



JÖNKÖPING UNIVERSITY

*Jönköping International  
Business School*

# Native Advertising: Don't Mislead, Don't Misread

A Research of Brand Disclosure Effect on Consumers'  
Native Ad Recognition Ability

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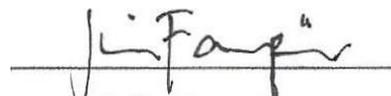
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# Bachelor Thesis Project in Business Administration

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**Background:** Online marketing tactics designed to have a minimized impact on consumer experience have emerged recently whereas native advertising is one concept. Native advertising is an approach designed to decrease interruptions in consumers' online experience by matching the form and functions of the platform in which the advertisement appears. It occurs online, with the one characteristic in common that it should not disrupt or negatively affect consumer experience. The desire to minimize consumer disruption has led to that native advertising in its most effective nature can be difficult for the reader to identify, which leads to the discussion of whether the tactic is deceptive. It is found that ad disclosures are frequently the only thing that separates native ads from commercial content. Unexplored areas in the literature exist, which include if native ad disclosures can be made more efficient with the use of brand disclosures.

**Purpose:** The purpose of this thesis is to investigate if brand disclosure in native advertisements affects consumers' native ad recognition ability.

**Method:** Data was collected through an eye-tracking experiment, exploring if brand disclosures affect the native ad recognition ability. The experiment was created in Tobii Pro Lab which tracked participants' real-time physiological reactions. Results were complemented with a questionnaire and data was analyzed in SPSS. The sample consisted of 60 students at Jönköping University.

**Findings:** The analysis illustrates that the experimental test group which received brand disclosures of high prominence showed an increased ability to recognize and identify native advertisements as promotional content compared to the control group. By implementing Mann-Whitney U tests and a Chi-Square test in order to test the hypotheses, results were found significant. The hypotheses were supported and could not be rejected, which resulted in the conclusion that brand disclosures increase the native ad recognition ability.

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# 1. Introduction

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*This section first presents a background to the emergence of native advertising and its characteristics, followed by a discussion of the research problem and research purpose in order to provide an understanding of the scope of this research. Lastly, delimitations of the research and its process are presented.*

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Online advertising is a constantly developing marketing strategy that has been under transformation and progression during the last decades (Tutaj & Van Reijmersdal, 2012). At the same pace as online advertising is evolving, consumers are becoming more aware of different marketing tactics used as well. As a result, there is an ongoing process for advertisers to keep up with consumers' recognition and response to information provided in the marketplace (Jung & Heo, 2019). Internet users today are generally exposed to high amounts of marketing messages every day and existing literature states that this advertising overload may cause consumers to develop negative feelings towards it (Souiden, Chtourou, & Korai, 2017).

To avoid that consumers generates these unwanted emotions about advertisements online, marketing tactics designed to have a less negative impact on consumer experience have emerged whereas native advertising is one concept. Native advertising is an approach designed to decrease interruptions in consumers' online experience by matching the form and functions of the platform in which the advertisement appears (Campbell & Marks, 2015; Federal Trade Commission [FTC], 2015; Wojdynski, 2016). It occurs online in forms such as sponsored posts, articles, videos, or images on social media platforms or alternative sites that publish original content. Additionally, it might occur as links or recommendation blocks on content providers or web search engines (Wojdynski & Golan, 2016). All with the one characteristic in common that it should not affect or disrupt consumer online experience.

Although the concept is commonly used today, native advertising is not a new phenomenon and the fundamentals stand the test of time. Native advertising has been a concept used in radio as well as television since the 1920s (Pressboard Media, 2015).

However, online native advertising has experienced rapid growth since the term was conceptualized in 2011 (Lee, Kim & Ham, 2016). The approach is predicted to take over online advertising with expected 74% of the total display ad revenue of the online market in the U.S. by 2021 (Business Insider, 2016). In Western Europe, native advertising is predicted to grow rapidly and expand by 156% in the upcoming years. Predictions indicate that more than every second digital persuasion attempt will be native advertisements by 2020 (Enders Analysis, 2016). This rapid growth illustrates why research within the field of how native advertising might affect both targeted consumers and the senders tend to be of interest to marketers as well as policy setters.

The desire to minimize the consumer disruption has led to that native advertising in its most extreme nature can be difficult for the reader to identify, which results in the discussion of whether the tactic is ethically correct or if its success is mainly based on misleading consumers. According to the Federal Trade Commission (henceforth, FTC), the awareness of something being an ad may affect the consumers' choice to interact with it or not and thus, it is marketers' responsibility to disclose their advertisements as ads. FTC's responsibility for protecting consumers from being deceived currently applies to native advertising online as well as in printed media (FTC, 2015) but it tends to be harder to control in the online environment. The phenomena of online native advertising today apply in new contexts which have resulted in that directives of how to regulate the technique and prohibit misleading consumers is more complex to revise.

## **1.1 Problem Discussion**

Research within the field of native advertising mainly focuses on the area of trust and how native advertising affects the credibility of the distributing platforms in which the ad is present. Further, existing research emphasizes the potential emotional effects the detection of native advertisements might have. However, results indicate that consumers generally have difficulties to recognize native ads at all (Amazeen & Wojdyski, 2018; Li & Wang, 2019) and that it is the platform and form of how the advertisement is outlined that have more impact on consumers' level of ad recognition rather than presented ad disclosures (Jung & Heo, 2019).

