Consumer Physical Effort in Marketing

How can consumers' physical effort influence marketing outcomes?

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Abstract

Marketing in the digital world has become extremely competitive in order to attract consumers' precious attention and time. Although research in this field has explored engaging consumers' cognitive effort for better marketing outcomes, consumers' physical effort has been overlooked by researchers and practitioners. The goal of this study is to examine the effect of engaging consumers' physical effort on marketing outcomes such as brand attitude and engagement as well as behavioral intentions. Two quantitative studies were conducted, and 322 total responses were received. For each study, participants were randomly assigned to different physical effort groups and a Nike marketing campaign was used to resemble a real-life setting.

The findings illustrate that engaging little to some physical effort could positively influence consumers' brand engagement and behavioral intentions while engaging too much physical effort could lead to negative outcomes. Additionally, the study also finds that consumers attitude towards the physical effort could affect their attitudes towards the specific brand. The study contributes to the research areas of consumer effort marketing, and it implies that marketers, especially those in the sports industry, can engage consumers' physical effort to improve the effectiveness of marketing campaigns.

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Keywords: Consumer effort, physical effort, brand attitude, brand engagement, behavioral intentions.

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1. Introduction

This introductory chapter addresses the current need for consumer physical effort in marketing activities and why this is chosen as a research topic. In addition to the background and purpose of the study, we are presenting our research question and how the research is expected to yield both empirical and theoretical contributions. Moreover, the introduction includes relevant definitions to bring a common understanding of some central concepts in the thesis and ends with delimitations for the study.

1.1 Background

With the rapid development of technology and the internet, consumers now have access to more information than ever before. Over 4 billion people globally have access to the internet and over 2.5 billion people globally have smartphones (Wearesocial.com). Due to the increasing trend of mobile internet and the penetration of smartphones, and other connected devices, marketing is becoming more personalized through new channels with less visible boundaries between the physical and digital worlds. The competitiveness of today's marketing landscape also creates information overload for consumers who can only register a limited amount of the advertising messages they are exposed to (Anderson and de Palma, 2009). Marketers use all kinds of marketing campaigns to fight over the precious attention of consumers and marketers are constantly looking for new ways to engage with customers, increasing marketing effectiveness and conversion rates. Research shows that successful marketing campaigns create beneficial value for the company by influencing the consumer decision-making process, including pre-purchase, purchase, and post-purchase behaviors (Rossiter & Percy, 1998).

Marketing practices, including marketing campaigns, usually require consumers to devote some kind of effort and engagement and the most common practice involves consumer cognitive effort (Kuvykaite & Piligrimiene, 2014). A brilliant while also successful campaign involving cognitive effort is Nike's Dream Crazy (Nike.com), where Nike utilized framing and bandwagon effect techniques. (marketingtechnews.net, 2017). By using carefully chosen words spoken by famous athletes and competitive actions in the video, Nike stimulated viewers and created excitement about sports, Nike brand and even social issues like gender equality. The campaign video also received millions of views throughout all media platforms. While companies like Nike have gained success through cognitive effort marketing, few of them have

involved in consumer physical efforts. We were able to interview a couple of Nike employees in Oregon headquarters through a conference call. They expressed interest in consumer effort engagement in marketing and also addressed that brand value and brand engagement are extremely important for the industry in general and Nike in particular.

As wearable technologies become more widely available, consumers can easily monitor their activities and health information. Sports companies like Nike also leveraged wearable and run tracking applications (Forbes) to promote more active lifestyles. Drawing on previous studies and current development of technology, we strongly believe that engaging consumers in physical efforts can also have an impact on marketing outcomes of a specific brand. While research contributions are extremely scarce for consumer physical effort, some studies have shed light on the field, such as that physical efforts have an impact on consumers' evaluation of commercial messages (Sagfossen et al., 2018). However, this study opens up a new area to consumer marketing research as physical efforts in today's world could potentially impact not only consumers' message processing but also other marketing related outcomes.

1.2 Purpose and Expected Contribution

Research in the field of marketing efforts has to a large degree dealt with cognitive effort when taking into account the theoretical variable (Westbrook & Braver, 2015). Moreover, cognitive efforts have also been paramount in the pre-purchase phase including the consumers' decision-making process. However, there is little research dedicated to consumers' behavior in regards to the physical aspects of effort (Sagfossen et al., 2018). Hence, the purpose of this thesis is to contribute with additional academic perspectives of consumer effort in general and consumer physical effort in particular. In addition to the theoretical contributions, we hope this thesis can provide practical insights to consumer product companies and help them with new and creative ways of marketing in order to succeed in building strong brands.

By merging the literature on consumer effort, consumer physical effort and marketing campaign effectiveness we create a foundation and broaden the general understanding of how different levels of effort imposed by brands can influence consumer behaviors and attitudes. Additionally, the methods that will be applied to study the underlying research question will encircle quantitative analysis applicable to marketing experiments. Two different studies will be conducted. The first one is to measure the perceived and imagined physical effort level in

relation to the dependent variables as well as a follow-on study in order to encapsulate the actual and real perceived effort level associated with the dependent variables.

1.3 Research Question

In order to deliver on the expected contributions and purpose, we are going to answer the following research question:

Does engaging consumer physical effort affect marketing outcomes including (1)brand attitude, (2)brand engagement, (3)behavioral intention towards the brand?

1.4 Definitions

To bring a common understanding of central concepts, below we introduce some key definitions used throughout the thesis.

Effort

Effort is generally considered as the energy or the amount of pressure put into a behavior or a series of behaviors (Mohr and Bitner, 1995).

Consumer effort

Consumer effort has been defined as the resources, in terms of cognitive, monetary and/or physical, consumed in order to access a product (Cardozo, 1965).

Consumer physical effort

As noted by Sagfossen et al. (2018), they view physical effort as "*a subjective variable comprising the individual's perception of exertion in a specific situation. It was assumed that the individual was able to integrate signals elicited from the peripheral working muscles and joints, from the central cardiovascular and respiratory functions, and from the central nervous system, into an overall assessment of physical effort (cf. Borg, 1982, 1990).*"

Consumer purchase behavior

Consumer purchase behavior is defined as "consumer buying behavior" which is consumed in order to meet the needs of consumers" (Acton, 2005). Purchase behavior also refers to the buying behavior of individuals which substitutes the exchange of goods or services in money or money. (Engel, 1993).

Brand engagement

Based on Hollebeek (2011), consumer brand engagement is defined as “the level of customer's cognitive, emotional and behavioral investment in specific brand interactions.”

1.5 Delimitations

In order to successfully conduct the experiment and research with limited time and resources, we decided to narrow down some areas and definitions of the research as discussed below.

As physical effort is difficult to evaluate and measure in a fair and scientific way with limited resources, customers’ perception of physical effort will be used as a variable in the research.

Based on the definitions discussed in the above section, customer purchase behavior is usually measured by actual transactions and other actions made by customers. Some literature suggests that measuring behavioral intention is a good substitute for consumer purchase behavior (Cronin et al., 2000). In this paper, we intend to use this behavioral intention as a variable rather than the actual purchase behavior/intention.

This paper intends to use Nike as the only brand instead of a range of sports brands in the research due to limited time and resources. As Nike is one of the largest and most well-known sports brands in the world, it is relatively easy for customers to relate to and think of this specific brand when taking part in the respective studies.

2. Theoretical Framework

In the following chapter, we present an overview of the theoretical framework for this study. We discuss the theoretical platform on which the literature review is centered around. We present previous research and findings on different types of effort and describe the theoretical research gap and our contributions. Lastly, based on our literature review we will create the foundation for and summarize our hypotheses.

2.1 Literature Review

2.1.1 Overview of the Research Area

The research framework in which this thesis is constructed around, namely consumer effort, is lacking a sufficient amount of theory (Sweeney et al., 2015). Taking this fact into consideration, there is a possibility that the scope of the literature review is relatively limited. However, while the breadth of theory may be finite, we are acknowledging that there is a great need for additional research and contributions within the field of consumer physical effort and that is partly why we have chosen to focus on this particular sub-category within consumer effort.

This thesis is focusing on a specific area within marketing and marketing campaigns, namely consumer behavioral intention and brand related measures. In general, there are many marketing theories that deal with different scientific aspects of consumer purchase intention and behavior. One of those domains put consumer effort at the center.

Consumer effort can be decomposed into different types of effort. Apart from consumer physical effort in which this thesis is going to focus on, other common research includes cognitive effort and monetary effort (Söderlund and Sagfossen, 2017). These efforts have shown in research that they can impact consumer behavior in terms of the overall evaluation and satisfaction of an object (Cardozo, 1965). It is possible to assume that many different types of effort are still efforts from the consumers' point of view. Although this thesis is supposed to deal with consumer physical effort, we believe that other types of effort are behaving in the same way. As a consequence, we are allowing ourselves to include some theory on consumer cognitive effort due to the lack of research on consumer physical effort. Moreover, we analyze aspects of consumer purchase intentions and behaviors in the context of physical effort. Since

marketing campaigns provide a good context to capture consumer purchase behavior, we also assess and examine marketing theories in regard to marketing campaign effectiveness.

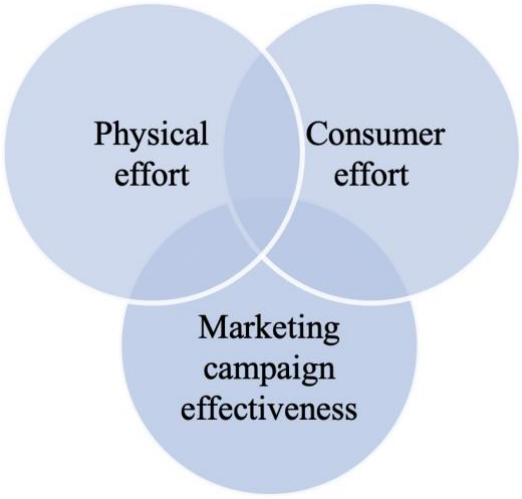

Figure 1: The literature review is built on the above three theory components.

In the following three subsections we will discuss and examine the three theory components more in-depth.

2.1.2 Consumer Effort

Consumer effort, as a means, has mainly been studied from the purchase process point of view (Saini et. al., 2010), where previous research generally deals with consumer effort in terms of cognitive and physical, both within the same construct of effort (Eisenberger, 1992). While cognitive effort may involve the consumer's evaluation of a brand or marketing campaign, physical effort generally includes physically engaging with the brand or purchase process such as walking to a store or physically finding a product within the store (Lala et al., 2015). Furthermore, Lala et al. are consistent with recent research when presenting arguments that effort and time are bound together since spending time on something involves effort and putting effort into something takes time, making no distinction between the two (Okada and Hoch, 2014). Lala et al. (2015) also contributed with the findings that the perceived level of control, e.g. voluntary or forceful effort, influence the consumer effort where a more believed voluntary effort results in a better outcome for the product owner.

A majority of research within the space has dealt with effects related to effort on choices made prior to the effort being invested. The result of those studies shows that consumers still pursue

opportunities that are relatively effortful, such as when the energy levels are high (Kivetz and Simonson, 2003), when the effort is believed as being too easy (Schrift et al., 2011), or when the effort, as well as grit, for an activity has a greater purpose (Olivola and Shafir, 2013). On the contrary, the purpose of Lala et al.'s research was to study consumer buying behavior after effort has been consumed, with the findings that under certain conditions, companies will benefit positive outcomes from consumers that are spending a higher level of effort, such as a higher willingness to pay for the product.

When studying consumer effort, much of the research within the field that is related to consumer decision making has encircled the cognitive efforts arising immediately prior to a purchase decision (Hoyer 1984). Hoyer further argues that purchase decisions that are made repeatedly or frequently and where the involvement or importance are low, involve less cognitive effort and more simple decision-making processes, referring to a study of Deshpande and Hoyer (1983) where it was evident that consumers exercised more cognitive effort when choosing running shoes or a car then in choosing peanut butter. Moreover, when dealing with the effect of cognitive effort on consumer buying behavior, the level of product complexity is an important mediator extracting the customers' effort level in the decision-making process. The less complex a product is the less willingness there is to exert cognitive effort (Adjei et. al., 2010).

With the rise of the internet, the consumer information search behavior is also changing, which has implications for decision-making in the purchase process (Peterson and Merino, 2003). However, Peterson and Merino argue that for cognitive as well as physical effort, the internet will most likely not lead to a conspicuous increase in information search in relation to a planned purchase but instead act as a substitute for other decision-making behaviors conducted in the pre-purchase process. Hence, consumers using the internet as an information search method will probably phase a decrease in physical effort directed to the pre-purchase decision-making process (Peterson and Merino, 2003).

2.1.3 Consumer Physical Effort

According to Meier et al., (2012) thoughts, feelings, attitudes, and behaviors are connected and found in bodily interactions with the environment. Since a main focus of this study is that consumers' physical effort have implications on brand attitude, brand engagement and brand purchase intention, and bodily activities is often related to physical effort, there is a value in

exploring communication effectiveness in regards to the engaged body, especially due to the fact that it has been highly ignored within the field of marketing research (Sagfossen et al., 2018). As noted by Sagfossen et al. (2018), when studying consumers' decision-making and purchase processes, academics have largely focused on consumer cognitive effort and overlooked physical effort. Moreover, looking at the scientific literature, effort could be acknowledged as an additional human sense (Proske and Gandevia, 2012) but marketing academics have barely examined, and recognized marketing activities associated with such senses and how they are linked to consumer behavior (Sagfossen et al., 2018).

