates the influence of consumer effort on all of the three dependent variables (Zhao et al. 2010).

Bodelius & Lundgren 2015

DV	Ad Attitude	Brand Attitude	Purchase Intention
axb	(95% CI: 0,0205-0,3427)	(95% CI: 0,0132-0,2119)	(95% CI:0,0196-0,2933)
Boot	0,1792	0,1056	0,1419
a-path	0,62 p = 0,02	0,62 p = 0,0237	0,62 p = 0,02
b-path	0,29 p = 0,00	0,17 p = 0,00	0,23 p = 0,00
c-path	0.94 p = 0.03	0,26 p = 0,01	0.02 p = 0.91
Type	Complementary	Complementary	Indirect only

HYPOTHESIS 7 ACCEPTED

As the direct effect c was not significant for purchase intention (p > ,05) there was an indirect-only mediation, which Baron and Kenny (1986) refer to as a full mediation. For ad attitude and brand attitude however, the direct effect c was significant (p < ,05), implying a complementary mediation, which Baron and Kenny (1986) define as partial mediation. This suggests that additional mediators in the direct path might have been omitted (Zhao et al., 2010). This will be further discussed in the section Future Research.

6. Summary Of Hypothesis Results

In the table below the findings from the statistical analyses are summarized together with their corresponding Hypothesis and Research Question.

Research Question	Hypothesis			
	H1: The anticipated effects from consumer effort are moderated by advertiser effort	Rejected		
Can an advertiser achieve higher consumer evaluations by increasing the level of consumer effort in taking part of the	H2: Consumer effort increases consumer perceived equitable exchange	Accepted		
advertisement?	H3: Consumer effort increases brand attitude	Accepted		
	H4: Consumer effort increases ad attitude	Accepted		
	H5: Consumer effort increases purchase intention	Rejected		
How can consumer effort be manipulated to further increase the positive impact on attitudes and intentions?	H6: The effect of consumer effort is greater when the consumer effort is perceived as controlled and voluntary	Accepted		
What is the underlying mechanism influencing the hypothesized effects from consumer effort on evaluations and intentions?	H7: The positive impact from consumer effort is mediated by consumer perceived equitable exchange	Accepted		

5. Discussion

The following chapter will be a discussion of the results derived from the study. The chapter starts off with a conclusion of the research questions and a response to the main purpose of the study. This will be followed by a general discussion regarding the effectiveness of increasing consumer effort in taking part of an online video commercial. Thereafter the managerial implications will be presented, followed by some criticism against the study. Finally, suggestions for further research within the field will be presented.

5.1 Conclusion

The main purpose of this study was to examine whether the findings by Lala et al (2015) and Dahlén (forthcoming) are applicable for online videos and thus answer (i) if a higher level of consumer effort could increase the consumers' evaluations and intentions, (ii) how the consumer effort could be manipulated to achieve the best possible outcome and (iii) what underlying mechanism that is influencing the hypothesized effects from consumer effort on evaluations and intentions. The study was carried out in the field of online advertising as well as in an ecologically valid environment, hence accomplishing to fill the gap previously existing in the research. The study at hand also answered the research questions using a large sample representative for the Swedish population leading to the ability of drawing generalizations from the results, which previous research conducted by Dahlén and Lala et al lacked in. Each of the three research questions will be answered below.

RQ1: Can an advertiser achieve higher consumer evaluations by increasing the level of consumer effort in taking part of the advertisement?

The study at hand demonstrates clear results that an increase of consumer effort does enhance the consumer's evaluations of the brand and the advertisement. However, although the hypothesized effect from consumer effort on purchase intention had directional support, the effect was not statistically significant. We therefore conclude that the level of consumer effort in taking part of an advertisement do have a positive

impact on attitudes towards the brand and the ad, while the effect on purchase intention only is directionally supported.

RQ2: How can consumer effort be manipulated to further increase the positive impact on attitudes and intentions?