Disclosures in native advertisements can take several forms to meet standards. Accepted disclosures involve labels such as “presented by”, “sponsored content”, “ad”, “suggested by” and repeated mentions of the brand or use of brand voice can be approved as well (Wojdyski & Evans, 2016; FTC, 2015). These divergent standards that are continuously evolving can be confusing and tend to decrease consumers’ ad recognition ability since consumers may not identify cues for how a standard native ad looks (Amazeen & Wojdyski, 2018).

The present regulations from FTC can be viewed as inexplicit and marketers tend to take advantage of this by minimizing their disclosure efforts. A study presented by Pollitt (2016) shows that 11% of publishers participating in a survey did not label their native advertising at all. This can be viewed as problematic since it indicates that regulations obviously do not completely fulfill its purpose. Despite clear ad disclosures are required due to law in native advertisements and should be the revealing factor of its nature (FTC, 2015), there are still other factors that seem to influence consumers’ ad recognition more.

Little research explores how native ad disclosures can be made more efficient. Li and Wang (2019) suggest that promotional messages that include more information associated with the advertiser such as sponsor-related sources and mentions of the brand name might increase the ad recognition ability. However, regarding the need for disclosure in native advertising, it is not yet explored whether the presence of the brand name and using the brand characteristics as native advertising disclosures can enhance the ad recognition. Due to the lack of existing research regarding brand disclosures in native advertising, the researchers identified a gap in whether the brand disclosures affect the consumers’ native ad recognition ability.

Research within this topic is valuable for several parties in the marketplace. Regulators and policy setters have a great interest in factors that can minimize the risk of consumers becoming deceived. It is difficult to set regulations that fit all contexts and platforms, but deeper insights into what affects the ad recognition ability might facilitate their operations. Further, it is significant for organizations and advertisers to be aware of what effects their marketing efforts might cause. To remain ethical towards consumers, organizations must be mindful of how to efficiently disclose and design advertisements. Research within the topic can further increase the general awareness of online native

advertising. This awareness can help consumers to make well-informed decisions by identifying cues and characteristics of how native advertising appears.

## **1.2 Purpose**

To explore the gap found in previous literature, the purpose of this research is to investigate the relationship between consumers' native advertising recognition and brand disclosure. The research aims to discover if there is any relation between the way organizations disclose their brand in native advertising and consumers' ability to recognize and define the message as marketing efforts. This lead up to following research question:

*Does brand disclosure in native advertising affect consumers' ad recognition ability?*

## **1.3 Delimitations**

This research involves several delimitations which should be acknowledged. A major circumstance that induced complications throughout the process was the worldwide pandemic Covid-19. The pandemic had its major outbreak during the time this research process took place and it made the Swedish government compel to impose new regulations and restrictions to minimize the spread.

The situation affected the research since Jönköping University due to recommended regulations performed all education on distance. These restrictions were launched days before the experiment in this research which led to a major decrease of students available at the university during the time researchers had access to the eye-tracking equipment to carry out the experiment. The consequence of the situation made the researchers face obstacles to gather data from a large sample. As a result, the researchers decided to retrench the sample size to 60 participants. It should be underlined that this delimitation mainly affected the data collection and sample size but did not cause major consequences to the research overall.

Further, due to resources available this research has been delimited to focus on one specific platform in which native advertising is commonly present, specifically a news site. The platform was chosen due to its applicability to the eye-tracking experiment as

well as its potential to conduct an experiment within a reliable online environment for participants. There exist additional platforms on which native advertising is appearing that is not considered in this thesis but could act as potential areas to investigate in future studies.

## 2. Literature Search

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*This section describes the literature review process of how previous studies used for this research were selected and evaluated. Additionally, a summarized review of several key references and their value for this research is presented.*

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In order to develop a theoretical framework that represents the basis for this research in terms of relevance, value, and sufficiency, evaluation of current knowledge within the research topic was completed. By critically reviewing the literature, deeper insights into what is previously known within the field as well as indications of the unexplored aspects were discovered. To gain a thorough understanding of existing literature, the search was completed mainly via the databases *Diva*, *Scopus*, *Google Scholar*, and *Jönköping University's library*. Keywords used included “*native advertising*”, “*ad recognition*”, “*advertising disclosure*” and “*brand disclosure*”.

To ensure the relevance of used literature, several delimitations for selection were made. First, closeness and relevance to the field of research were emphasized and articles perceived as outdated were sorted out. The time frame for used literature was set to 2011 and forth due to the timing of online native advertising conceptualization. However, it should be acknowledged that several exceptions occurred involving specific definitions and fundamental models since their usefulness and expected value to this research despite that they were published earlier than 2011. Second, to further assure high quality of literature only peer-reviewed articles were included and articles ranked in either SSCI index and/or ABS-list were used to the greatest extent possible.

The selective process to ensure articles' relevance to the research topic included an organized screening of abstracts and summaries from literature within the field. Articles that were irrelevant to this research were excluded. This was followed by an evaluation of the objectivity and transparency of perspectives and methodologies undertaken in the articles. The analysis took a thematic approach where themes both in terms of research subjects and methodologies were identified and categorized by using a spreadsheet.