Although there has been relatively limited research on physical effort in marketing, scholars in other fields have made contributions on the effects of physical effort, not least related to information processing. Hence, through information processing, one can assume that physical effort influence cognitive processes, in turn indicating that physical effort may act as a variable also within marketing (Sagfossen et al., 2018).

Another element making physical effort an important aspect within marketing and in marketing campaign settings is that psychologists conclude that effort plays a key role for human behavior (Eisenberger, 1992). As noted by Söderlund and Sagfossen (2017), they assume that effort may affect consumers' evaluation of experiential offers. We make a similar fair assumption in that consumer effort in general and consumer physical effort in particular could possibly affect the evaluation of the product offering presented through a marketing campaign.

Research has also been conducted in the field of marketing and advertising where academics have been studying effort imposed by the supply-side when generating a product offering and how the consumers' attitude is affected by that effort, but there remains a lack of research in regards to consumers' own effort (Söderlund and Sagfossen., 2017; Sweeney et al., 2015; Mohr and Bitner, 1995). However, some research still exist in which suggestions towards effort in respect to an offering is mandated, resulting in an increased evaluation of that same offering (Cardozo, 1965; Norton et al., 2012). Norton et. al. (2012), further argue that the more effort people extract for some quest, the higher they tend to value it and subsequently that effort and evaluation increases in harmony. Sagfossen et al. (2018), on the other hand, argues that since people are effort averse, physical effort can have a negative impact on consumers' evaluations of marketing messages. Cardozo (1965) also mentions that high physical effort activity can result in consumers' finding the activity less pleasant and frustrating, thus leading to a negative

attitude. Research regarding physical effort are two-folded, thus we need to look at several levels of physical effort from low to high and study their effect on consumers.

2.1.4 Marketing Campaign Effectiveness

An important objective for advertising in general which could also be included under the broad area of marketing campaigns is the aim to support the brand and influence consumers through communication capabilities. This communication process, also called communication effects, aims to create cognitive associations attained by the consumer, which is connected to the target company (Rossiter and Percy, 1998, p.109). According to Rossiter and Percy, there are five communication effects and they can all, partly or exclusively, be a consequence of communication processes such as through marketing campaigns (p.109). Out of the five communication effects, we are in this thesis focusing on brand attitude and brand behavioral intention. In addition, we are also studying the effect on brand engagement in which all three will act as dependent variables.

2.1.4.1 Brand Attitude

Brand attitude is a buyer's overall evaluation of a brand that expresses the consumers ability to phase a currently imposed motivation (Rossiter and Percy, 1998, p.120). As noted by Gardner (1985), a lot of research has shown that a consumer's brand attitude is affected by the person's perceived brand-related beliefs. Hence, one could argue that brand attitude is created by the consumer itself and that it often persists without radical changes in one's beliefs. Furthermore, Dahlén and Lange (2009), argue for the importance of brand attitudes since attitudes contribute to an emotional appeal, in turn creating behaviors that lead to actions. Dahlén and Lange (2009) also highlight the intellectual aspect of attitudes in the sense that it directs our thinking-processes.

2.1.4.2 Brand Engagement

Consumer brand engagement in a marketing setting is defined as the effort, produced by a brand, to empower, motivate and measure consumers contributions (Harmeling et al., 2017). Harmeling et al., remark the consumers' impact and contributions to different marketing functions such as customer acquisition and retention as well as marketing communication. Hence, consumer engagement could play a vital role for brands in providing a foundation to achieve its marketing objectives (Harmeling et al., 2017). An effective marketing engagement can result in an increased customer satisfaction as well as more loyal customers leading to an

overall improved brand performance (Ranjan and Read, 2016). As opposed to brand attitude being stable evaluations, brand engagement is rather a two-way process between consumers and brands (Harmeling et al., 2017), thus this engagement is situation specific, and it is shorter lived since people are more or less engaged in something at one point compared to another.

2.1.4.3 Behavioral Intention

As discussed in the above section, the attitude towards a brand is important. But, only having an attitude about and engaging with a brand will not contribute to the company's overall objective (generating revenue). Instead there needs to be a focus on influencing the attitude and engagement in order for the consumers to take an action and make a purchase. Brand purchase/behavioral intention is defined as a consumer's self-instruction to take purchase-related action (Rossiter and Percy, 1998, page 126). As Rossiter and Percy notes, it is important to treat the intention in a broad context and include the whole purchase-process. Furthermore, they proclaim differences in purchase intention in relation to low and high involvement where one should *assume* purchase intention for low involvement purchase decisions opposed to *generate* purchase intention for high involvement purchase decisions.

2.2 Hypotheses

2.2.1 Hypotheses generation

As previously stated, the base of which this thesis is founded upon is to study the effects on consumer perceived physical effort and how the effort level affects consumer brand attitudes, brand engagement as well as brand behavioral intention. Based on the theoretical framework explained in the above section (2.1), we will in this part investigate, discuss, and present our identified dependent variables in which we are going to further generate our hypotheses.

Consumers attain knowledge and evaluate a brand by processing information such as getting exposed to an advertisement and marketing campaign, engaging with the brand, experiencing a brand through a store/online visit or consuming a product. These brand-related touch points result in consumers' generating associations that in turn affect the attitude towards the specific brand. Contradicting to previous theories presented about brand attitude, some academics argue that brand evaluation and information processing is a dynamic and ongoing process where the attitude is not set in stone but rather part of a constantly revised and updated perception of the brand (Reed et. al., 2002; Weilbacher, 2003).

With the above reasoning in mind, we hypothesize that a higher perceived physical effort level will lead to consumers' engaging more with the brand and attaining a better brand attitude of the product offering in a marketing campaign. Moreover, and perhaps even more importantly a higher perceived effort level is hypothesized to generate a more positively influenced consumer purchase behavior or behavioral intentions. However, as mentioned previously, academics suggest that too much effort could lead to negative attitude. Hence, we also hypothesize that consumer brand attitudes, brand engagement, and behavioral intention will decrease if the effort required is too high. The reasoning behind the choices of hypotheses' is phased with different opinions in marketing related literature. While older studies state that there is a clear correlation between attitudes possessed by consumers and behavioral intentions (Baldinger and Rubinson, 1996), more recent research shows relatively little relations between the two with a correlation ranging between 20-30% (Dahlén and Lange, 2009).

In light of the research presented in the theory section by Norton et al. (2012) we also want to investigate whether their findings on effort in respect to an offering, which resulted in a higher evaluation of that same offering, is applicable also in a consumer physical effort setting.

Due to the limited time and resources and the expensive and difficult nature of measuring actual purchase behavior which among other things would include acquiring point-of-sale data, we are hauling on literature such as Cronin et al (2000) that suggest consumer behavioral intentions work as a good substitute.

The following is hypothesized:

H1 A higher perceived physical effort leads to a better attitude towards a specific brand while this attitude decreases if the perceived physical effort is too high.

H2 A higher perceived physical effort level leads to more engagement with the brand and the product while this engagement decreases if the perceived physical effort is too high.

H3 A higher perceived physical effort imposed by a specific brand leads to more behavioral intentions towards that brand while this behavioral intention decreases if the physical effort is too high.

3. Main Studies

To test what we are now proposing in this theory section, the thesis is divided into two different studies, study 1 and study 2. First, we introduce study 1 to establish if there are any main effects at all. This is conducted by using a simulated/fictitious context wherein there are no real effort from the participants (i.e. consumers') point of view. Hence, perceived and imagined physical effort is used as the independent variable. Study 1 is then followed by a discussion of the main outcomes before moving on to study 2. In study 2 we want to examine the effect of the main pattern by replicating the study in a real effort setting.

Furthermore, what we did not include in study 1 was to look at various potential explanations for the studied effect in terms of mediators. That is why study 2 will be comprising the same dependent variables but also comprise additional questions in regard to potential mediators.
The following sections: (4.) Method, (5.) Result and Analysis, and (6.) Discussion is regarding study 1 and will then be complemented with additional sections regarding study 2. Lastly, we will be drawing general conclusions for the thesis in regard to both study 1 and study 2.

4. Method

Based on the theoretical framework provided above, we discuss the methodological approach that addresses the hypothesis and research question in this section. We then discuss the selection of research methods, preparatory work, experimental design followed by a data quality discussion for the different studies.

4.1 Selection of Research Methods - Quantitative Approach

Since the main research is regarding consumers' physical effort and how it can affect certain marketing outcomes such as behavioral intentions and brand engagement, we consider consumer physical effort level, or the perceived physical effort level as the only independent variable in this research. In general, this thesis uses a deductive research approach since we are using theory to outline potential effects and to help provide insights and guidance on our topic. We then examine those same effects empirically. Hypotheses are developed and tested with data generated from surveys and marketing experiments. This testing process serves as a deductive approach where the hypotheses and the research question are founded upon existing literature and tested through survey participants. (Bryman and Bell, 2015, p. 27). There is no other way effects can enter our study if they are not from theory because theory is the basis for our questions. However, since we first conducted a study 1, we allowed for elements of learning where we used our thoughts and data to design study 2. In that sense, there are also some aspects of abduction.

Moreover, the thesis uses a quantitative research design and surveys in the main data collection method. Due to the nature of the research question and the need of consumer knowledge, obtaining data of consumer preferences, behavioral intentions and attitudes are essential for our study. With that in mind, using a survey approach is considered as an appropriate method for collecting such data. Survey distribution also allows us to gain insights from a large sample size compared to a qualitative approach (Bhattacherjee, 2012). Thus, self-completion survey questionnaires were used throughout the data collection process (Bryman and Bell, 2015). Questionnaires for study 1 were designed and distributed through the online marketing tool Qualtrics, while questionnaires for study 2 were also designed in Qualtrics but participants were required to complete a marketing experiment in the form of a physical movement and thereafter conduct the survey in person. Data collected was first analyzed inside Qualtrics to

gain initial insights. The data was then exported to excel with the purpose to create a clean raw data set and lastly it was exported and analyzed in the software programs RStudio and SPSS.

4.2 Preparatory Work

A pre-study and a pilot-study were conducted to test the survey questions and the range of topics that should be included. The aim for the pre-study was to choose an appropriate physical exercise that can be used to measure consumers perceived physical effort level. The chosen exercise type resulting from the findings in the pre-study was then used as the independent variable for our further studies. The data gathering for the pre-study was conducted in the form of a survey. The pilot-study aimed to test and assure that the questions in the main studies where appropriately perceived by the respondents and that the answers where in harmony with the research question. Hence, the steps undertaken in the data collection consisted of three components and was conducted in the following order: Pre-Study and Pilot-Study followed by the Main-Studies.

Figure 2: Steps of data collection

4.3 Pre-Study

This section presents the study's first data collection undertaken. Starting with the purpose and method and followed by the results and conclusions as well as critique towards the approach of the study.

4.3.1 Purpose & Method

In order to choose the most appropriate exercise to investigate consumers' physical effort level, a pre-study was conducted. After diligent research about simple workout routines, we came up with four types of exercises that do not require special equipment or clothes. The four types of exercises were squats, push-ups, sit-ups and running. These exercises should also be in approximately equal level of physical effort level and equal in time used. As a result, likeliness to do 15 squats, 15 push-ups, 15 sit-ups, and 100 meters of running were incorporated into a survey questionnaire in Qualtrics. The survey was then sent out to randomly chosen people at the Royal Institution of Technology campus and Stockholm School of Economics campus.

Four exercises were presented first in the description text and specific questions were presented in random order to mitigate any bias and comparison. Respondents were asked regarding their likeliness to participate in each of the given exercise from a scale from 1-10, as 10 is the most likely to participate.

4.3.2 Results and Conclusion

For the Pre-Study, 43 complete survey responses were received along with 7 incomplete responses. The results regarding people's likeliness to participate in these exercises are displayed below in Table 1.

Scenario	Minium	Maximum	Mean	Std Deviation	Variance	Count
How likely are you to do 15 squats?	3.00	10.00	6.37	1.59	2.51	43
How likely are you to do 15 push-ups?	3.00	10.00	5.98	1.61	2.58	43
How likely are you to do 15 sit-ups?	1.00	9.00	4.70	1.82	3.33	43
How likely are you to run for 100 meters?	1.00	9.00	5.23	1.83	3.34	43

Table 1: Preference over different kinds of physical activity/exercise

Results in Table 1 showed that squats is the most preferred exercise with an average of 6.37 in response compared to the next highest exercise, push-ups with an average of 5.98. The standard deviation for all scenarios were under 2, so the variance of means was not too high. Though squats and push-ups were quite close in terms of average likeliness to participate, we decided to move on with squats as the manipulated physical effort level. Squats is also subjectively easier to conduct for most people and can be executed on the spot (standing at one point, without the need to get on the ground). We also got the personal feedback that doing push-ups or sit-ups could be perceived as more awkward since you are laying on the ground in public.

4.3.3 Critique of the Study

One of the criticisms in regard to the pre-study encircle the selection of physical exercises which did not receive too much theoretical reasoning and scientific support. Nonetheless, while the purpose of the pre-study is to consider which physical exercises to use throughout the thesis, as long as the same exercise is manipulated and can be changed in respect to different effort levels and are not too easy to execute, the respondents in the main studies will not be affected by the choice of exercise.