In order to answer this research question, we manipulated consumer effort in two different ways regarding the level of decisional control. The results showed directional support for the hypothesis, as the *controlled effort* group scored higher than the *uncontrolled effort* group on all dependent variables. Further, the *controlled effort* group scored significantly higher than the control group for all measures but purchase intention, while the corresponding effect for the *uncontrolled effort* group compared to the control group only reached non-significant directional support. We argue that these results supports the notion that decisional control is an important factor when manipulation consumer effort, and thus should be incorporated in the effort in order to further increase the positive impact on brand and ad attitude.

RQ3: What is the underlying mechanism influencing the hypothesized effects from consumer effort on evaluations and intentions?

The results of this study imply that perceived equitable exchange mediates the effect from consumer effort on all three measurements of evaluations and intentions. The effect is however complementary for the ad- and brand attitude, indicating that the mediation is partial, and that there could be other mechanisms influencing the effects as well. Interestingly we found that the perceived equitable exchange also influenced the effect from consumer effort on purchase intention, despite the fact that the study did not establish a significant main effect from consumer effort for this construct. We could with these results conclude that the perceived equitable exchange is an underlying mechanism mediating the hypothesized effects from consumer effort on evaluations and intentions, but with that said not concluding that it is the one and only mediator.

The answers of the of the research questions above leads us to conclude that higher levels of consumer effort generate a perception of an equitable exchange, which in turn yield higher ad and brand ratings. These ought to be interesting findings for marketers in general and for the industry of online advertising specifically since they demonstrate

potential benefits of making consumers invest more effort. This will be discussed more in detail below.

5.2 General Discussion

This study set out with the widespread assumption that consumer effort is always bad for companies. An interesting antithetical idea was suggested by both Lala et al (2015) and Dahlén (forthcoming), who proposed that consumer effort could in fact increase buying behaviour and evaluations and attitudes for purchase situations and print advertising. We found an important gap in the research, and thus aimed to examine whether findings from previous research would be applicable also for online video commercials and real brands, in contrast to print advertisements with fictive messengers. The interest to apply this research on online video commercials is derived to the rapid growth of online video right now, making this a highly contemporary topic. Simultaneously the ad avoidance is constantly increasing, stressing the importance of maximizing the effects of online advertising. With these facts at hand we pursued to examine whether advertisers could achieve higher ratings by *increasing* the consumer effort.

The results of this thesis show that increased consumer effort may indeed have positive effects on consumers' attitude, which confirms earlier research within the field. However, the study at hand could not establish statistical support for the anticipated interaction effect between consumer effort and advertiser effort. This was quite surprising, not only because Dahlén managed to demonstrate the effect, but also since it is rather intuitive that advertiser effort would influence the effect of consumer effort. As mentioned in the theory section, higher levels of consumer effort are not only expected to generate positive effects on attitudes, but also yield emotions of anger and resentment. Thus one wonder if there might be a critical limit for how low advertiser effort can be without having the negative effect (anger) outperforming the positive distortion effect. However, one must also keep in mind that not finding a statistically significant interaction in the sample does not mean that an interaction effect does not exist in the population (Faraway, 2015; Fox, 2008; Searle, 2006).

Another surprising aspect of the results from this study was the rejection of Hypothesis 5, i.e the non-significant effect on the purchase intention. This is noteworthy since Dahlén in his study found statistical support for the effect of advertiser and consumer effort on purchase intention. Lala et al on the other hand only managed to establish directional support for the same measure in their study. It is however unfortunate that we did not accomplish statistical support for purchase intention in this study, given its' importance for businesses. We will discuss potential explanations of the non-significance for purchase intention in *criticism of the study*.