Within these themes that emerged, key references that developed the core in the theoretical framework conducted for the purpose of this research could be discovered.

## **2.1 Literature Review**

Several key references could be identified to build the theoretical framework. The purpose of this research is to investigate if brand disclosures affect consumers' native ad recognition ability and it is proposed that variation in presence and prominence of brand disclosure result in different consumer reactions. Therefore, Wojdyski and Evans (2016) findings of how consumers' advertising recognition is affected by visual prominence in advertisements were useful to root the discussion that resulted in the researchers' first proposed hypothesis. Wojdyski and Evans reported a transparent discussion where the perspective of the study was unbiased which increased the relevance and usefulness for this research.

Further, Krouwer, Poels, and Paulussen (2017) research provide important insights into potential gaps and lack of consistency in previous literature within the research topic on brand disclosures effect on ad recognition ability. Combined with Nielsen (2006) research on the F-shape viewing pattern, the researchers could derive a second hypothesis that considered what effect the placement of brand disclosures might have. Additionally, Wojdyski (2016) discusses important aspects of native advertising disclosures that tend to have increased risk to be more deceptive as well as how marketers' take advantage of the fuzzy regulations to minimize their disclosure efforts. These insights lead the discussion into whether more implicit techniques without clearly labeled ad disclosures can still enhance native ad recognition by using the language of the brand, which derives in the third hypothesis.

Additionally, themes in previous research could be found in that significant portions of research that involve individuals' ad recognition abilities refers to persuasion knowledge. Friestad and Wright (1994) Persuasion Knowledge Model explains how individuals can interpret information and make well-informed decisions based on experiences and knowledge of persuasive tactics. The persuasion knowledge can be further divided into conceptual and attitudinal persuasion knowledge whereas the first considers the ability to recognize persuasive efforts, which is highly relevant to the purpose of this research. The

conceptual persuasion knowledge is suggested by the researchers of this research to be higher if clear brand disclosures are present which represents the fourth hypothesis in this research.

Since this research focuses on the process of consumers' native ad recognition ability, models and theories that evaluate and investigate attitudes, emotional effects and behavioral actions post ad recognition have not been taken into extensive consideration in this research. This should not be understood as a position taken by the researchers, but a decision based on the purpose and theoretical format of this project. A complete list of the 15 number of articles used in this research can be found in Appendix A.

### **3. Theoretical Framework**

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*Literature and important concepts related to the research topic is examined in this section. The chapter is covering the topics of visual appeals' effect on native ad recognition, brand prominence and position effect as well as implicit ad disclosures. These topics lead to the description of the Persuasion Knowledge Model. Lastly, the conceptual framework proposed by the researchers is presented, which describes brand prominence's suggested effect on native ad recognition.*

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#### **3.1 Native Ad Recognition and Visual Appeals**

Native advertising is appointed to be a growing phenomenon due to consumers' lack of ability to recognize the advertisement as paid content. However, previous research indicates that there exist some negative consequences of this phenomenon despite the convenience. The lack of ability to recognize commercial content might lead to consumers feeling deceived and persuaded which in turn leads to critical processing and increased skepticism towards the advertisements they are exposed to (Wojdyski & Evans, 2016; An, Kang, & Koo, 2019).

Since native advertising occurs in varied forms, ad disclosures are often the only characteristic that separates paid content from editorial content (Wojdyski, 2016). Commercial content and editorial content have been blended for years in printed media, as well as in radio and television, but the environment online makes it more complex due to its more disguised nature. However, since the blending of the two concepts online can be viewed from different devices and might occur in different forms due to the platform in which it integrates, it is harder for consumers to separate and therefore avoid being deceived (Wojdyski, 2016). This development has led to an increased importance of knowledge in how to frame ad disclosures.

For disclosures to be effective, it is of importance that they are consciously processed, meaning the position, language, and style need to be clearly recognized (Krouwer et al., 2017). According to Wojdyski and Evans (2016), disclosures are more likely to be recognized when it is visually appealing but in general, little is known about to what

extent the guidelines of how to use disclosures in native advertising are followed within the industry. According to An et al. (2019), identification of disclosures and sponsors is problematic. Their study found that the most problematic issue is how to label disclosures and neologisms labels are used rather than the recommended ones which lead to identification problems among the consumers (An et al., 2019).

Liu and Zhang (2013) present that brand logos attract much attention to advertising. Besides, they argue that logos have great commercial and social values. Additionally, Wojdyski and Evans (2016) argue that visual appeals such as brand disclosures in the form of brand logos are an important factor in ad recognition as well. There are further positive effects in terms of brand logos and ad recognition. Wojdyski and Evans (2016) present that disclosure with visual prominence of the brand works to activate associations connected to the brand in the memory of consumers. This assumption draws to the conclusion that brand disclosures in form of logos lead to greater brand memory which can be a positive effect for the sponsor by not only increase ad recognition but lead to competitive marketing advantage as well (Grinsven & Das, 2014). Due to previous research and findings that brand logos attract much attention, the following hypothesis is proposed by the researchers:

*H1: Brand logo presence in native advertising increase ad recognition*

### **3.2 Brand Prominence and Position Effect**

Disclosure of the brand behind a promotional message can help consumers to identify advertisements (An et al., 2019; Wojdyski & Evans, 2016). Henceforth, these disclosures are one tool that protects consumers from being deceived or misled. A study by Harms, Bijmolt, and Hoekstra (2017), proposes that brand disclosure of some degree in the form of brand mentions, logos or URLs should be present in proper online advertising. However, the correct level or outline remains difficult to determine due to the complex environment. The broad variation of formats that native advertising can take online is an obstacle for FTC's possibilities to set general guidelines for practitioners that appeal to all (Wojdyski, Evans, & Hoy, 2018). As a result, the appropriate level, and potential effects of brand disclosures in online advertising have been widely discussed and studies have emerged in different opinions. Krouwer et al. (2017) suggest that the

broad differences in what researchers conclude are a result of that the level of brand prominence researchers implements in their studies differs as well.