Furthermore, the participants choices of physical exercises in the pre-study could be influenced by moderators such as weather-condition. Due to the current season, autumn, the participants may imagine that their perceived effort for the different exercises bring inconveniences. Such inconveniences could include making sit-ups on a dirty surface or running 100 meters under rainy or cold conditions. Hence, squats could be perceived as the most comfortable option. Further investigation would be necessary to make up for that ambiguity.

Additionally, one could argue that the sample size is too small and that the survey is too simple in the way that it is not taking into account demographic information. However, the aim of the pre-study is to get a fast and general idea to guide us in the construction of the main studies, rather than taking a deep and scientific approach of the pre-study itself.

4.4 Pilot-Study

This section presents the study's second data collection undertaken. Data and feedback from this section serve as the foundation for the main study. Starting with the purpose and method and followed by the results and conclusions as well as critique towards the approach of the study.

4.4.1 Purpose & Method

The pilot-study was conducted before the main study with the purpose to test the feasibility of the questionnaire for the main study where we tested the quality of the survey to improve and make sure it was perceived as authentic and credible in the eyes of the participants (Bryman and Bell, 2015). The aim for the pilot-study was to further receive valuable feedback in order to eliminate any ambiguities for the main study.

First, a survey questionnaire was designed in Qualtrics and then a fictitious Nike marketing campaign was created as the background of the questionnaire. Nike was chosen as the only brand in the research, as mentioned in the delimitation section, since Nike is a widely recognized brand and it is relatively easy for participants to relate to. The campaign content was "Nike is starting a promotion. You, as a participant in this campaign, have to complete XX numbers of squats to earn a 20% promotional code to use on Nike.com". A coupon was chosen as a marketing tool since it is commonly used by today's businesses in order to set in motion a process for consumers. The questionnaire was intended to measure the outcome of the fictitious

campaign by examining (i) the brand attitude (ii) the brand engagement and (iii) behavioral intentions attained by the participants.

The first draft of the questionnaire was sent out to 5 selected respondents and was then modified based on qualitative feedback gathered. The improved questionnaire was then sent out to 5 additionally selected respondents. Based on all these qualitative feedbacks, we could move forward with the main studies. For both the initial 5 respondents as well as the follow-on participants, the discussions were conducted in the atrium of Stockholm School of Economics during "off-rush hour".

4.4.2 Survey Design

Based on Söderlund (2005), a survey questionnaire needs to be as concise and comprehensive as possible in order to reduce the risk of response bias as respondents may have tiredness with long questionnaires. With that in mind, we deleted unnecessary words and questions to keep the questionnaire short and clear. Structured multiple-choice questions with 1-10 interval scale was used to measure the dependent variables. (Malhotra & Birks, 2007).

The pilot survey was initially created with two different scenarios with different effort levels. The first level required participants to imagine doing 3 squats and the question was "Nike is starting a promotion. You, as a participant in this campaign, have to complete 3 squats to earn a 20% promotional code to use on Nike.com.". The second scenario used the same question but required participants to do 15 squats in the fictitious campaign. Both scenarios were designed to show up randomly. Below, we further explore the intended measures with specific survey questions.

Pre-Select Question

The question "How likely are you to participate in this campaign and earn the discount code from doing the physical activity?" with a 1-10 interval answer scale was used to measure the interest of participants in doing the physical activity to earn the coupon. Scale 1 was defined as "Not likely to participate and do squats" while scale 10 was defined as "Very likely to participate and do squats." Participants who selected choices that were less than 4 on the scale were directed to the end of the survey to answer questions regarding physical effort and demographics.

Brand Engagement

Brand engagement was one of the main dependent variables of the study, and a specific question was asked only for participants who showed interest in the Nike campaign proposed based on the pre-select question above. The question was "After completing the physical activity, how likely are you to visit Nike.com and browse the products?". The answer option was also a 1-10 interval scale with 1 being "Not likely" and 10 being "Very likely". Though there are many other ways to measure brand engagement, we decided to use website visits since it is the most basic of all engagement metrics. (Searchenginejournal).

Behavioral Intention

Another main dependent variable is behavioral intention or the likeliness to buy. Participants' were asked about their behavioral intention through the following question, "How likely are you to use the coupon to buy something from Nike?". Like previous questions, the answer options were in the intervals of 1-10 with 10 being "Very likely".

Brand attitude

Lastly, we wanted to measure the general attitude towards the brand since this could affect whether the respondent want to engage with the brand and/or use the coupon to make a purchase, other than the effort level itself. The question was, "What do you think of Nike as a Brand?", and it had the same intervals for answer options as the previous questions.

Demographics

In order to understand and validate whether demographics potentially have an effect on the questions measured and presented above, we wanted to take the following demographics into account where we focused on four main areas: (i) age, (ii) level of education, (iii) gender, and (iv) current geographical living status.

4.4.3 Results and Conclusion

The initial survey questionnaire was sent to 5 respondents and qualitative data was gathered through personal interview after they answered the survey. Based on Bryman & Bell (2015), we followed some of the general guidelines on conducting qualitative research. Questions asked included "How do you feel about the exercise mentioned in the survey?", "Do you feel comfortable reading and understanding these questions?", "What do you think of the Nike

campaign mentioned in the beginning?", "Do you have any general suggestions on how we can make the survey better?".

One main feedback we gained was that the physical effort level, 3 squats or 15 squats, might not be enough for some people. One respondent mentioned "I go to the gym quite often and both 3 and 15 squats are too easy for me. I think both of them are quite low effort." Another related feedback given by a Stockholm School of Economics Phd student was that people could perceive the squats as different physical requirements and it would be important to know what respondents think of the effort level and their fitness level. Another respondent did not perceive Nike brand positively and suggested that we could use a generic brand that participants could choose themselves. A master student from Stockholm School of Economics also pointed out that she wanted to know the expiration date of the coupon, which could affect her purchase behavior. Some other feedback also includes minor wording issues and clarification on some sentences.

With the feedback in mind, an additional effort level, 40 squats, was added. One question regarding participants' perceived physical effort of the squats was added. Another multiple-choice question asking about the participants' personal exercise habits or fitness level was added right after. We also decided to add a two months expiration date to the coupon for Nike campaign as two-month period is enough time for consumers to make purchase decisions while providing results relatively quickly. However, we decided not to change Nike as our focus company since our study is focusing on physical effort in which various sports or training contexts is likely as settings, hence we chose to focus on a company that could add realism to the research and Nike is the most well-known sports-related brand in the world (Forbes).

A table displaying the number of respondents taking part in the pilot-study is presented below, taking into consideration the participants gender.

# of respondents: first draft	# of male respondents	# of female respondents
5	4	1

# of respondents: second draft	# of male respondents	# of female respondents
5	3	2

# of total respondents	# of total male respondents	# of total female respondents
10	7	3

Table 2: Participants in pilot-study with gender distribution

4.4.4 Critique of the Study

As the pilot-study focused on a small sample size it's difficult to draw any significant results as well as demographic effects. Additionally, further critique could be appointed the use of a convenient sample (Jacobsen, 2002) which consisted of PhD and Master students at SSE as well as marketing managers. While these respondents, to our advantage, were quickly accessible, it lacked overall demographic representation. However, the aim of the pilot-study was to test the feasibility of the questionnaire rather than contributing with actual results and gaining valuable feedback in order to improve the general structure and questions, which the target respondents contributed with.

In regard to the qualitative approach, critique could be directed towards the procedure and overall setting. The feedback and discussion took place in the atrium at Stockholm School of Economics, which is not the ideal place to conduct qualitative research due to it's, in general, crowded environment. However, the purpose of the pilot-study was to gain a fast outlook and feedback in order to improve and distribute the main study, rather than focusing and spending effort on qualitative methods.

4.5 Main Study 1

This section presents the main study 1 and data collection undertaken to explore brand engagement, brand behavioral intentions and brand attitudes in relation to level of consumer physical effort. Starting with the data collection, survey design, and data preparation, and followed by analytical tools and data quality.

4.5.1 Data Collection

The data was collected between the 27th of September and 14th of October where respondents where anonymously recorded through an online survey using Qualtrics. The survey was distributed to people partly through social media and was also distributed in an on-site setting using Stockholm School of Economics and Royal Institute of Technology as a base. The target group consisted mostly of people in age from 18-25 and majority of them were undertaking university studies. The reasoning behind our choice of distribution, social media and on campus participation, was founded on making it as convenient as possible for the target respondents to partake in and answering the survey. The table below displays the most essential demographics.

Demographics		Low effort group 3 squats (N=59)	Medium effort group 15 squats (N=41)	High effort group 40 squats (N=44)	Total Sample (N=144)
Gender	Male	54%	63%	57%	58%
	Female	46%	37%	41%	41%
	Other	0%	0%	2%	1%
	Choose not to respond	0%	0%	0%	0%
Age	18-25	70%	63%	68%	67%
	26-30	20%	17%	21%	19%
	≥ 30	10%	20%	11%	14%
	Mean	***25,4***	***25,5***	***29,8***	***26,9***
Currently Living	Stockholm	80%	80%	75%	78%
	Other, Sweden	2%	0%	16%	6%
	Other, Europe	10%	2%	5%	6%
	US	5%	12%	5%	7%
	Asia	3%	5%	0%	3%

Table 3: Demographics for main study 1 sample.

In total, 144 respondents received and opened the survey with the distribution of 59 people in the low effort group, 41 respondents in the medium effort group, and 44 in the high effort group. Out of the 144 participants, 130 indicated that they were likely to participate and answered all the questions. For the other 14 contributors, 2 didn't finished the survey and 12 chose a low likelihood to participate in the marketing campaign and were directed to brand attitude and demographic questions. Hence, they did not answer questions regarding brand engagement and purchase intention.

4.5.2 Survey Design

The same survey questionnaire from Qualtrics was used for the main study with additional questions and minor adjustments based on results from the pilot study. The survey was kept concise, clear, and anonymous.

An additional effort level, 40 squats was added in the beginning of the questionnaire. Three different scenarios of physical effort (3, 15, 40 squats) randomly showed up to respondents. An expiration time was also added to the Nike promotion coupon. The final Nike campaign message was "Nike is starting a promotion. You, as a participant in this campaign, have to complete (3/15/40) squats to earn a 20% promotional code (expires in 2 months) to use on Nike.com." Questions regarding pre-select, brand engagement, purchase intention, and brand attitude were kept the same. Question on consumer perceived effort was added afterwards. We asked, "What was your perceived level of the imagined physical effort to earn this coupon?" with a 1-10 interval slider, 1 being "No/low effort" and 10 being "High effort". This question also served as manipulation check of the physical effort level proposed in the Nike campaign. Another question on respondents' personal fitness level was added. "How often do you take part in physical activities/exercise?" was asked with multiple choice options including "Once or less time per week", "1-3 times per week", and "3 or more times per week". The questionnaire ended with the same sets of demographic questions as those in the pilot study questionnaires. Additionally, a special attention question "What brand was in the promotional campaign mentioned previously?" was used to test whether respondents were actually focused on answering the questionnaire. (Bryman & Bell, 2015). Answer choices included Adidas, Nike, Tesla, Under Armor, and Apple.

4.5.3 Data Preparation

Survey results were exported into a CSV file from Qualtrics. Unnecessary data columns were deleted. A special column called "Group" including numbers 1, 2, and 3 was created to identify what physical level, 3 or 15 or 40 squats, each response corresponded to. Independent variables, dependent variables, and demographics variables were listed by columns. All data were in numeric format with dependent variables ranging from 1-10.

4.5.4 Analytical Tools

Both RStudio and SPSS were used as the primary analytical tool for the study. As mentioned before, data were grouped based on the physical effort level assigned randomly. Means of likeliness to participate, brand engagement, behavioral intention, brand attitude, and perceived physical effort level were calculated for each group. Since all the answer choices for these questions were all interval scale from 1-10, the means of them were also from 1-10. Moreover, a One-way ANOVA test and Scheffe post hoc tests were used in SPSS to compare the variance of means of dependent variables across physical effort groups.

For Hypothesis 1, One-way ANOVA test and Scheffe post hoc test were conducted to compare differences in brand attitude of different physical effort levels.

For Hypothesis 2, One-way ANOVA test and Scheffe post hoc test were conducted to compare differences in brand engagement of different physical effort levels.

For Hypothesis 3, One-way ANOVA test and Scheffe post hoc test were conducted to compare differences in behavioral intentions of different physical effort levels.

4.6 Data Quality

In order to reassure that the data examines what the study is intended to examine we will in this section present and discuss three critical measures in relation to the data quality, namely reliability, validity, and replicability.

4.6.1 Reliability

In quantitative studies, as within this thesis, the reliability is of high importance and will be assessed in regard to the stability over time (Söderlund, 2005), the internal reliability and inter-observer consistency (Bryman & Bell, 2015).

Stability over time

As noted by Söderlund (2005), stability over time is referred to as the persistency of the results regardless of when it is created. Due to the limited scope of time for this paper, we did not conduct any additional studies regarding fictitious physical effort. Hence, we cannot be 100 percent certain that the survey will result in the same outcome. However, we did undertake measures and designed questions in order to increase the likeliness of reliability and stability

in replicated studies and in that way enabled comparable results. The types of questions and measures have proven to capture the essence of what we are studying (Bryman and Bell, 2015). By making a 1-10 interval scale with a wide option of answers, with inspiration from the Swedish national customer satisfaction parameter, we increased the reliability of the measure (Fornell, 1992). Through our pilot-study we also gained feedback and improved the questionnaire to make sure the survey was perceived as we intended. Since the survey, through our measures, was interpreted coherently, we increased the likelihood of achieving stability and reliability over time.