Furthermore, the study found statistical support for the mediating effect of perceived equitable exchange on ad and brand attitude. This effect was only complementary though, i.e. partial mediation (Baron and Kenny, 1986), indicating that there might exist more variables that mediates the positive effect of consumer effort. This will be further discussed in the chapter of *future research* (5.5). Lastly, one strong finding of this study is the greater effect of the controlled consumer effort compared to uncontrolled consumer effort. This finding will have implications for practisers within the industry, which will be discussed further in the next section.

5.3 Managerial Implications

This thesis provides evidence that advertisers could enhance ad attitudes and brand attitudes by increasing consumer effort when taking part of an online commercial. These measurements are of great importance for advertisers, why practitioner could fruitfully incorporate the concept of consumer effort in their advertising. In specific, they should aim to increase general consumer effort and strive to provide consumers with (an illusion of) decisional control.

A contemporary example of a company that effectively uses the concept of consumer effort is the fashion retailer Victoria's Secret. They annually arrange a very popular fashion show, that is in fact a commercial for the company. Several months after the show takes place, it is broadcasted globally. But consumers - desperate to get hold of the show in advance - invest a lot of effort in finding it on illegal sites, download it and take part of it. Given the findings in this study, this pursuit among consumer is likely to

generate higher attitudes towards the brand and the commercial than if the show would have been easily supplied to them.

The concept of consumer effort could also have been successfully applied to the trailers for the coming Star Wars movie that have been launched just weeks before this discussion was written (May, 2015). Although these advertisements for the Star Wars movie got a huge reach, we argue that consumers attitudes towards the brand and the commercials could have been even stronger by "leaking" the trailers on Pirate Bay, or asking viewers to pass a "Darth Vader-quizz" before being granted access to the trailer. Thereby, consumers would have needed to invest more effort and thus be prone to positively distort their perceptions.

While Victoria's Secret and Star Wars are extremely popular and well-known brands with the ability to actually make consumers chase their advertisement, more ordinary brands cannot do the same. However, the findings of this study suggest that the positive effects of consumer effort are as valid for less familiar brands with lower advertising. So, how could a manager for such a brand take part of the benefits from consumer effort? It is indeed difficult for each brand to increase consumer effort on their own, and therefore we argue that the concept of consumer effort instead should be applied on a platform level rather than on an individual brand level. Video advertising platforms such as YouTube - with millions of impressions each day - could increase consumer effort for all commercials by changing the advertising experience, and thus increase the general efficiency of online video advertising. One possible approach to create increased decisional effort would be to let the viewer choose which commercial to see, instead of being forced to see a specific ad (which you shut down after 5 seconds anyway). Based on the findings of this study, this small change could generate significantly higher attitudes towards the ad and the brand, and would most probably also have a positive effect on purchase intention. Thereby, the general efficiency of online video advertising could be increased which is a top priority for the all actors in the industry, according to former YouTube-executive Nicole Haman, currently partner at United Screens, (see introductory chapter). Given the rapid increase in ad avoidance behaviour, increasing efficiency of online advertising is also expected to be even more important in the future.

A great example of the potential in our suggested platform strategy is found in the study at hand: the rather unknown company Paroy, owner and operator of petrol stations in western Sweden, scored 0,93 points higher in brand attitude among respondents in the controlled effort group compared to the control group (p < 0,05). That is indeed a great effect for the brand, achieved by just increasing the level of decisional control among viewers.

As the matter of fact, YouTube recently implemented a new advertising feature - interactive cards - which are quite in line with suggestions in his study. The interactive cards, which will be further discussed in future studies, are turning the commercial into a controlled effort as the viewer can determine whether they would like to take part of the ad or not, which could lead to improved evaluations according the results of this study.