Some research suggests that if brands appear too obvious in advertising content, it may result in decreased trustworthiness and negative evaluations from consumers (Harms et al., 2017; Wojdyski & Evans, 2016). Contrariwise, there are indications that prominent brand disclosures do not necessarily affect the credibility of the message or media (Li & Wang, 2019). Solely the disclosure of a brand is argued to have a subdued role compared to other variables when it comes to consumers' evaluations and emotions when they identify a promotional message (Krouwer et al., 2017). Additionally, very low degrees of brand disclosure can be perceived as more deceptive and result in negative evaluations as well since consumers might develop feelings that they are being deluded.

Harms et al. (2017), propose that the reason some research finds that advertisements with minimized brand disclosures create more positive feelings than those with clear brand disclosures might be because the reader is misled and does not recognize the advertisement as sponsored content. This is in line with what Krouwer et al. (2017) suggest as potential reasons for conclusions regarding differences in brand disclosure effects. Therefore, it is proposed that if the brand is not prominent enough in advertisements, it cannot result in any conclusions about the effects of disclosures either if the reader might not even acknowledge that the message is sponsored content. It can be argued that prominent brand disclosures are more likely to provide a more informed consumer and decrease the risk of deceptiveness (Krouwer et al., 2017).

However, not only the prominence of a brand in advertising can affect the likeliness of it being noticed and thus influence the ad recognition ability. Previous research conducted in the form of eye-tracking experiments has confirmed that the reading pattern of webpage users are somewhat resembling the shape of the letter F. Nielsen (2006) refers to this as the F-shape pattern theory which describes the scanning pattern of web users. The theory suggests that users initially scan a website by moving their eyes in a horizontal movement at top of the page. Second, the movement of the eyes shifts to a horizontal movement, similar to the form of an F's lower bar. Thirdly, the web users scan the web page in a vertical movement, resembling the stem of an F (Nielsen, 2006). The F-shape pattern

theory shapes decisions of where to place advertisements but also the design of adverts since the information placed in the upper-left edge probably receive the best attention.

Nielsen (2006) confirmed the theory in his research that indicated that disclosures at the top left corner were most likely to draw attention. On the contrary, Wojdyski and Evans (2016) found that disclosures in an upper position might risk being ignored since online users start reading the article without paying attention above the headline. Nevertheless, the F-shape pattern theory confirms that both prominence and place of disclosures must be acknowledged to determine disclosure efficiency. With relation to brand disclosure and its prominence, implementing the F-shape pattern theory in this research with both Nielsen (2006) and Wojdyski and Evans (2016) findings taken into consideration result in researchers suggest the following hypothesis:

*H2: Brand disclosure in the heading of native advertising articles increase native ad recognition*

### **3.3 Implicit Ad Disclosures**

To understand the emergence of discussions regarding native advertising and its ethical concerns, it is essential to first acknowledge the definition of deceptiveness in this context. Deceptiveness within the nature of advertising is defined as when it increases the likelihood that consumers behave differently from how they probably intended to if they would have been highly informed (Sahni & Nair, 2020). Therefore, advertising that provides difficulties for consumers to identify it as such can be claimed to fall within the category (Wojdyski et al., 2018).

Traditionally, regulators have mainly emphasized restrictions of claims and statements in advertising content that forbid lying or providing false information. However, in line with the evolution of online advertising tactics such as native advertising, the main concern tends to have shifted to whether consumers recognize persuasive messages as advertising at all. Therefore, the format and outline of advertisements are now restricted as well (Wojdyski, 2016). Despite the purpose to avoid deception, research shows that in 2016, four out of ten publishers in the U.S. did not follow the presented guidelines regarding native advertising disclosures at the time (Li & Wang, 2019). Wojdyski (2016) states

that numerous advertisers publish sponsored content with sparing information provided that would be necessary to enable consumers to make well-informed decisions based on the advertisement. The intention from marketers today tends to be to minimize transparency and since disclosures vary significantly depending on the type of advertisements and platforms, the likeliness to deceive consumers increases.

An et al. (2019) discuss how the use of language and format can affect ad recognition of native advertising content. The study refers to the FTCs statements that native ads that are very similar in format, topic, and wording to the original publishers' site, tend to result in more difficulties for consumers to identify the persuasive message. Thus, native advertisements that do not include any specified disclosure should be very clear in its persuasive nature in order to be considered as accepted in terms of legal as well as ethical aspects and thus, avoid being deceptive. It is found that explicit ad disclosures such as phrases stating that the content is sponsored are more likely to increase consumers' ability to identify advertisements compared to implicit disclosures which includes the use of brand voice or less clear labeling (An et al., 2019; Wojdyski & Evans, 2016). However, research confirms that despite the form disclosures take, the use of language tends to influence the way consumers interpret the information and reflect upon the persuasive nature (Wojdyski & Evans, 2016). It has been found that repeated mentions of a brand can increase the likeliness that consumers recognize ad disclosures (Krouwer et al., 2017).