Internal reliability

In study 1, the measured variables, namely brand attitude, brand engagement, and behavioral intention are all single items. This could be viewed as slightly different compared to the standard which generally include multi-item questions measuring the same variable more than once. However, there are good reasons and arguments for why we chose to focus on single item measures. Firstly, we took inspiration from the practices of the well-known researcher Rossiter (2011) who argues in favor of and recommends one item measures. Rossiter argues that internal-consistency reliability, in which multi-item measures are undertaken, is unnecessary and that it could even be harmful in the sense that it always results in a decrease of the content validity of the measure (Rossiter, 2011). Moreover, Bergkvist and Rossiter (2007) reported that single-item measures have as high predictive validity as multi item measures, if carefully created, and that as a result the latter is unnecessary to conduct. The researchers where backing their assumptions with a new procedure called C-OAR-SE (Rossiter 2002, 2011). This procedure argues that if an object of a construct (e.g. a brand or an ad, in our case the Nike campaign) is conceptualized as concrete with no ambiguity and the attributes of the construct (dependent variables of this Nike campaign) can be considered as concrete and clear, there is no need to use an multi-item scale. Other advantages of using one item measure include the convenience for participants and simplicity for further analysis (Rossiter, 2011). Based on the above arguments, we chose to use one item measures for this thesis.

Inter-observer consistency

Moreover, we accounted for inter-observer consistency which, according to Bryman and Bell (2015), refers to concerns about multi-observer data collection. Since the main study was quantitative in nature and a majority of the questionnaire responses were self-performed by participants online with no supervision, we do not consider the inter-observability having a big

negative impact on the reliability over the collected data. For the on-site respondents, space was given to ensure they felt comfortable completing the survey, however critique could be applied since no question was asked to control for the possible effect of us being present as observers.

4.6.2 Validity

Validity is an important aspect of data quality since it treats the integrity of the conclusions in the research. In order to account for the validity in this study, we evaluate the constructs, internal validity and external validity.

Internal validity

The internal validity assesses the accuracy and whether the independent variable, rather than other external influences, causes the variation in the dependent variables (Bryman & Bell 2015; Malhotra & Birks, 2007). Hence, the internal validity is assessing whether the different physical effort levels cause the variation in evaluations of brand engagement, brand attitude, and purchase intention. The manipulations are then compared against each other, between the groups. Additionally, by implementing manipulation checks for the perceived consumer physical effort we could mitigate the risk that external factors influenced the results, hence ensuring that the effects on the dependent variables were in fact caused by the independent variable, resulting in an increase of the internal validity. Additionally, using Nike as a brand throughout the study could have had an external influence on the dependent variables due to participants perception about the brand. However, by including questions such as if the respondents want to participate in the imagined marketing campaign created by Nike as well as their brand attitude towards Nike, we could ensure internal validity for our chosen brand.

External validity

In contrast to internal validity that shed light on the level of accuracy in the context of the study itself, external validity focuses on the level of accuracy in relation to a larger and similar population, also called population validity, as well as the generalized setting and treatment in relation to the real world, also called ecological validity (Malhotra & Birks, 2007).

The experiment design was not performed in a real-life setting but rather in a manipulated environment with a fictitious marketing campaign which could be criticized since Bryman & Bell (2015) argues that a manipulated setting is not ideally representing an authentic

environment. However, the marketing campaign is inspired by authentic marketing practices. To make up for the applied setting, we used a well-known brand, Nike, in order to generate a real-life perception of the study. Since we were able to focus on the intended effect with the fictitious marketing campaign, the internal validity increased as we were able to limit factors that could affect the outcome. Additionally, since the effects on the variables were studied at a single point in time, the external validity was limited and did not account for factors influencing changes over time.

Due to the focused target group, which primarily consisted of university students in their twenties, it was hard to generalize the results to a broader population. Additionally, as the study was conducted mainly with Swedish respondents, with 82% of participants living in Sweden, one could argue that generalizations about a larger population outside Sweden should be treated carefully if applied. Nonetheless, the chosen sample was reflecting a specific consumer group in relation to the larger population. Moreover, since we were measuring behavioral intentions rather than actual purchase behavior, the results were limited in its generalizability.

4.6.3 Replicability

As noted by Bryman and Bell (2015), replicability refers to the practice of replicating the study with the purpose of either supporting or disproving the outcome. For the study at hand, the survey design and analysis of the survey results are clearly explained and documented. Dependent variables and independent variables are clearly defined. Moreover, the reliability and validity of the study are clearly explained along with limitations and shortcomings. Lastly, a comprehensive range of theories are used and discussed to support the study and variables that are measured. Hence, procedures have been undertaken in order to make it easy for academics to replicate the study.

5. Results and Analysis

In the following section, the results of study 1 are discussed. First, the result of manipulation checks is presented. Second, all hypotheses are tested and deliberated in the order they were previously presented.

5.1 Manipulation Checks

The purpose of this study is to understand the effect of independent variable consumer physical effort on consumer brand engagement, brand attitude, and purchase intention. We aim to manipulate the independent variable - physical effort level. Three different level groups are compared. The goal is to test the internal validity that the effects on these dependent variables were caused by the three levels of physical effort and these levels were clearly perceived by participants from low to medium to high effort. Below is a table that illustrates the results of perceived effort level by participants. We hypothesize that the perceived physical effort levels are different for the varying assigned squats. As a result, we can accept the hypothesis with a p-value of less than 0.05. There is a significant difference among the means of these squats perceived effort. Scheffe post-hoc test also shows that the differences are significant when each group (3, 15, 40 squats) are compared to each other. We can conclude that the manipulation check is effective.

Perceived effort level	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	425.747	2	212.873	44.092	.000
Within Groups	613.145	127	4.828		
Total	1038.892	129			

Table 4: One-way ANOVA for manipulation check variable: Perceived effort level.

Group	Group comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
3 squats	15 squats	-1.577*	.467	.004	-2.73	-.42
	40 squats	-.4.343*	.464	.000	-5.49	-3.20
15 squats	3 squats	1.577*	.467	.004	.42	2.73
	40 squats	-2.767*	.501	.000	-4.01	-1.53
40 squats	3 squats	4.343*	.464	.000	3.20	5.49
	15 squats	2.767*	.501	.000	1.53	4.01

* The mean difference is significant at the 0.05 level.

Table 5: Scheffe Post-Hoc tests for manipulation check variable: Perceived effort level.

5.2 Hypothesis Testing

The hypothesis testing encircles the effects on the dependent variables. Output includes means of dependent variables in regard to the different effort level groups. One-way ANOVA and Scheffe post hoc tests were used for hypothesis testing.

Physical effort level	Avg. Willingness to Participate	Avg. Perceived Effort Level	Avg. Brand Attitude	Avg. Brand Engagement	Avg. Behavioral Intentions
3 squats	8.358	2.528	7.774	7.623	7.151
15 squats	8.079	4.105	7.684	8.105	7.658
40 squats	6.589	6.872	7.000	6.897	6.513

Table 6: Means of output based on physical effort level.

5.2.1 Hypothesis 1

We hypothesized that a higher perceived physical effort level leads to a better attitude towards a specific brand while the attitude decreases if the physical effort is too high. Based on the output table 6 above, means of brand attitude decreases with the increase of physical effort level. Based on the output table 7 below, P-value from One-way ANOVA test for differences in means of brand attitude across three physical effort levels is 0.079, which is bigger than the significance level of 0.05. We can conclude that the differences between the means of brand attitudes across different physical levels are not statistically significant. We can reject our hypothesis.

Brand Attitude	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14.976	2	7.488	2.588	.079
Within Groups	367.494	127	2.894		
Total	382.469	129			

Table 7: One-way ANOVA for dependent variable: Brand Attitude.

5.2.2 Hypothesis 2

For the dependent variable, brand engagement, we hypothesized that a higher perceived physical effort level leads to more engagement with the brand and the product while this engagement decreases if the physical effort is too high. Based on the output table 6 above, means of brand engagement of doing 15 squats is the highest while brand engagement of doing 40 squats is the lowest. Based on the One-way ANOVA test result, P-value for differences in means of brand engagement across three physical effort levels is 0.002, which is smaller than the significance level of 0.05. We can conclude that the differences between some of the means of brand engagement across different physical levels are statistically significant. Thus, Scheffe

Post-Hoc test was conducted to look at how different levels compared to each other. As shown in table 9, differences in means of brand engagements of 15 squats level group are significant compared to that of 40 squats level group with a P-value of 0.02. Since difference between 3 squats and 15 squats is not statistically significant, we cannot accept the hypothesis but doing 40 squats/high effort level does decrease brand engagement.

Brand Engagement	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.602	2	14.301	6.495	.002
Within Groups	279.622	127	2.202		
Total	308.223	129			

Table 8: One-way ANOVA for dependent variable: Brand Engagement.

Group	Group comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
3 squats	15 squats	-.483	.315	.313	-1.26	.30
	40 squats	.725	.313	.072	-.05	1.50
15 squats	3 squats	.483	.315	.313	-.30	1.26
	40 squats	1.208*	.338	.002	-.37	2.05
40 squats	3 squats	-.725	.313	.072	-1.50	.05
	15 squats	-1.208*	.338	.002	-2.05	-.37

*** P<0.05

Table 9: Scheffe Post-Hoc tests for dependent variable: Brand Engagement.

5.2.3 Hypothesis 3

The behavioral intention regarding purchase behavior is also used as a dependent variable and we hypothesized a higher perceived physical effort level imposed by a specific brand increases behavioral intentions towards that brand while this behavioral intention decreases if the physical effort is too high. Based on the output table 6 above, means of behavioral intention of doing 15 squats is the highest while behavioral intention of doing 40 squats is the lowest. P-value from One-way ANOVA test for differences in means of purchase intention across three physical effort levels is 0.008, which is smaller than the significance level of 0.05. Thus, we can conclude that the differences between some of the means of behavioral intentions across different physical levels are statistically significant. Scheffe Post-Hoc test was also conducted to look at how different levels compared to each other. As shown in table 11, mean of behavioral intention of 15 squats level group is significantly different compared to that of 40 squats level group with a P-value of 0.008. We cannot conclude that higher perceived physical effort level leads to better behavioral intention but high physical effort level (40 squats) does lead to negative effect.

Behavioral Intention	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25.404	2	12.702	4.993	.008
Within Groups	323.089	127	2.544		
Total	348.492	129			

Table 10: One-way ANOVA for dependent variable: Behavioral Intention.

Group	Group comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
3 squats	15 squats	-.507	.339	.330	-1.35	.33
	40 squats	.638	.336	.170	-.20	1.47
15 squats	3 squats	.507	.339	.330	-.33	1.35
	40 squats	1.145*	.364	.008	.24	2.05
40 squats	3 squats	-.638	.336	.170	-1.47	.20
	15 squats	-1.145*	.364	.008	-2.05	-.24

*** P<0.05

Table 11: Scheffe Post-Hoc tests for dependent variable: Behavioral Intention.

6. Discussion for Study 1

6.1 Conclusion

The main purpose of the study 1 was to understand if there are any effects from fictional physical efforts by consumers. The results showed some support for hypothesis while more physical efforts do not necessary lead to better marketing outcome including behavioral intentions and brand engagement. As shown in results for hypothesis testing 2, doing 3 fictional squats does not produce statistically different results in brand engagement compared to that of doing 15 fictional squats. However, doing 40 fictional squats does lead to less brand engagement compared to that of either 3 or 15 fictional squats. The results of hypothesis testing 3 illustrates that doing 3 and 15 fictional squats do not lead to statistically different behavioral intentions of purchase from Nike.com. Similar to the result of hypothesis 2, doing 40 fictional squats lead to less behavioral intentions compared to that of 3 or 15 fictional squats. On the other hand, results of hypothesis testing 1 do not suggest that 3, 15, or 40 fictional squats lead to statistically different brand attitude towards Nike for these respondents. Overall, the results of study 1 showed that study 2 is needed to test if actual physical effort would lead to different results compared to fictional physical effort.

6.2 General Discussion

In contrast to Norton et al. (2012), that argue that the more effort people extract for some quest, the higher they tend to value it and subsequently that effort and evaluation increases in harmony, our preliminary findings from study 1 shows that for consumer physical effort the same reasoning holds until a certain level of effort where it will consequently phase a negative effect from extracting "too much" effort. We can conclude that too much imagined physical effort could negatively affect consumers' brand engagement and behavioral intentions. As discussed above, brand attitude does not have significant effect from different physical level, and an additional group with participants that are not required to do any physical exercise at all might provide more insights. The rejection of this hypothesis 1 is not surprising as brand attitude, argued by Gardner (1985), is affected by a person's perceived brand related beliefs. Thus, brand attitude is relatively persistent to each consumer. Regarding brand engagement, there is a slight increase, though not statistically significant with the physical effort level increasing from 3 squats to 15 squats. The same applies to behavioral intentions with the slight increase from 3 squats to 15 squats. So, we cannot conclude if increasing the imagined physical effort level to

a certain extent would positively influence brand engagement or behavioral intentions. And we cannot yet reflect on Norton et al. (2012)'s theory as mentioned in the beginning. However, not finding a statistically significant interaction in the sample does not necessarily mean that the effect does not exist in the population. (Faraway, 2015; Fox, 2008; Searle, 2006). It is helpful to continue with more sample or with study 2.