5.4 Criticism of the Study

The discussion above has concluded the positive outcomes of generating a higher consumer effort for consumers in order to take part of an online commercial. It has further been discussed in what way this research finding could be applied to the industry for practisers in the managerial implications. In this chapter we aim to address shortcomings and aspects that may limit the outcome of the study at hand. The experiment was set up with a high ecological validity as we used real life examples of brands and commercial but the experiment was still carried out in an artificial environment, in an online research tool, resulting in a study of a laboratory kind. Hence this study cannot fully state the results are applicable to the real life. A limitation of the same kind regards the sample of the study. Despite that the experiment was conducted with a large sample from the research company Nepa's panel, it cannot be said to perfectly represent the Swedish population. Further criticism of the sample is the unequal sample sizes of the different groups of consumer effort, these should have been more equally distributed as the sample size of manipulation three is distinctively higher than the two other manipulations.

This study did not accomplish significant results for the purchase intention, which is an important measure for consumer behaviour. This could be an effect, as well as a

shortcoming, of the research study as the survey only included one single measure of the purchase intention. The reason for this single measure was to keep the questionnaires as short as possible to avoid tiredness (Söderlund, 2005), but since this is a central measure for the study it could be seen as limiting to not use a multiple measure, hence this is also discussed to be implemented in future research. Further criticism for this measure would be the way the question derived from Bergkvist & Rossiter (2009) was constructed: "Next time you are buying a product of this kind, how likely is it that you would buy the brand in the commercial?". This question implies that there is a specific product in the commercial, which was not always the case. In some commercials there was no specific product exposed, but rather a transformational commercial aiming to build the brand of the company. Therefore, once again, a multiple measurement would be suitable to accomplish to in a better way measure the underlying purchase intention of the consumer.

5.5 Future Research

To further strengthen the findings from the study at hand, further research could focus on testing the concept of consumer effort in an even more ecologically valid environment than this study managed to achieve. In addition, the fact that we in this study found the effects of consumer effort to be *partially* mediated by the perception of equitable exchange, suggests that there are in fact other additional underlying mediators to explore. Hence we propose further research to investigate and identify additional mechanisms influencing the effect of consumer effort on evaluations and intentions. In the criticism of the study we elaborated on the problems regarding the measurement of purchase intention for the study at hand. While we used only a single item measurement to measure this behavioural intention, we propose for future research to put more effort in investigating the potential influence on purchase intention, as it is a very important measure that marketers are likely to be concerned about.

In the "Managerial Implications", we stated that YouTube recently launched a new advertising feature to their advertising experience; *interactive cards*. In contrast to the imposed advertisements, the *interactive cards* are small icons that are displayed in combination with the video that the viewer is watching. The card provides a short text on what you will get by clicking, and the idea is that the card will add value to the

experience. If you for instance are watching a YouTube video of a famous football player, there might be an interactive card stating that you can get more information about the Nike trainers that the football player is wearing in the video. Viewers that click on the link and watch the advertisement have invested more effort *in general* and have total control over the invested effort than if the ad was imposed. With this new advertising feature, a unique and interesting possibility for further research appears. In specific, we suggest researchers to compare the attitudes and purchase intention (using multi-item measurements) between respondents who take part of the commercials after clicking on an interactive card with respondents who are forced to see the very same ad. Due to the huge data that YouTube gathers and the ecologically valid environment, such research would contribute enormously to the research area of consumer effort within online video advertising.

6. References

Books

Aiken, L.S., & West, S.G., 1991, Multiple regression: Testing and interpreting interactions, Newbury Park, CA: Sage

Ajzen, I, 1982, Equity and Justice in Social Behavior, Edited by: Jerald Greenberg and Ronald L. Cohen, Academic Press

Bryman, A. & Bell, E. 2011, *Business Research Methods*, 3rd edition, Oxford University Press, Oxford

Faraway, J. J., 2015, Linear models with R (2nd ed.). Boca Raton, FL: CRC Press.