Regulators suggest that the language of native advertisements should differ significantly from what is used on the site it is published in order to disclose the content as advertising (An et al., 2019). Additionally, repeated mentions of a brand are shown to attract more attention which can indicate that the use of brand voice such as taglines and slogans in the text as native ad disclosures might influence ad recognition. The following hypothesis is therefore proposed:

*H3: The use of brand voice in native advertising increase native ad recognition*

### **3.4 Persuasion Knowledge Model**

Consumers are constant targets of advertising and sales persuasion attempts when browsing online, and studies on how consumers respond and adapt are of interest to researchers. The commonality of persuasion attempts has led to consumers have become more informed and increased their awareness about marketing tactics they are exposed to. By identifying common characteristics of how, when, and why they are subjects of persuasion attempts, consumers can use the knowledge to respond properly due to their interest (Friestad & Wright, 1994). This behavioral pattern of consumers has been elaborated on in the Persuasion Knowledge Model (Friestad & Wright, 1994) and can be described as a measure of an individual's self-control and competence while being exposed to persuasion attempts. The moment consumers identify persuasion attempts, they activate the persuasion knowledge and the processed information about the advertisement is stored for the future (Evans & Park, 2015). It is proposed that the more knowledge consumers have about common advertising cues, the more capable of making deliberate decisions and defending themselves against the message they become. Consumers use their persuasion knowledge to make effective decisions based on individual interests (Tutaj & Van Reijmersdal, 2012).

Persuasion knowledge has over time been divided into two dimensions. The first dimension is referred to as conceptual persuasion knowledge which describes individuals' ability to identify persuasive attempts as well as the capability to interpret the content, source, and intent of the advertisement (Boerman, Van Reijmersdal, & Neijens, 2012). The conceptual persuasion knowledge is activated only if individuals identify the advertisements. If advertisements are not recognized as such, it is suggested that the likeliness that the consumer will reflect upon the content, source, and intent decrease significantly as well (Krouwer et al., 2017). Due to the broad variety of formats that online advertisements can appear in, consumers experience increased difficulties to identify obvious and distinct cues that distinguish persuasion attempts. In marketing tactics where the advertisements are embedded in the platform, such as native advertising, disclosures are sometimes the only characteristic that differentiates the advertisement from regular content. In these situations, prominent disclosures are sometimes a prerequisite for consumers to be able to activate their conceptual persuasion knowledge from the first place (Krouwer et al., 2017).

The second dimension proposed is attitudinal persuasion knowledge. The attitudinal persuasion knowledge involves the evaluation of the advertisement post recognition. Krouwer et al. (2017) highlight that, commonly, marketers focus on the initial recognition of persuasion attempts, which then only involves the conceptual persuasion knowledge, since they assume recognition leads to negative emotions. Consumers tend to be more critical in their evaluation when the credibility is perceived as low and advertisements bring no value. Further, the recognition of persuasion attempts where consumers perceive there are unfair methods used involving manipulation and dishonesty generates higher skepticism as well (Boerman et al., 2012). However, consumers that identify persuasion attempts do not necessarily develop these negative emotions or become more critical towards the message or its source. Therefore, attitudinal persuasion knowledge is important to consider as well, since it describes the emotions that consumers experience after recognizing advertisements. If the content and information received from advertisements are valuable enough for the consumer, it can still lead to positive responses even if the persuasive attempt is identified (Krouwer et al., 2017).

Nevertheless, consumers' ability to recognize advertisements and factors that affect this knowledge mainly relates to the conceptual persuasion knowledge. Accordingly, this eventuates to that the application of the model in this research will mainly consider an analysis focused on this dimension. The researchers propose the following hypothesis:

*H4: Brand presence in native ad disclosures results in increased conceptual persuasion knowledge*

### **3.5 Conceptual Framework**

With the thorough research of the literature and theories related to the topic as a basis, the researchers propose a conceptual framework of factors suggested to influence the native ad recognition ability. The integrated factors that constitute the framework are all discussed in previous research within the field of the research which highlights the relevance and fit to the purpose of this research. Figure 1 illustrates the conceptual model derived from the hypotheses regarding brand disclosures' effect on native ad recognition ability.