6.3 Limitation of the Main Study

Discussions above have been the results and positive implications of the study. However, the study at hand is also drawing on some limitations. Firstly, the environment in which the study is conducted is fictitious leading the participants to imagine taking part of and not being exposed to a real marketing campaign situation. As noted by Bryman and Bell (2015), and discussed in the data quality section, this result in a decrease in external validity. Hence, conducting a real marketing campaign together with Nike might have led to the participants reacting differently. Additionally, limitations regarding data quality were discussed in section 4.6. Secondly, conducting the artificial experiment in an online environment using Qualtrics lead to some randomization concerns where the sample sizes differed among the effort groups. As a result, the number of participants in the lowest effort group (3 squats) was considerably higher than the two other effort groups (15 squats and 40 squats) representing 59, 41, 44 participants in respective group.

7. Study 2

7.1 Complementary Theory for Study 2

For study 2 we are going to examine whether the same patterns as in study 1 could be replicated also in a setting where there is a real effort. However, study 1 did not cover various potential explanations for the studied effect in terms of mediators. Hence, this section is presenting complementary theory regarding potential mediators examined in study 2.

As discussed in the theory section (section 2), academics have studied the relationship between effort extracted and the attitude towards a quest where Norton et al. (2012) argues that the more effort in respect to an offering the higher the consumer will evaluate that same offering. At the same time, research shows that most people are seriously effort aversive (Lewis, 1965; Scollon and King, 2004). As noted by Sweeney et al. (2015) a majority of consumers prefer taking part in low-level efforts. It could be argued that the more effort consumers are asked to undertake the less likely it is that they will enjoy it, hence the attitude seems to have a mediating effect. Based on this theory we want to examine whether the attitude towards the activity, physical effort in terms of squats, influence the effect on the dependent variables.

Additionally, research has been made within the context of supplier effort where academics have studied how consumers perceive supplier effort in terms of how much time, work, and money they put in to deliver on the activities (Modig et al., 2014; Söderlund et al., 2017). A general consensus among multiple studies within the field is that the higher the consumers perceive supplier effort the higher perceived quality they tend to associate the product with (Ambler & Hollier, 2004; Kruger et al., 2004; Kirmani and Wright, 1989). Academics have concluded different reasons for the relation between perceived supplier effort and perceived quality such as that supplier effort gives a feeling the the supplier is motivated to perform where perceived motivation in turn is linked to consumers perceived quality (Mohr and Bitner, 1995). As noted by Modig et al. (2014) an additional reason could be that perceived confidence and commitment is triggered from perceived supplier effort which could influence the perceived quality. The study at hand does not have intentions to examine perceived quality, but the link to perceived supplier effort is of interest. Since there is a lack of research within consumer physical effort in general there exists a value in studying the relationship with supplier effort

in order to examine whether consumers' perceived supplier effort could influence the effect consumer physical effort have on the dependent variables.

Moreover, in the field of social psychology researchers have concluded that the presence of others can affect the choices and performance of a participant (Hazel, 1978; Schmitt et al., 1986). This evaluation apprehension effect could be viewed as a potential mediator also in this type of study were participants act or respond differently due to being observed when taking part in the experiment.

Based on the additional theory presented above we hypothesize the following:

H1 A: Consumers' attitude towards the exercise could have mediation effect on brand attitude.

H1 B: Consumers' perception of amount of work the brand has put in the campaign could have mediation effect on brand attitude.

H2 A: Consumers' attitude towards the exercise they did could have mediation effect on brand engagement.

H2 B: Consumers' perception of amount of work the brand has put in the campaign could have mediation effect on brand engagement.

H3 A: Consumers' attitude towards the exercise they did could have mediation effect on behavioral intention.

H3 B: Consumers' perception of amount of work the brand has put in the campaign could have mediation effect on behavioral intention.

For the above mediation hypotheses, we will use the most common type of analysis, the Hayes' PROCESS. However, this method is not ideal for all kinds of mediators since it cannot deal with dichotomous mediators. This is why we need to take a more primitive approach, by using the Pearson correlation coefficient, for our fourth hypothesis due it being a binary mediator.

H4: Observation of participants has mediation effect on the dependent variables.

7.2 Method

Based on the additional theoretical framework provided in the thesis, we discuss the methodological approach that addresses the hypothesis and research question in study 2. Overall, we used the same methods in study 2 as we did for study 1. Hence, we will only discuss the method in terms of the additional elements. Starting with the purpose, data collection, and survey design we then add a section about experiment design and then look at data preparation and analytical tools. A simple mediation analysis is then reflected followed by a discussion about data quality.

7.2.1 Purpose

As study 1 examined possible effects on the dependent variables using a simulated/fictitious context not extracting any real effort from the participants, the purpose of study 2 is to explore if there are any effects on the main patterns if the study is replicated in a real effort setting. Additionally, drawing on the results and limitations, and what we did not include in study 1, we want to partly compare the three effort level groups towards a non-effort group to examine if any efforts lead to better results at all. For study 2, the non-effort group serves as a control group. Moreover, we will explore possible explanations for the studied effect in terms of mediators.

7.2.2 Data Collection

Data collection for study 2 still relied on survey questionnaires from Qualtrics, but these surveys were distributed and completed under an observed/supervised setting as participants were required to fulfill the exercise before answering the questionnaire. The data for study 2 was collected during November 1st and November 6th. Majority of the data was collected at the basement of Stockholm School of Economics and participants were randomly chosen. Similar to study 1, the target group consisted mostly of people in ages between 18-25, and a majority attend university study. In total, 178 responses were received and 171 of these were complete. In our analysis we used 165 responses out of the 171 completed questionnaires since 8 of those failed the attention check. Three effort levels along with the non-effort level were randomly given to respondents. Out of these four groups, non-effort group had 39 responses, 3 squats level had 44 responses of which 3 failed the attention check question, 15 squats level had 40 responses and 1 failed attention check question, and 40 squats had 47 responses in which 1 failed the attention check question.

Demographics		Low effort group 3 squats (N=41)	Medium effort group 15 squats (N=39)	High effort group 40 squats (N=46)	Non-effort group No squats (N=39)	Total Sample (N=165)
Gender	Male	61%	69%	48%	33%	53%
	Female	39%	31%	52%	67%	47%
	Other	0%	0%	0%	0%	0%
	Choose not to respond	0%	0%	0%	0%	0%
Age	18-25	85%	78%	74%	87%	81%
	26-30	10%	20%	26%	10%	17%
	≥ 30	5%	2%	0%	3%	3%
	Mean	***22***	***22,4***	***22,3***	***22,8***	***22,4***

Table 12: Demographics for main study sample.

7.2.3 Survey Design

The survey questionnaire was kept the same as that from study 1 with the addition of a few more questions addressing hypothesis 1A, 1B, 2A, 2B, 3A, 3 and the addition of non-effort group questions. Questions for brand engagement, behavioral intention, and brand attitude were kept the same for all three physical effort level groups and the non-effort group. Manipulation check question regarding perceived physical level of squats and participant's fitness level were kept the same with the additional question "What's your overall attitude towards the squats you just did?" An 1-10 interval scale answer option was used for this question. "How much work do you think Nike puts in this campaign?" was also added and the answer option was an 1-10 interval scale. Since the survey required participants to do squats in a relatively public setting, a yes/no question "If you were to do the exercise in a private or unobserved setting, would you think and answer differently regarding the above questions?" was added. Lastly, a multiple-choice question "How do you feel and how was it like to take part in this study? (Choose all that apply)" was added with answer options including "It was fun", "It was embarrassing", "It was effortful", "It was effortless", and "it was time consuming". Both effort groups and non-effort group questions were ended with the same sets of demographics questions.

7.2.4 Experiment Design

The experiment took place at two different dates, November 1st and November 6th. Data was collected from both Royal Institute of Technology and Stockholm School of Economics, with a majority of respondents coming from the later. The experiment was initially conducted in public spaces at both institutes but due to a lack of respondents and feedback, our strategy changed where we moved the experiment location to the basement (Rotunda) at the Stockholm School of Economics. This allowed for a more comfortable setting taking into account that

evaluation apprehension could be viewed as a mediator causing people to react differently when being observed by other individuals while conducting and taking part in the study. By promoting the experiment using a word-of-mouth method the participants took part in the study. First, participants used their mobile device to scan a QR-code and were then randomly assigned to one of the effort groups, including the non-effort group. Through survey instructions, participants were then obligated to conduct the physical exercise, squats, which was completed in an observed setting, before answering the questionnaire as discussed in the previous section (survey design).

7.2.5 Data Preparation

The data preparation process for study 2 was identical to that of study 1. The survey results were exported into a CSV file from Qualtrics and cleaned up in Excel. Due to the addition of the non-effort group, data was divided into four groups. Extra columns were also added to address the added questions in study 2.

7.2.6 Analytical Tools

RStudio and SPSS were used as the primary analytical tool for the study, with the addition of Hayes PROCESS mediation analysis in SPSS for the added variables in study 2. Since the nature of data from study 2 was identical to that of study 1, One-way ANOVA tests and Scheffe post hoc tests were conducted to compare the variance of means of dependent variable across physical effort groups. The hypothesis testing for hypotheses 1-3 were the same as that of study 1.

7.2.7 Simple Mediation Analysis

Mediators were described in hypotheses added in study 2. As the direct effects of X on Y were analyzed and discussed, mediator variables could reveal potential indirect effects. (Zhao et. al., 2010). The mediation variables are presented in table 13 below. Three dependent variables were examined, and path shows the mediator variables for each dependent variable. The goal of simple mediation analysis is to understand the mechanisms that underlie the observed causal relationship and it increases the accuracy of hypotheses testing. Hayes' PROCESS (2013) in SPSS was used to the mediation analysis. For all mediators, Hayes' Model 4 mediation analysis was used, with confidence interval of 95% and bootstrap samples set to 5000. Mediators were controlled for one at a time. The aim was to examine the direct and indirect effects. This process was run individually for each dependent variable Y including brand attitude, brand engagement,

and behavioral intention. The physical effort levels served as the independent variable X (Pieters, 2017). Though Hayes' PROCESS is the ideal method for mediation analysis, it is not suitable for binary variables (Pieters, 2017). Instead, Pearson correlation was used for one of the mediator variables that have binary values.

Type of Variable	Factor
Independent Variable	Physical Effort Level
Potential Mediators	Attitude Towards the Exercise Perception of Amount of Work the Brand Put in Being Observed in Public
Dependent Variables	Brand Attitude Brand Engagement Behavioral Intention

Table 13: Mediation Variables

7.2.8 Data Quality

We will in this section examine the data quality for study 2 with the same methods as approached for study 1, namely reliability, validity, and replicability.

7.2.8.1 Reliability

Regarding the *stability over time* as well as *internal reliability*, the same measures and arguments as for study 1 also apply for study 2, hence no further discussion will adhere. For *inter-observer consistency* the methods applied to collect data for study 2 meant that the participants were required to do physical exercise, in terms of squats. Hence, it was necessary to reassure that the participants actually conducted the assigned number of squats. The surveillance did not include subjective differences among the observants. As a result we observed all participants in a consistent manner (Bryman and Bell, 2015, p.158) and made sure the correct procedures were undertaken among participants.

7.2.8.2 Validity

For both *internal validity* and *external validity* the same arguments and discussions are applied as for study 1. However, for the *internal validity*, all effort groups were receiving the exact same information except the treatment effect itself. Additionally, the non-effort group, which we did not include in study 1, was excluded from some treatment related questions.

7.2.8.3 Replicability

The same practices as conducted for study 1 were undertaken in study 2 in order to assure the study to be easily replicable.

7.3 Results and Analysis

7.3.1 Manipulation Checks

Similar to study 1, manipulation check was used to understand the effect of independent variable on brand engagement, brand attitude, and purchase intention. Below is the table of the results of participants perceived physical effort regarding the squats they did. We anticipate that participants perceive 3, 15, and 40 squats differently. Based on the results of one-way ANOVA test, the p-value is less than 0.000, which is much smaller than our chosen significant value of 0.05. The result indicates that there are significant differences among different physical effort levels. Scheffe Post-Hoc test also shows that perceived efforts of all 3 physical effort levels are significantly different from each other. Thus, the manipulation check is effective.

Perceived effort level	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	225.076	2	112.538	28.579	.000
Within Groups	484.352	123	3.938		
Total	709.429	125			

Table 14: One-way ANOVA for manipulation check variable: Perceived effort level.

Group	Group comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
3 squats	15 squats	-1.179*	.444	.032	-2.28	-.08
	40 squats	-3.174*	.426	.000	-4.23	-2.12
15 squats	3 squats	1.179*	.444	.032	.08	2.28
	40 squats	-1.994*	.432	.000	-3.06	-.92
40 squats	3 squats	3.174*	.426	.000	2.12	4.23
	15 squats	1.994*	.432	.000	.92	3.06

* The mean difference is significant at the 0.05 level.

Table 15: Scheffe Post-Hoc tests for manipulation check variable: Perceived effort level.

7.3.2 Hypothesis Testing

The hypotheses testing process is identical to that of study 1 with the addition of new hypotheses. Output includes means of dependent variables in regard to the different effort level groups. One-way ANOVA tests were used in order to test the hypotheses and examine the differences in the results for sample consisting of more than two groups. Scheffe Post Hoc tests were used for results that are significant to produce an assessment of the extent to which there are differences to all pairs. Additionally, mediation analysis was used for hypotheses 1A & B, 2A & B, 3A & B, and 4.