Fox, J., 2008, Applied regression analysis and generalized linear models (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Iversen, G. R., & Norpoth, H., 1987, Analysis of variance. Thousand Oaks, CA: Sage Publications, Inc, New York

Malhotra, N.K., 2010, *Marketing Research: An Applied Orientation*, 6th edition, Prentice-Hall International, Upper Saddle River

Malhotra, N.K., & Birks, D.F., 2007, *Marketing Research: An Applied Approach*, 7th edition, Prentice-Hall Financial Times, Harlow

Norušis, M. J., 2011, IBM SPSS Statistics 19 guide to data analysis (international edition). Upper Saddle River, NJ: Pearson Education International, New York

Neisser, U., 1976, Cognition and Reality: Principles and implications of Cognitive Psychology, W.H. Freeman and Company, New York

Searle, S. R., 2006, Linear models for unbalanced data. Hoboken, NJ: John Wiley & Sons, Inc, New York

Söderlund, M., 2005, Mätningar och mått, Liber, Malmö

Söderlund, M., 2010, Experiment med människor, Liber Malmö

Electronic Resources

Financial Times, 2015, "Publishers and adblockers are in a battle for online advertising" Viewed 2015-04-15 from http://www.ft.com/intl/cms/s/2/c84a647e-d3af-11e4-99bd-00144feab7de.html

Journal Articles

Adams, J. Stacy., 1965, Inequity in Social Exchange, in Advances in Social Psychology, vol. 2, Leonard Berkowitz, ed., New York: Academic Press, 267–299.

Barn, R.M., & Kenny, D.A., 1986, The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173-1182

Bergkvist, L., & Rossiter J.R., 2009, Tailor-made single-item measures of doubly concrete constructs, International Journal of Advertising, 28 (4), 607

Chaudhuri, J., 1996, The Effect Of Media, Product and Message Factors on Ad Persuasiveness: The Role of Affect And Cognition, Journal of Marketing Communications, 2:4, 201-218,

Chunsik, L., 2011, What happens if online video advertising is skippable? Testing a hierarchical model of advertising avoidance, University of Florida Press

Dahlén, M., Rosengren S., & Törn, F., 2008, Advertising Creativity Matters, Journal of Advertising Research, 48 (3), 392-403

Dahlén, M., Rosengren S., 2013, Exploring Advertising Equity: How a Brand's Past Advertising May Affect Consumer Willingness to Approach Its Future Ads, Journal of Advertising Research 53 (1), 61-70

Djikstra, M. & Heidi, E.J.J.M., 2005, Separate and joint effects of medium type on consumer responses: a comparison of television, print, and the Internet, Journal of Business Research, 58 (2005) 377–386

Giebelhausen, M.D., Robinson, S.G. & Cronin, J.J. Jr., 2011, Worth waiting for: increasing satisfaction by making consumers wait, Journal of the Academy of Marketing Science, Vol. 39 No. 6, pp. 889-905

Kivetz, R. 2003, The effects of effort and intrinsic motivation on risky choice, Marketing Science, Vol. 22 No. 3, pp. 477-502.

Lala V, C., 2015, Impact of consumers' effort investments on buying decisions, Journal of Consumer Marketing, Vol. 32 Iss 2 pp. 61 - 70

Lapidus, Richard S. & Lori Pinkerton, 1995, Customer Complaint Situations: An Equity Theory Perspective, Psychology & Marketing, 12 (2), 105–122.

Low, G.S. & Lamb, C.W., 2000, The measurement and dimensionality of brand associations, Journal of Product & Brand Management, Vol. 9 No. 6, pp. 350-68.

Norton, M.I. & Mochon, D., Ariely, D., 2012, "The 'Ikea' effect: when labor leads to love, Journal of Consumer Psychology, Vol. 22 No. 3, pp. 453-460.

Okada, E.M., 2005, Justification effects on consumer choice of hedonic and utilitarian goods, Journal of Marketing Research, Vol. 42 No. 1, pp. 43-53.

Olivola, C.Y., & Shafir, E., 2013, The martyrdom effect: when pain and effort increase prosocial contributions, Journal of Behavioral Decision Making, Vol. 26 No. 1, pp. 91-105.