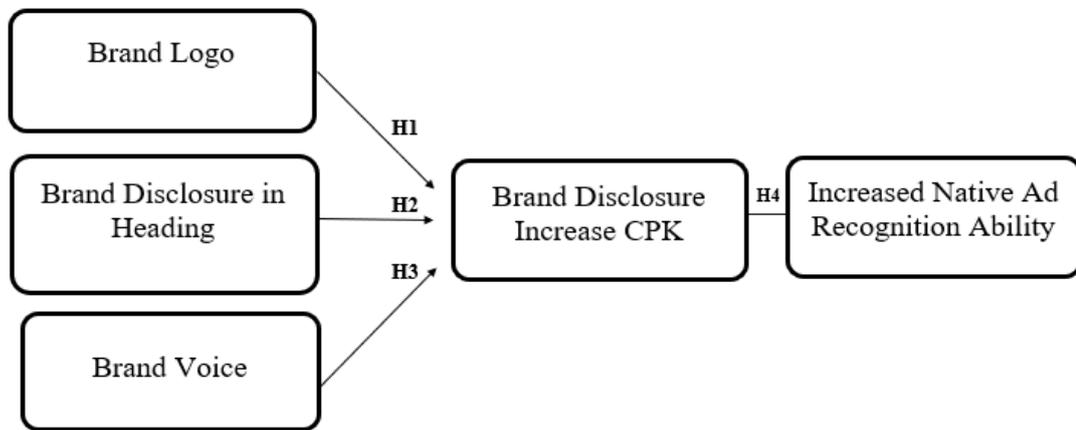
Wojdyski and Evans (2016) discuss that ad disclosures that are visually appealing activate consumers' minds so that they associate the content with the brand and memories. Further, they argue that disclosures of the brand behind advertisements enhance consumers' ability to identify the content as an ad. Hence, Liu and Zhang (2013) state that brand disclosures in the form of brand logos are an important factor of ad recognition since these disclosures attract much attention.

It is also suggested that the position of disclosures plays a significant role in native ad recognition. This is mainly based on Nielsen (2006) study of how consumers scan online websites by moving their eyes in a shape resembling the letter F. The study implies that disclosures in the heading of advertisements are most likely to be seen and acknowledged.

An et al. (2019) discusses the language and format of advertisements' effect on native ad recognition ability as well. Their study refers to statements from FTC describing that content similar to the original publishers' sites in terms of language and format are more likely to deceive consumers. The style of language influences how consumers interpret information and repeated mentions of a brand name tend to increase the ability to recognize advertisements (Krouwer et al., 2017). Accordingly, it is proposed that the use of brand voice increases native ad recognition since it becomes more distinct from the original publishers' content and it indicates who the sender of the message is by using brand mentions, taglines, and slogans.

Identification of common characteristics in persuasion attempts is proposed to increase consumers' responsiveness and ability to control their actions based on their interests. The Persuasion Knowledge Model presented by Friestad and Wright (1994), describes how the conceptual persuasion knowledge is activated only when consumers identify persuasive messages. If advertisements are not recognized as such, there is a low chance that the reader will reflect upon the content, source, and promotional intentions (Krouwer et al., 2017). Since brand disclosures are suggested to increase consumer reflections and their ability to recognize ads, it is proposed that brand disclosures in form of logos, brand disclosures positioned in headings, and using brand voice increase the conceptual persuasion knowledge which consequently increases the native ad recognition ability.

The model presented by the researchers derives from the proposed hypotheses. Thus, the conceptual model used to examine the suggested factors of causality is up to date, related to the research topic, and designed to fit the purpose of this research.



*Figure 1.* Conceptual Model for Factors Influencing Native Ad Recognition

## 4. Methodology

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*This section addresses the methodology of this research which includes the research philosophy, research approach, and research purpose. The reasoning for the adopted methodologies is discussed with each section in order to understand the philosophy, approach, and purpose which underpin the research.*

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### 4.1 Research Philosophy

The research paradigm is essential to efficiently guide the flow throughout the research process. What paradigm that is most suitable mainly depends on the presumptions about human behavior and reality that are undertaken in the research. It can be further described as the way researchers use beliefs and philosophies to develop their knowledge, and the two main paradigms are usually referred to as positivism and interpretivism (Saunders, Lewis, & Thornhill, 2016). To provide an answer to the purpose of this research, the researchers have evaluated existing literature within the field to develop hypotheses to be tested in an experiment. This approach of hypothesis testing is strongly associated with a positivistic paradigm, which is also the philosophy that underpins this research. Positivism has its origin in natural science and proposes that social reality is objective and can be explained only by logical reasoning since the reality is independent of human influences and facts can be proven. Thus, positivistic philosophy is usually associated with quantitative research (Collis & Hussey, 2014).

Testing of hypotheses in positivistic research further emphasizes the importance of using existing literature as a basis that allows the development of relevant anticipations of causality aimed to be tested (Collis & Hussey, 2014). To answer the research purpose of whether brand disclosures affect native ad recognition ability, this research investigates physiological reactions and direct behavior rather than exploring underlying reasons, attitudes, and impressions, which would potentially have been the case if applying a more interpretivism paradigm. Positivistic research involves that social reality is observable and can be used to draw generic conclusions while interpretivism contrariwise argues that research of human beings and their social worlds cannot be completed the same with a view of social reality as physical phenomena (Saunders et al., 2016). Researches of

positivistic philosophy generally emphasize that the design and method are structured in a way that enables research replication (Saunders et al., 2016). While observing physiological reactions in this research, the researchers searched to be independent and taking a detached role which enhances replication and potential use of results in future studies.

## **4.2 Research Approach**

When evaluating research approaches and which is most suitable for a study, the design the research falls under depends on the reasoning and the structure. There are two main approaches generally considered within research, namely deductive and inductive (Saunders et al., 2016). A deductive approach can be explained by moving from general to specific instances (Collis & Hussey, 2014) which is the structure adopted in this research where existing theories emerged in the proposed hypotheses. This research process began with identifying a gap within existing literature that aimed to be explored by hypothesis testing to answer the research question. In other words, the research project carried out can be explained as theory-driven which confirms the design of a deductive approach (Saunders et al., 2016).