Group	Valid Responses (N=166)	Avg. Perceived Physical effort level	Avg. Brand Attitude	Avg. Brand Engagement	Avg. Behavioral Intention	Avg. Attitude Towards Squats
Non-effort group	39		7.692	5.692	5.718	
3 squats	42	3.000	7.731	6.609	6.731	7.723
15 squats	39	4.179	8.000	7.123	7.077	6.641
40 squats	46	6.174	7.543	5.674	6.522	5.891

Table 16: Means of output based on different physical effort level groups.

7.3.2.1 Hypothesis 1

We hypothesized that a higher perceived physical level of doing the squats leads to a better attitude towards a specific brand. Based on the output table below, p-value of the one-way ANOVA test is 0.481, which means that there is not a significant difference of means of brand attitude across non-effort group and different physical effort levels in treatment groups. The results are identical to that of study 1 and we can conclude that the differences between the means of brand attitudes across different physical effort level and non-effort level are not statistically significant.

Brand Attitude	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.497	3	1.499	.827	.481
Within Groups	291.770	161	1.812		
Total	296.267	164			

Table 17: One-way ANOVA for dependent variable: Brand Attitude.

Hypothesis 1A: Consumers' attitude towards the exercise they did could have mediation effect on brand attitude.

We hypothesized that Consumers' attitude towards the exercise they did could have mediation effect on brand attitude. Mediator variable, attitude towards squats, was put in Hayes' PROCESS Model 4 along with independent variable physical effort level (3, 15, 40 squats). Based on the output below for dependent variable brand attitude, indirect effect confidence interval includes 0. We can conclude that attitude towards squats has no mediation effect on brand attitude.

Direct effect of X on Y								
	Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
	-.0445	.1566	-.2840	.7769	-.3545	.2655	-.0318	-.0265
Indirect effect(s) of X onY:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.0561	.0558	-.1794	.0429				
Partially standardized indirect effect(s) of Xon Y:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.0402	.0425	-.1413	.0267				
Completely standarized indirect effect(s) of X on Y:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.0335	.0351	-.1160	.0227				

Table 18: Hypothesis 1A, direct and indirect effects of X on Y (physical effort level on brand attitude).

Hypothesis 1B: Consumers' perception of amount of work the brand has put in the campaign could have mediation effect on brand attitude.

We hypothesize that Consumers' perception of amount of work the brand has put in the campaign could have mediation effect on brand attitude. Mediator variable, perception of amount of work Nike has put in the campaign, was put in Hayes' PROCESS Model 4 along with independent variable physical effort level (3, 15, 40 squats). Based on the output for brand attitude, the confidence interval of indirect effect does not include 0. We can conclude that perception of amount of work Nike has put in the campaign has mediation effect on brand attitude, and the indirect effect size is 0.1356.

Direct effect of X on Y								
	Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
	-.2362	.1605	-1.4713	.1438	-.5539	.0816	-.1691	-.1409
Indirect effect(s) of X onY:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	.1356	.0683	.0185	.2854				
Partially standardized indirect effect(s) of Xon Y:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	.0971	.0477	.0149	.2035				
Completely standarized indirect effect(s) of X on Y:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	.0809	.0394	.0126	.1696				

Table 19: Hypothesis 1B, direct and indirect effects of X on Y (physical effort level on brand attitude).

7.3.2.2 Hypothesis 2

We hypothesized that a higher perceived physical effort of doing the squats leads to more engagement with the brand and the products. Based on the output table 16 doing 15 squats leads to highest average of brand engagement of 7.123, while doing 40 squats leads to the lowest brand engagement. Non-effort group has an average of 5.69 brand engagement. Based on one-way ANOVA test, P-value for differences in means of brand engagement across physical effort levels and non-effort level is 0.010, which is smaller than the significance level of 0.05. We can conclude that the differences between some of the means of brand engagement across three physical levels and non-effort level are statistically significant. Scheffe Post-Hoc test result shows that only doing 40 squats has a significant difference for brand engagement compared to doing 15 squats, and the p-value is 0.042. Non-effort level compared to 15 squats has p-value of 0.060 for brand engagement, which is slightly larger than 0.05. We can conclude that high physical effort decreases brand engagement while we do not have strong evidence to support that a higher perceived physical effort leads to better brand engagement.

Brand Engagement	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	62.778	3	20.926	3.933	.010
Within Groups	856.531	161	5.320		
Total	919.309	164			

Table 20: One-way ANOVA for dependent variable: Brand Engagement.

Group	Group comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
3 squats	15 squats	-.518	.516	.799	-1.98	.94
	40 squats	.936	.495	.316	-.46	2.34
	Non-effort group	.917	.516	.370	-.54	2.38
15 squats	3 squats	.518	.516	.799	-.94	1.98
	40 squats	1.454*	.502	.042	.04	2.87
	Non-effort group	1.436	.522	.060	-.04	2.91
40 squats	3 squats	-.936	.495	.316	-2.34	.46
	15 squats	-1.454*	.502	.042	-2.87	-.04
	Non-effort group	-.018	.502	1.00	-1.44	1.40
Non-effort group	3 squats	.917	.516	.370	-2.38	.54
	15 squats	-1.436	.522	.060	-2.91	.04
	40 squats	.018	.502	1.00	-1.40	1.44

* The mean difference is significant at the 0.05 level.

Table 21: Scheffe Post-Hoc tests for dependent variable: Brand Engagement.

Hypothesis 2A: Consumers' attitude towards the exercise they did could have mediation effect on brand engagement.

We hypothesize that consumers' attitude towards the exercise they did could have mediation effect on brand engagement. Mediator variable, attitude towards squats, was put in Hayes' PROCESS Model 4 along with independent variable physical effort level (3, 15, 40 squats). Output for dependent variable brand engagement has 0 in the indirect effect confidence interval, thus we can conclude that attitude towards squats has no mediation effect on brand engagement.

Direct effect of X on Y								
	Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
	-.3564	.2649	-1.3453	.1810	-.8807	.1680	-.1482	-.1235
Indirect effect(s) of X onY:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.1291	.0996	-.3464	.0517				
Partially standardized indirect effect(s) of Xon Y:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.0537	.0420	-.1447	.0214				
Completely standarized indirect effect(s) of X on Y:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.0448	.0347	-.1195	.0176				

Table 22: Hypothesis 2A, direct and indirect effects of X on Y (physical effort level on brand engagement).

Hypothesis 2B: Consumers' perception of amount of work the brand has put in the campaign could have mediation effect on brand engagement.

We hypothesize that consumers' perception of the amount of work the brand has put in the campaign could have mediation effect on brand engagement. Mediator variable, perception of

amount of work Nike put in the campaign, was put in Hayes' PROCESS Model 4 along with independent variable physical effort level (3, 15, 40 squats). Based on the output for brand engagement shows that there is 0 in the confidence interval of indirect effect. We can conclude that perception of amount of work Nike has put in the campaign has no mediation effect on brand engagement.

Direct effect of X on Y								
	Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
	-.4562	.2781	-1.6407	.1034	-1.0067	.0942	-.1897	-.1581
Indirect effect(s) of X onY:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	-.0293	.1291	-.2946	.2220				
Partially standardized indirect effect(s) of Xon Y:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	-.0122	.0542	-.1238	.0917				
Completely standarized indirect effect(s) of X on Y:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	-.0101	.0450	-.1039	.0755				

Table 23: Hypothesis 2B, direct and indirect effects of X on Y (physical effort level on brand engagement).

7.3.2.3 Hypothesis 3

We hypothesize that a higher perceived physical effort level of doing squats imposed by a specific brand positively influence consumer behavioral intentions towards the brand. Based on the output table 16, doing 15 squats leads to the highest average behavioral intention (purchase) of 7.08 while non-effort group leads to the lowest average behavioral intention of 5.72. The one-way ANOVA test with a p-value of 0.013 suggests that there's a significant difference between some of the means of behavioral intentions across physical effort and non-effort levels. The Scheffe Post-Hoc test shows that only doing 15 squats result in a significant different behavioral intention from non-effort group/non-effort level. Apart from that, all three physical levels do not have statistically different results in behavioral intention. Thus we cannot fully accept hypothesis 3 but some physical effort imposed by the brand does lead to higher behavioral intentions.

Behavioral Intention	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39.018	3	13.006	3.711	.013
Within Groups	564.194	161	3.504		
Total	603.212	164			

Table 24: One-way ANOVA for dependent variable: Behavioral Intention.

Group	Group comparison	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
3 squats	15 squats	-345	.419	.878	-1.53	.84
	40 squats	.210	.402	.965	-.93	1.35
	Non-effort group	1.014	4.19	.123	-.17	2.20
15 squats	3 squats	.345	4.19	.878	-.84	1.53
	40 squats	.555	.407	.604	-.60	1.71
	Non-effort group	1.359*	.424	.019	-.16	2.56
40 squats	3 squats	-.210	.402	.965	-1.35	.93
	15 squats	-.555	.407	.604	-1.71	.60
	Non-effort group	.804	.407	.277	-.35	1.96
Non-effort group	3 squats	-1.014	.419	.123	-2.20	.17
	15 squats	-1.359*	.424	.019	-2.56	-.16
	40 squats	-.804	.407	.277	-1.96	.35

* The mean difference is significant at the 0.05 level.

Table 25: Scheffe Post-Hoc tests for dependent variable: Behavioral Intention.

Hypothesis 3A: Consumers' attitude towards the exercise they did could have mediation effect on behavioral intention.

We hypothesize that consumers' attitude towards the exercise they did could have mediation effect on behavioral intention. Mediator variable, attitude towards squats, was put in Hayes' PROCESS Model 4 along with independent variable physical effort level (3, 15, 40 squats). Output for dependent variable behavioral intention shows that the indirect effect confidence interval includes 0, thus, the indirect effect is significant. We can conclude that attitude towards squats has mediation effect on behavioral intentions, and this indirect effect size is -0.2121.

Direct effect of X on Y								
	Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
	.0991	.2004	.4945	.6218	-.2976	.4958	.0530	.0442
Indirect effect(s) of X onY:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.2121	.0918	-.4131	-.0579				
Partially standardized indirect effect(s) of Xon Y:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.1135	.0475	-.2163	-.0319				
Completely standarized indirect effect(s) of X on Y:								
	Effect	BootSE	BootLLCI	BootULCI				
Attitude	-.0946	.0394	-.1789	-.0265				

Table 26: Hypothesis 3A, direct and indirect effects of X on Y (physical effort level on behavioral intention).

Hypothesis 3B: Consumers' perception of amount of work the brand has put in the campaign could have mediation effect on behavioral intention.

We hypothesize that consumers' perception of the amount of work the brand has put in the campaign could have mediation effect on behavioral intention. Mediator variable, perception amount of work Nike has put in the campaign, was put in Hayes' PROCESS Model 4 along with independent variable physical effort level (3, 15, 40 squats). Output for behavioral intentions shows that there is 0 in the confidence interval of indirect effect. We can conclude that perception of amount of work Nike has put in the campaign has no mediation effect on behavioral intention.

Direct effect of X on Y								
	Effect	se	t	p	LLCI	ULCI	c'_ps	c'_cs
	-.1497	.2189	-.6837	.4954	-.5830	.2837	-.0801	-.0667
Indirect effect(s) of X onY:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	.0367	.0923	-.1446	.2275				
Partially standardized indirect effect(s) of Xon Y:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	.0196	.0492	-.0808	.1162				
Completely standarized indirect effect(s) of X on Y:								
	Effect	BootSE	BootLLCI	BootULCI				
How much work	.0163	.0408	-.0670	.0960				

Table 27: Hypothesis 3B, direct and indirect effects of X on Y (physical effort level on behavioral intention).

7.3.2.4 Hypothesis 4

We hypothesize that the observation of participants has mediation effect on the dependent variables measured. Based on the results of correlation analysis, we found significant correlation between physical effort level and mediator variable, between brand attitude and mediator variable. Physical effort level positively correlates with if participants are being observed, and the correlation coefficient is 0.192. Brand attitude also has positive correlations with if participants are being observed, and the correlation coefficient is 0.177. The positive correlation suggests that if participants responded that they would answer the survey differently when they were observed doing the exercise, they tend to respond with higher brand attitude in the survey. We can conclude that the observation of participants has mediation effect on brand attitude.

		Observed	Physical effort level
Obervation of participants	Pearson Correlation	1	.192
	Sig. (2-tailed)		.031*
	N	126	126
Physical effort level	Pearson Correlation	.192	1
	Sig. (2-tailed)	.031*	
	N	126	165

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

Table 28: Correlation between mediator variable and group physical effort level.

		Observed	Brand Attitude
Obervation of participants	Pearson Correlation	1	.177
	Sig. (2-tailed)		.048*
	N	126	126
Brand Attitude	Pearson Correlation	.177	1
	Sig. (2-tailed)	.048*	
	N	126	165

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

Table 29: Correlation between mediator variable and brand attitude.

		Observed	Brand Engagement
Obervation of participants	Pearson Correlation	1	-.056
	Sig. (2-tailed)		.535
	N	126	126
Brand Engagement	Pearson Correlation	-.056	1
	Sig. (2-tailed)	.535	
	N	126	165

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

Table 30: Correlation between mediator variable and brand engagement.