Reczek, R.W., Haws, K.L., Summers, C.A., 2014, Lucky loyalty: the effect of consumer effort on predictions of randomly determined marketing outcomes, Journal of Consumer Research, Vol. 41 No. 4, pp. 1065-1077.

Saini, R., Rao, R.S. & Monga, A., 2010, Is that deal worth my time? The interactive effect of relative and referent thinking on willingness to seek a bargain, Journal of Marketing, Vol. 74 No. 1, pp. 34-48.

Schrift, R., Netzer, O., Kivetz, R., 2011, Complicating choice, Journal of Marketing Research, Vol. 48 No. 2, pp. 308-326.

Schoorman, D.F. & Holahan, P.J. 1996, Psychological antecedents of escalation behavior: effects of choice, responsibility and decision consequences, Journal of Applied Psychology, Vol. 81 No. 6, pp. 786-794.

Staw, B.M, 1981, The escalation of commitment to a course of action, Academy of Management Review, Vol. 6 No. 4, pp. 577-587.

Webster C., Barnes, D. C., Beauchamp M., 2010, To Delight, or Not to Delight? This is the Question Service Firms Must Address, Journal of Marketing Theory and Practice, 18 (3), 275-284.

Weick, K.E., 1964, Reduction of cognitive dissonance through task enhancement and effort expenditure, Journal of Abnormal and Social Psychology 68 (May): 533-9,

Zhang, Y., Xu, J., Jiang, Z., & Huang, S, 2011, Been there, done that: the impact of effort investment on goal value and consumer motivation, Journal of Consumer Research, Vol. 38 No. 1, pp. 78-93.

Zhao, X., Lynch Jr. J.G., & Chen, Q., 2010, *Reconsidering Baron and Kenny: myths and truths about mediation analysis*, Journal of Consumer Research, 37(2), 197-206.

Interviews

Nicole Haman, Partner and Global Director Sales, United Screens Stockholm, 2015-01-15

Elias Nilsson, Consultant, Prime & United Minds Stockholm, 2015-01-20

Björn Wallenberg, Digital Editor, Veckans Affärer Stockholm, 2015-02-04

Forthcoming publications

Dahlén, M., 2014 (?), It's Not the Quality But the Effort Itself that Matters - Advertiser Effort and Consumer Perceptions of Equitable Exchange, Forthcoming

Appendix 1 - Movie-stimuli

Ving, High Effort - https://vid.me/Be2W



Lacoste, High Effort - https://vid.me/pXd2



Mini, High Effort - https://vid.me/CcGb



Tide, High Effort - https://vid.me/Stod



Ikea, High Effort - https://vid.me/zDoo



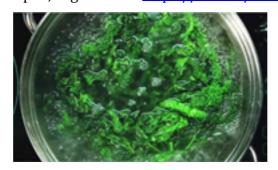
Infiniti, High Effort - https://vid.me/eVik



Mountain Dew, High Effort - https://vid.me/ZIbT



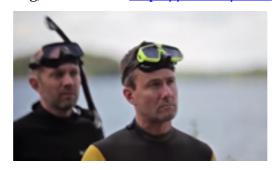
Lurpak, High Effort - https://vid.me/lICC



Kungsängen, Low Effort - https://vid.me/D2zA



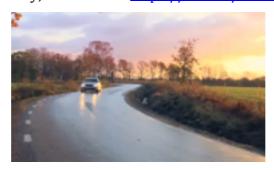
Ving, Low Effort - https://vid.me/Zv2S



Duke, Low Effort - https://vid.me/ImgY



Paroy, Low Effort - https://vid.me/k4bU



Quorn, Low Effort - https://vid.me/y7cf



T-Mobile, Low Effort - https://vid.me/JyZG

No, we're not on our 4th margarita.

Qlean, Low Effort - https://vid.me/vWgg



Appendix 2

 $\it Question naire$

The same questionnaire was supplied to each of the three groups.

Q1 - Har du sett hela filmen?