The deductive research approach was further suitable for the experimental design. Hence, the experimental design indicated that an inductive approach which usually starts with gathering and exploring data instead of theory (Collis & Hussey, 2014) would not have been as applicable for this research since the reliability of hypotheses was dependent on exploring existing knowledge within the field to have qualified presumptions about causality. Further, an inductive approach usually aims to discover the traits of an interpretive study, such as reasons and attitudes, which is not the case in this experimental research where physiological reactions are measured. Hence, this research is truly permeated by the adoption of a deductive approach.

Using a deductive approach is sometimes criticized since the structured design does not allow alternative explanations to the conclusions drawn from the research (Saunders et al., 2016). Nevertheless, since this research aimed to discover if, rather than how, brand disclosure in native advertising affects consumers' ad recognition ability, alternative explanations are not required in the research. Furthermore, in a deductive study it can be

assured that if the premises are true, the conclusion must be true as well (Saunders et al., 2016) which further supports the constitution of this research.

### **4.3 Research Purpose**

Research conducted can be categorized due to what purpose the study undertakes. Three frequently adopted alternatives of purposes that research aims to fulfill are exploratory, explanatory, or descriptive purposes. The research purpose of a study can be determined by evaluating the research question and by taking a glance at how the question is formulated and what it aims to discover (Saunders et al., 2016). Whereas the research question of this research investigates a characteristic of a problem, namely brand presence in native ad disclosures, this research is classified to fulfill a descriptive purpose (Collis & Hussey, 2014).

Research that adopts a descriptive purpose intent to gain accurate information on situations, events, or persons (Saunders et al., 2016) which is pertinent to this research as well where physiological reactions of individuals due to specific events are studied. The research conducted worked to gather accurate information on whether brand disclosures in native advertising increase the ad recognition ability, not to declare why or how the recognition might affect the consumer post treatment.

Moreover, data collection methods to investigate the purpose of this research included a response scale survey filled out by the participants. To fulfill an exploratory or explanatory purpose was deemed inadequate since surveys of such studies rather involve open-ended questions to gather an understanding of a problem. However, this research can be viewed as a potential forerunner to explanatory or an extension to exploratory research (Saunders et al., 2016).

## 5. Method

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*This section elaborates and presents the methods used to collect data for this research. Data collection method, sampling frame, and sampling selection are described followed by a description of the experiment and survey. Further, the methods used for analyzing data are elaborated and the section is concluded with a discussion related to research quality and research ethics.*

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### 5.1 Data Collection Method

A review of the literature within the field of the research topic indicated that studies are mainly conducted with data collection based on interviews and surveys in a post-treatment mode. As a result, literature tends to rely on respondents' memories and perceptions of how they think they would behave or feel in specific situations, rather than their real-time reactions. According to Eisend (2015), consumers generally tend to find themselves as insusceptible for persuasion attempts which can result in that studies based on exclusively individuals' perceptions might lack the real-time perspective that can provide a broader understanding of consumer behavior. With this taken into consideration, the collection of primary data in this research did not only rely on participants' individual perceptions but also investigated physiological reactions in real-time.

Strategies the researchers considered to collect data by observing direct behavior and reactions were observations, case studies, or an experiment. However, due to the research design and attempt to track real-time reactions on native advertisements, the strategy applied was through an experiment using eye-tracking technology. Eye-tracking is a technique used to track the movement of individuals' eyes in real-time and the equipment measures overt movements and patterns of eye fixations and attention. The data enables researchers to discover what key elements are seen and how much consumer attention different types of content attracts (TobiiPro, 2020). It should be acknowledged that the eye-tracker cannot track whether mental attention is put somewhere else (TobiiPro, 2020) and thus, it requires that participants remain focused throughout the complete test to provide useful results. Nevertheless, the collection of real-time physiological reactions

provides an additional dimension to understand consumer behavior compared to only relying on memories and perceptions about intended behavior. Insights in what consumers actually see help the development of the optimized design of advertisements, both from advertisers' and regulators' perspectives. Despite the eye-tracking experiment, complementary data were also collected by questionnaires about the experience from which responses were analyzed with relation to the eye-tracking data

According to Söderlund (2018), experiments are assumed to work best when there is a significant level of pre-understanding regarding causal claims. Therefore, the review of existing literature in the field provided findings and insights to build up the theoretical framework used to support the expected causality of hypotheses. One desired advantage of using an experiment instead of other common methodologies involving observations was that the researchers were allowed to perform a strict and accurate test that with greater certainty could tell what treatments contributed to specific reactions of the participants, since not only one group was tested and treated the same. Söderlund (2018) claims that a precondition for being able to draw plausible conclusions about causes of reactions in an experiment is that there must be a variation of treatments. In experiments, treatments are referred to as something initiated by the experimenter which enables the researchers to have a more impactful role but remain detached from the data collection (Söderlund, 2018) which is highly important for positivist research. By conducting an experiment, researchers avoided common errors in methodologies that use participant observation. These errors, such as observer bias and observer errors (Saunders et al., 2016), were minimized since data from the eye-tracking equipment was highly objective and the researchers obtained a low influence on the test result. Since the experimental approach was taken where researchers did not reveal any specific time limit or goal to be accomplished in the test, biases of social desirability and response biases could be reduced as well.