		Observed	Behavioral Intention
Obervation of participants	Pearson Correlation	1	-.150
	Sig. (2-tailed)		.093
	N	126	126
Behavioral Intention	Pearson Correlation	-.150	1
	Sig. (2-tailed)	.093	
	N	126	165

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

Table 31: Correlation between mediator variable and behavioral intention.

7.4 Discussion

7.4.1 Conclusions

The purpose of study 2 was to first verify conclusions from study 1 but with actual physical effort and to complement study 1 with additional mediators that might affect the outcome. The results from study 2 confirmed the outcome of study 1 and further suggested that some physical effort lead to better marketing outcome than non-effort. Hypothesis 1 testing confirms that doing 3, 15, or 40 squats or not doing squats at all has no significant effect on consumers' brand attitude. Hence, physical effort, in general might not be a great tool for marketers to increase consumers' attitude towards a specific brand. Hypothesis 2 testing also confirms the results from study 1 that doing 15 squats lead to the most brand engagement while doing 40 squats leads to less brand engagement, similar to that of not doing squats at all. Also, doing 3 squats, which is low effort level, does not lead to significant increase in brand engagement compared to other physical levels or non-effort level. Hypothesis 3 testing reveals that committing actual physical effort on average (any physical effort level) lead to better behavioral intentions in purchasing compared to committing no effort at all. However, only doing 15 squats leads to statistically significant better behavioral intention than the non-effort group. For marketers, a certain level of physical effort, such as the 15 squats, could lead to better purchasing results.

Based on the mediation analysis, we also found several mediation effects on brand attitude and behavioral intention. First, attitudes towards squats has mediation effect on behavioral intention. In a broader context, consumers' attitudes towards the exercise required for the marketing campaign could affect the behavioral intentions of purchasing with the brand. And the effect size is -0.2121, which means that when participants have a better attitude towards the exercise, they are likely to have less purchase intention. Second, consumers' perception of amount of work Nike has put in the campaign has mediation effect on brand attitude. The effect size is 0.1356, which means that if participants think Nike put more effort towards the campaign, they are likely to have better brand attitude towards Nike. Third, the mediation effect of participants being observed on brand attitude. Based on the results, if participants feel strongly about being observed in public that will lead them to answer higher brand attitude in the survey. Hence, the results of brand attitude could be higher than reality due to this mediation effect.

7.4.2 General Discussion

The results could be argued to be subject to diminishing returns. The relationships are non-linear in the sense that a medium level of effort is most effective. Because a very high level of physical exercise, 40 squats, could be considered to be of high effort and by definition humans are high effort aversive as discussed by Sagfossen et al. (2018), Sweeney et al. (2015), and Cardozo (1965) in the theory sections.

A possible explanation for the differences between the results for brand attitude and brand engagement could be our choice of Nike as the only participating brand in the study. Since Nike has such a well-recognized brand, the attitude towards the brand will probably not be affected by an isolated marketing campaign because the attitude is already well established in participating people's minds (Gardner, 1985). On the other hand, brand engagement is more situation specific and short lived (Harmeling et al., 2017) which could demonstrate why this variable, brand engagement, results in a more significant effect.

Since brand attitude is closely related to the marketing campaign itself, this mediation effect is also discussed by other researchers such as Mohr and Bitner (1995) that perceived supplier effort signals supplier motivation, which in this case increases brand attitude of Nike since participants perceived the brand showed motivation and quality through the campaign. Another mediator, attitude towards squat, however, has a negative relationship with behavioral intention,

which is contrasting to existing theories that consumers are effort aversive (Lewis, 1965; Scollon and King, 2004). This could be caused and explained by the relatively small sample size. Further research is recommended to investigate this specific mediator.

In addition to the influences on the dependent variables in terms of mediation effects other variables such as moderators could potentially impact the strength of the associations. Although data was collected for measuring moderating effects in terms of fitness level of the participants, not enough evidence was found in the data supporting strong moderating effects. Additionally, theory was not found supporting the moderator. Hence, we recommend that future researchers further investigate potential moderators.

7.4.3 Limitation of the Main Study

Although the study has a more real effect than study 1 since we removed the fictitious setting to a real effort setting where participants needed to conduct squats a limitation still exist in which the marketing campaign is still imagined and the actual 20 percent discount is not given after completion of the physical effort. Hence, a collaboration with Nike providing a real marketing campaign could potentially influence the results of the participants also for study 2. Moreover, the setting or environment in which participants conducted the physical exercise, squats, might have had an effect on participants' responses. To mitigate this risk, we tried to make the setting as natural and as comfortable as possible for everyone involved. Lastly, since taking part in the study was voluntary, based on our word-of-mouth promotion, the sample could be viewed as somewhat systematic rather than random due to whoever wanted to participate could do so.

8. Conclusions

This section presents the conclusions of this thesis in respect to the key findings from the discussions in both study 1 and study 2. In addition to the conclusions regarding the purpose and aim of the study further discussion evolved around theoretical contributions and implications of the study, limitations of the study, as well as suggestions for future research.

8.1 Conclusions

The main purpose of this thesis was to study consumers' behavior in regards to the physical aspects of effort both in order to contribute with new academic perspectives in an otherwise understudied research area as well as providing practitioners with valuable insights to create successful marketing campaigns enhancing their brands in an ever increasing competitive landscape over the attention of consumers.

Two different studies were conducted with the first examining the perceived imagined effort, as the independent variable, in relation to brand attitude, brand engagement, and behavioral intentions, where we hypothesized an incongruent pattern. For study 2 the same was hypothesized but with the difference of looking at real effort instead of imagined effort. In addition, study 2 also took into consideration potential mediating effects. Hence, we will only talk about study 2 in the conclusion section since study 2 is more comprehensive. Based on what was just mentioned the following research question was applied for the thesis at hand:

RQ: Does engaging consumer physical effort affect marketing outcomes including (1)brand attitude, (2)brand engagement, (3)behavioral intention towards the brand?

The results from both studies reveals that by engaging physical effort level, marketers can achieve better brand engagement and behavioral intentions in purchasing compared to not engaging in any effort at all. While the effect will decrease or lead to negative results if the physical effort is considered too high by the participants. Brand attitude, however, is not affected by physical effort.

8.2 Theoretical Contribution

The literature on consumer effort is to a large degree dominated by topics related to cognitive effort. Hence, through theory we know a lot about effort in terms of cognitive effort. However, the literature has not really distinguished between different types of effort and only a few studies have dealt with the situation in which there are physical effort. That is why we have chosen to contribute to the physical effort literature within the field of marketing. Nonetheless, there are some literature on physical effort and information processing outside marketing. Hence, we have not invented the topic encircling physical effort, however, existing studies goes beyond what most marketers are dealing with. We are therefore contributing with a bridge between marketers and consumers on the one hand and the more physiologically oriented literature on the other. Additionally, not only are we contributing with findings related to how physical effort affects the dependent variables, we also explain why this is happening in terms of mediators.

8.3 Practical Implications

This thesis contributes with practical evidence that some companies can engage consumers' physical effort to increase brand engagement and intention to purchase. Engaging physical effort is very important as it is becoming more challenging for marketers to engage with consumers due to the large amount of information out there today where companies are competing for the consumers' attention. By engaging with consumers' physical effort, companies could see better results in some of the key marketing metrics compared to a traditional approach.

As discussed previously, Nike expressed interest in engaging consumer physical effort to increase marketing effectiveness. Since our study focused on Nike and the campaign was designed for Nike, the conclusion of the study is potentially limited to Nike, similar sports companies, or similar sized enterprises that have big brand influence. The study also reveals that the type of physical effort and the intensity of the effort could affect consumers' behavioral intention to purchase, thus, it is important to understand what exercise or workout, and the intensity level work best with the specific brand or product. In our study, 15 squats achieved the best results overall for Nike. Sports companies like Nike already have exercise apps such as Nike Run, thus they can easily integrate physical effort marketing with current apps that can make it seamless for consumers.

With the upcoming 2020 Olympic Games in Tokyo, Japan, as well as for annual sporting events such as the Superbowl in the US, there is a great opportunity for brands to implement consumer physical effort campaigns to boost both brand engagement and purchase intentions. In addition to creating new and unique marketing campaigns, it is also a great tool for practitioners to consider where engaging consumers' in physical activity has a positive effect on the consumers' health. An important subject in today's increasing sedentary society. Hence, it could be assumed that marketing campaigns related to consumer physical effort also is beneficial for brands outside the sporting industry including brands such as insurance companies that benefit healthier clients as well as brands that want to position themselves as part of the solution for the sedentary lifestyle. Additionally, there would be a practical business opportunity for both existing social platforms (e.g. Instagram & Facebook and Snapchat) as well as new market entries to become a facilitator of marketing campaigns targeting consumer physical effort.

8.4 Limitations

The limitations include both concerns that emerged during the research process as well as decisions applied by us as academics. Throughout the method sections limitations and shortcomings were discussed towards the two specific studies as well as the pre- and pilot-studies. In the introduction section, delimitations were also considered due to the finite time and resources for the scope of this thesis.

In addition to the above limitations some notable shortcomings include the sample of participants which to a large degree derived from students at either Stockholm School of Economics or Royal Institute of Technology with a majority in the ages between 18 to 25. While the chosen sample did represent a specific consumer group it should be reflected with caution to the larger population. Hence, it should also be clear that conducting the study at another sample could result in a different outcome. Additionally, we have solely been looking at Nike as the brand throughout the thesis. As it was only possible to study a limited number of brands within the scope of this thesis, Nike was the optimal choice representing a well-established, recognizable and strong brand. However, including additional brands both in terms of size, recognizability, and type of industry could have generated different results. Furthermore, the participants in both studies were exposed to a fictitious marketing campaign where the 20 percent discount was not given after completion of the physical effort. Providing a real-world setting with an actual 20 percent discount from Nike could have resulted in the participants acting differently when taking part in the study.

8.5 Future Research

Further research could strengthen the evidence found in our study. First, similar study carried out by focusing on other companies or industries could help examine if the effects from our study with Nike brand still holds for other brands with different sizes or in different industries. Further research could use an anonymous or an imaginary brand to study the effect of physical effort on marketing. If resources allow, further research should try to include actual incentives and coupons for the marketing campaign so that it resembles the real-world setting. Also, different kinds of physical efforts could be studied such as leveraging GPS tracking features and similar technologies to make the setting as real as possible, expanding on our selection of physical exercise in terms of squats. Moreover, future research could take a different approach towards the sample in order to examine potential effects between demographic groups.

Due to limited time and resource, our study was not able to include all potential mediating variables. Further research should try to include more variables that could affect the outcome of a marketing campaign. Based on the theory provided in this thesis it seems likely that some credible patterns of influence could include information processing (Sagfossen et al., 2018) and perceived level of control over the activity (Lala et al, 2015). Regarding information processing, future research could examine self-perceived information processing and ask questions related to how difficult or easy it was to understand the marketing campaign as well as how much participants had to think in order to make sense of the marketing campaign. In terms of the level of control further research could explore the perceived level of control and whether a perceived voluntary or forceful effort has an influence on the measured variables. Additionally, more dependent variables could also be added in order to study possible marketing outcomes. Moreover, one of our mediators has binary values, hence Hayes' PROCESS could not be executed. It is highly recommended that future research does not use binary values for mediator variables although it signifies that there is a possibility of mediation effect.

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10. Appendix

10.1 Pre-study

Start of Block: Block 1

We are conducting a pre-study for our master thesis. Thank you for participating in the survey. Your input is very valuable to us and all responses are anonymous.

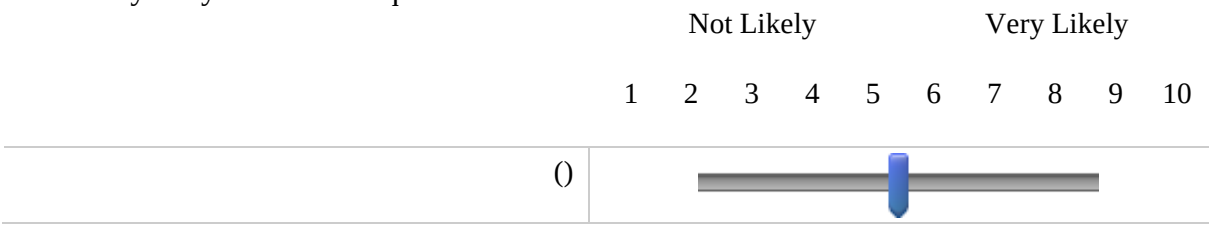
Page Break

In this survey, you are asked to participate in several physical exercises fictionally. Assume you are wearing your ordinary clothes and you have time for the short exercise.

End of Block: Block 1

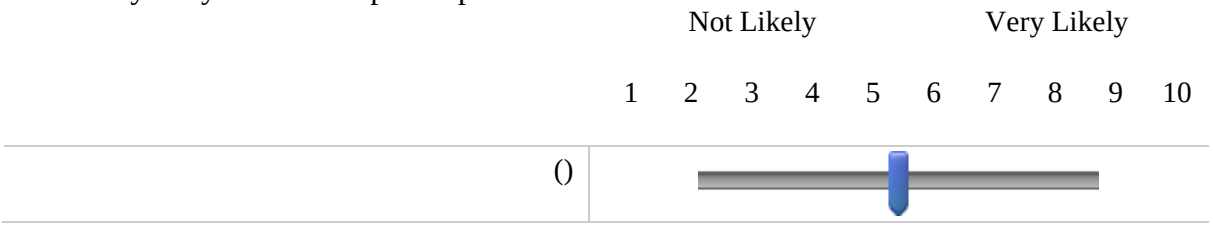
Start of Block: Default Question Block

How likely are you to do 15 squats?