Ia – Nej

Q2 - Har du sett den här reklamfilmen tidigare?

Ja – Nej

Q3 - Hur mycket fick du anstränga dig för att ta del av reklamfilmen?

Väldigt lite - Väldigt mycket

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q4 - Var vänlig ta ställning till följande påståenden

Q4_1 - Jag ansträngde mig mycket för att öppna filmen

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q4_2 - Jag ägnade mycket energi åt att ta del av filmen

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q4_3 - Jag lade ner mycket tid för att kunna ta del av filmen

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q5 - Hur bekant är du med varumärket som exponerades i filmen?

Inte alls bekant - Mycket bekant

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Q6 - Hur stor erfarenhet har du av varumärket som exponerades i filmen?

Mycket stor erfarenhet - Ingen erfarenhet alls

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Q7 - Hur mycket kunskap har du om varumärket som exponerades i filmen?

Ingen kunskap alls - Mycket stor kunskap

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Q8 - Var vänlig ta ställning till följande påståenden om din uppfattning om reklamfilmen du just sett.

Q8_1 - Reklamfilmen förtjänade min uppmärksamhet

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q8_2 - Reklamfilmen var värd min tid

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q8_3 - Jag fick rimligt utbyte av att se på reklamfilmen

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q9 - Var vänlig ta ställning till följande påståenden.

Q9_1 - Annonsören borde ha ägnat mer/mindre energi åt reklamfilmen

Mindre - Mer

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q9_2 - Jag borde ha ägnat mer/mindre energi åt reklamfilmen.

Mindre - Mer

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q10 - När du tänker på reklamfilmen, vilket av följande alternativ stämmer bäst överens med vad du tycker om den?

- 1 Jag tycker extremt illa om reklamfilmen
- 2 Jag tycker mycket illa om reklamfilmen
- 3 Jag tycker ganska illa om reklamfilmen
- 4 Jag varken gillar eller ogillar reklamfilmen
- 5 Jag tycker ganska mycket om reklamfilmen
- 6 Jag tycker mycket om reklamfilmen
- 7 Jag tycker extremt mycket om reklamfilmen
- **Q11** Mot bakgrund av reklamfilmen du just sett, vad tycker du om varumärket i reklamfilmen?
- 1 Jag tycker varumärket är extremt bra
- 2 Jag tycker varumärket är mycket bra
- 3 Jag tycker varumärket är ganska bra
- 4 Jag tycker varumärket varken är bra eller dåligt
- 5 Jag tycker varumärket är ganska dåligt
- 6 Jag tycker varumärket är mycket dåligt
- 7 Jag tycker varumärket är extremt dåligt
- **Q12** Nästa gång du skall köpa en produkt av det här slaget, hur troligt är det att du skulle köpa varumärket i reklamfilmen?
- 1 Ingen chans eller nästan ingen chans
- 2 Mycket liten möjlighet
- 3 Liten möjlighet
- 4 Ganska troligt
- 5 Troligt
- 6 Mycket troligt
- 7 Säkert eller praktiskt taget säkert

Q13 - Hur mycket tror du att utvecklingen av den här reklamfilmen har kostat?

Väldigt lite - Väldigt mycket

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Q14 - Hur mycket tid tror du spenderades på utvecklingen av den här reklamfilmen?

Väldigt lite - Väldigt mycket

Q15 - Företaget har ansträngt sig mycket för att göra den här reklamfilmen

Håller inte alls med - Håller helt och hållet med

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Q16 - Var vänlig ta ställning till följande påståenden.

Q16_1 - Jag upplever att varumärket i reklamfilmen är populärt

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q16_2 - Jag upplever att varumärket i reklamfilmen är värdefullt

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q16_3 - Jag upplever att varumärket i reklamfilmen har hög status

Håller inte alls med – Håller med helt och hållet

$$1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10$$

Q17 - Kön:

Man - Kvinna

Q18 - Vilket årtal är du född?