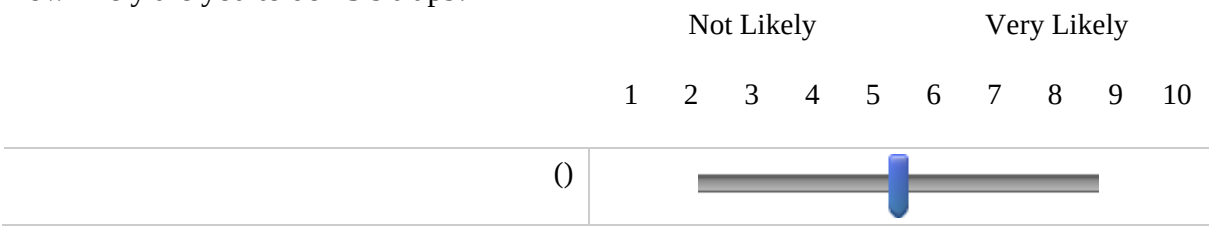
Page Break

How likely are you to do 15 push-ups?



Page Break

How likely are you to do 15 sit-ups?



Page Break

How likely are you do run for 100 meters?

	Not Likely								Very Likely	
	1	2	3	4	5	6	7	8	9	10
()										

End of Block: Default Question Block

10.2 Main study 1

Start of Block: Introduction A

We are conducting a study for our master thesis. Thank you for taking your time to participate in the survey. Your input is very valuable to us! All your responses are anonymous.

Page Break

Nike is starting a promotion. You, as a participant in this campaign, have to complete 15 squats to earn a 20% promotional code (expires in 2 months) to use on Nike.com.

Page Break

End of Block: Introduction A

Start of Block: Introduction B

We are conducting a study for our master thesis. Thank you for taking your time to participate in the survey. Your input is very valuable to us! All your responses are anonymous.

Page Break

Nike is starting a promotion. You, as a participant in this campaign, have to complete 3 squats to earn a 20% promotional code (expires in 2 months) to use on Nike.com.

Page Break

End of Block: Introduction B

Start of Block: Introduction C

We are conducting a study for our master thesis. Thank you for taking your time to participate in the survey. Your input is very valuable to us! All your responses are anonymous.

Page Break

Nike is starting a promotion. You, as a participant in this campaign, have to complete 40 squats to earn a 20% promotional code (expires in 2 months) to use on Nike.com.

Page Break

End of Block: Introduction C

Start of Block: Pre-Select

How likely are you to participate in this campaign and earn the discount code from doing the physical activity?

	Not likely to participate and do the squats									Very likely to participate and do the squats
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

End of Block: Pre-Select

Start of Block: Likely to Run, Purchase intention

After completing the physical activity, how likely are you to visit Nike.com and browse the products?

	Not likely									Very likely
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

How likely are you to use the coupon to buy something from Nike?

	Not likely									Very likely
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

End of Block: Likely to Run, Purchase intention

Start of Block: Physical Effort

What do you think of Nike as a brand?

	Negative								Positive
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

What was your perceived level of the imagined physical effort to earn this coupon?

	No/low effort								High effort
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

How often do you take part in physical activities/exercise?

- Once or less time per week (1)
- 1-3 times per week (2)
- 3 or more times per week (3)

Page Break

What brand was in the promotional campaign mentioned previously?

- Adidas (1)
- Nike (2)
- Tesla (3)
- Under Armour (4)
- Apple (5)

End of Block: Physical Effort

Start of Block: Demographics

What is your year of birth?

_____

Page Break

What is the highest level of school you have completed/(completing) or the highest degree you have received?

- Less than high school degree (1)
- High school graduate (high school diploma or equivalent including GED) (2)
- Some college but no degree (3)
- Associate degree in college (2-year) (4)
- Bachelor's degree in college (4-year) (5)
- Master's degree (6)
- Doctoral degree (7)
- Professional degree (JD, MD) (8)

Page Break

What is your sex?

- ○ Male (1)
- ○ Female (2)
- ○ Other (3)
- ○ I choose not to respond (4)

Page Break

Information about income is very important to understand. Would you please give your best guess?Please indicate the answer that includes your entire household income in (previous year) before taxes.

- ○ Less than $10,000 (1)
- ○ $10,000 to $19,999 (2)
- ○ $20,000 to $29,999 (3)
- ○ $30,000 to $39,999 (4)
- ○ $40,000 to $49,999 (5)
- ○ $50,000 to $59,999 (6)
- ○ $60,000 to $69,999 (7)
- ○ $70,000 to $79,999 (8)
- ○ $80,000 to $89,999 (9)
- ○ $90,000 to $99,999 (10)
- ○ $100,000 to $149,999 (11)
- ○ $150,000 or more (12)

Page Break

Where do you currently live?

- ○ USA (1)
- ○ Stockholm, Sweden (2)
- ○ Gothenburg, Sweden (3)
- ○ Malmö, Sweden (4)
- ○ Other, Sweden (5)
- ○ Other, Europe (6)
- ○ Asia (7)
- ○ Other (9)

End of Block: Demographics

Start of Block: Block 6

Thank you so much for participating in the survey. To be clear, the promotion you were exposed to from Nike does not exist in real life. It was created for the purpose of this study. We hope you don't mind and don't hesitate to contact us if you have any concerns.

End of Block: Block 6

10.3 Main study 2

Start of Block: Introduction A

Physical Effort Group Questions, 3, 15, 40 Squats are assigned randomly along with the non-effort level questions.

We are conducting a study for our master thesis. Thank you for taking your time to participate in the survey. Your input is very valuable to us! All your responses are anonymous.

Page Break

Nike is starting a promotion. You, as a participant in this campaign, have to complete 3(*or 15 or 40)* squats to earn a 20% promotional code (expires in 2 months) to use on Nike.com.
NOTE: Before proceeding with the survey, please do the squats :)

Page Break

After completing the physical activity, how likely are you to visit Nike.com and browse the products?

	Not likely								Very likely	
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

How likely are you to use the coupon to buy something from Nike?

	Not likely								Very likely	
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

What do you think of Nike as a brand?

	Negative								Positive	
	1	2	3	4	5	6	7	8	9	10

()	

Page Break

What was your perceived level of the physical effort to earn this coupon?

No/low effort High effort

1 2 3 4 5 6 7 8 9 10

()	

Page Break

What's your overall attitude towards the squats you just did?

Negative Positive

1 2 3 4 5 6 7 8 9 10

()	

Page Break

How often do you take part in physical activities/exercise?

- Once or less time per week (1)
- 1-3 times per week (2)
- 3 or more times per week (3)

Page Break

What brand was in the promotional campaign mentioned previously?

- ○ Adidas (1)
- ○ Nike (2)
- ○ Tesla (3)
- ○ Under Armour (4)
- ○ Apple (5)

Page Break

How much work do you think Nike puts in this campaign?

	No/less work								A lot of work
	1	2	3	4	5	6	7	8	9	10
()										

Page Break

If you were to do the exercise in a private or unobserved setting, would you think and answer differently regarding the above questions?

- ○ No (1)
- ○ Yes (2)

Page Break

How do you feel and how was it like to take part in this study? (Choose all that apply)

- ☐ It was fun (1)
- ☐ It was embarrassing (2)
- ☐ It was effortful (3)
- ☐ It was effortless (4)
- ☐ It was time consuming (5)

Page Break

What is your year of birth?

_____

Page Break

What is the highest level of school you have completed/(completing) or the highest degree you have received?

- ○ Less than high school degree (1)
- ○ High school graduate (high school diploma or equivalent including GED) (2)
- ○ Some college but no degree (3)
- ○ Associate degree in college (2-year) (4)
- ○ Bachelor's degree in college (3/4-year) (5)
- ○ Master's degree (6)
- ○ Doctoral degree (7)
- ○ Professional degree (JD, MD) (8)

Page Break

What is your sex?

- ○ Male (1)
- ○ Female (2)
- ○ Other (3)
- ○ I choose not to respond (4)

Page Break

Where do you currently live?

- ○ USA (1)
- ○ Stockholm, Sweden (2)
- ○ Gothenburg, Sweden (3)
- ○ Malmö, Sweden (4)
- ○ Other, Sweden (5)
- ○ Other, Europe (6)
- ○ Asia (7)
- ○ Other (9)

Page Break

Thank you so much for participating in the survey. To be clear, the promotion you were exposed to from Nike does not exist in real life. It was created for the purpose of this study. We hope you don't mind and don't hesitate to contact us if you have any concerns.

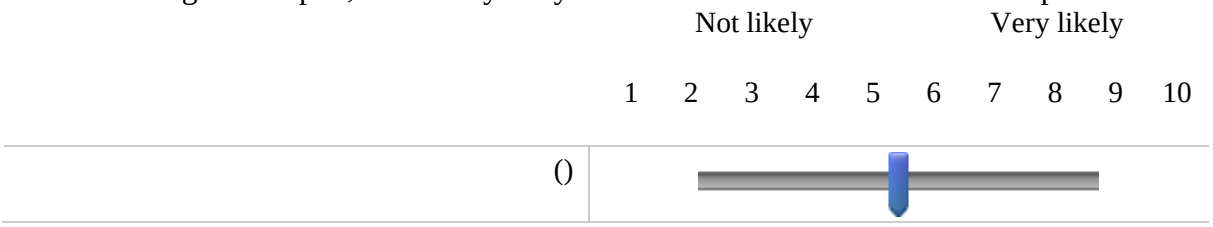
Page Break

Non-Effort Group Questions

Nike is starting a promotion. You, as a participant in this campaign, will receive a 20% promotional code (expires in 2 month) to use on Nike.com.

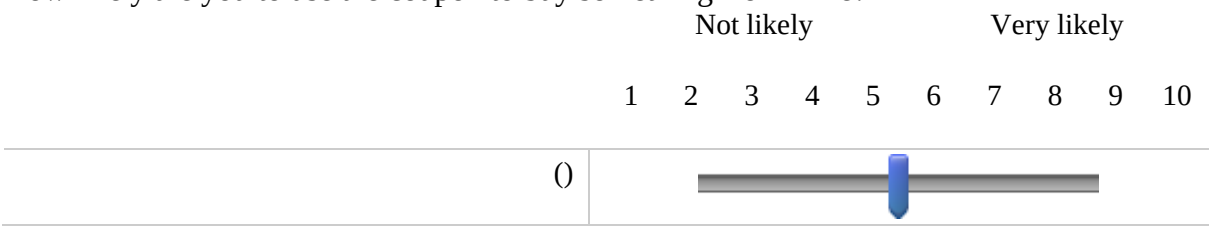
Page Break

After receiving the coupon, how likely are you to visit Nike.com and browse the products?



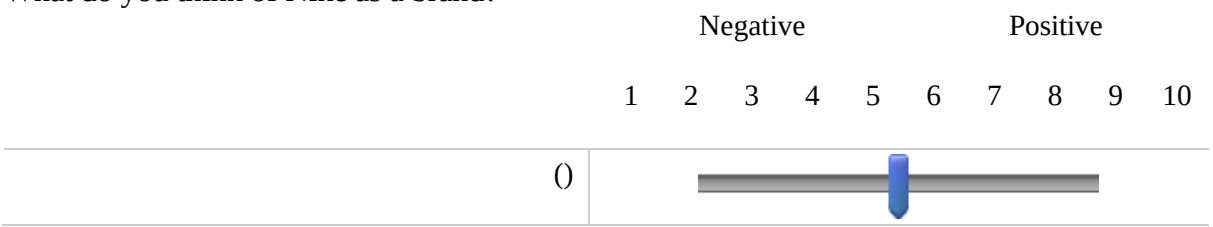
Page Break

How likely are you to use the coupon to buy something from Nike?



Page Break

What do you think of Nike as a brand?



Page Break

How often do you take part in physical activities/exercise?

- ○ Once or less time per week (1)
- ○ 1-3 times per week (2)
- ○ 3 or more times per week (3)

Page Break

What brand was in the promotional campaign mentioned previously?

- ○ Adidas (1)
- ○ Nike (2)
- ○ Tesla (3)
- ○ Under Armour (4)
- ○ Apple (5)

Page Break

What is your year of birth?

_____

Page Break

What is the highest level of school you have completed/(completing) or the highest degree you have received?

- ○ Less than high school degree (1)
- ○ High school graduate (high school diploma or equivalent including GED) (2)
- ○ Some college but no degree (3)
- ○ Associate degree in college (2-year) (4)
- ○ Bachelor's degree in college (3/4-year) (5)
- ○ Master's degree (6)
- ○ Doctoral degree (7)
- ○ Professional degree (JD, MD) (8)

Page Break

What is your sex?

- ○ Male (1)
- ○ Female (2)
- ○ Other (3)
- ○ I choose not to respond (4)

Page Break

Where do you currently live?

- ○ USA (1)
- ○ Stockholm, Sweden (2)
- ○ Gothenburg, Sweden (3)
- ○ Malmö, Sweden (4)
- ○ Other, Sweden (5)
- ○ Other, Europe (6)
- ○ Asia (7)
- ○ Other (9)

Page Break

Thank you so much for participating in the survey. To be clear, the promotion you were exposed to from Nike does not exist in real life. It was created for the purpose of this study. We hope you don't mind and don't hesitate to contact us if you have any concerns.

Page Break