## **5.2 Sampling Frame**

As in all research where it is not possible to collect data from the complete population, the researchers had to determine a target population from which the sample to test the proposed hypotheses was set. For experiments to provide reliable results, the groups in the test must not differ from each other in other ways than the treatments initiated by the

researchers (Söderlund, 2018). Therefore, the sample frame was set to students at Jönköping University since it provided a tolerably homogenous test group. Additionally, the sample frame was further narrowed down to exclusively Swedish students to diminish the risk of results that depend on cultural differences. By only involving Swedish students, the researchers could to a greater extent also predict that the brands used and mentioned within the experiment could be assumed to be well-known and recognized.

Two fundamental approaches for sampling that are commonly used are probability sampling and non-probability sampling (Saunders et al., 2016). Probability samples are based on statistical information and the likeliness for each individual within the sample frame to be picked is known and usually equal, while this probability is not known in non-probability samples (Saunders et al., 2016). In this research, the choice of using a non-probability sampling technique was determined to be most appropriate due to resources available and since participation in the experiment was voluntary. The non-probability sampling approach has a major drawback since it cannot be used to draw conclusions based on statistics about the complete population characteristics (Saunders et al., 2016). However, several generalizations suggesting the relationship between brand disclosures and native ad recognition ability among consumers could still be drawn despite it cannot represent the entire population on statistical grounds. The results can instead generate useful indications and act as a basis for future research where extended resources could be provided.

### **5.3 Sampling Selection**

From the sample frame consisting of Swedish students at Jönköping University, the recruitment of participants for the experiment was conducted via self-selection sampling. Self-selection sampling is one form of volunteer sampling where every individual within the target population is allowed to determine and act upon their desire to participate in the research (Saunders et al., 2016). Free choice of participation has, as mentioned in section 5.2 *Sampling Frame*, several drawbacks when it comes to statistical inferences and representation of the entire population. However, since experiments provide more reliable results when test groups are homogenous (Söderlund, 2018), self-selection sampling can be advantageous from one perspective since it provides a state where participants have an interest in the study in common. Further, the voluntary approach can

also imply a condition where participants' performance is increased compared to if individuals would have felt strained to take part (Söderlund, 2018) which should be emphasized in this research where participant focus is vital to deliver reliable data from the eye-tracking equipment.

The researchers created awareness of the research by posting the prerequisites for the experiment at relevant platforms and locations, and interested individuals were asked to perform an electronic sign-up. According to Söderlund (2018), a rule of thumb for experiments requires a minimum of 30 participants to enable a reliable analysis of the results. The equipment required to execute the experiment was provided and available for use during a limited time which implicated another factor to be taken into consideration when determining the sample size. Additionally, restrictions due to Covid-19 decreased the availability to voluntary individuals which brought that the researchers decided the feasible sample size to be set at 60 participants.

## **5.4 Pilot Study**

To make sure the data collected would enable the research question to be answered, a pilot study was conducted. The pilot study was used to, in an early stage, detect problems associated with the treatments involved in the experiment which enabled the researchers to facilitate the feasibility of the test. Additionally, the pilot study was used to provide face validity, which is an assessment of whether the questionnaire makes sense (Saunders et al., 2016). Moreover, to perform a pilot study also provided a time estimation of the test duration to the researchers. According to Bell and Waters (2018), a pilot study should involve participants from the same or similar sample as used in the main study to generate the best result. Therefore, the researchers decided to perform the study with a student at Jönköping University that represented the sample. Because of a limited number of participants due to Covid-19, the researchers decided to perform the pilot study just once but in a more extensive manner.

After the pilot study, the test person was asked questions about the experience of the experiment as well as the survey. Regarding the process of the eye-tracking experiment, two adjustments were made. First, the participant felt not informed enough about how accurately or for how long to browse the website. Therefore, instructions were revised to

include that participants should scan the website due to their own preference imagining the news site was one that the participant was interested in. Secondly, the participant raised concerns about feeling distracted by the researchers following the implementation of the experiment at an external computer behind the participant since it caused a feeling of being observed. Accordingly, the researchers moved the placement of the external computer further away from the participants' screen.

Regarding the questionnaire, some of the questions were ambiguous to the test person which was assumed to depend on lack of knowledge within the area of marketing. Therefore, the questions referred to were rewritten to be understandable to the participants regardless of knowledge within the field.

## **5.5 Eye-tracking Experiment**

The test was created in the Tobii Pro Lab software and conducted as a screen project. The screen project more precisely involved the use of a computer monitor to present the stimuli while the data collection was gathered via a screen-based eye tracker. Since native advertisements are widely used in news reporting, the stimuli were outlined as an online newspaper site. Thus, the native advertisements to be tested were presented as articles embedded in the news site among editorial content to provide a natural environment as it appears in reality. Consumers are not very likely to be exposed to only one advertisement or article at the time when browsing online. The website called *Jönköping News* was constructed by the researchers and included three different native ads including well-known brands that tested our hypotheses separately. Except for the stimulus that was about to be tested, all content was identical to assure the treatments were the only thing that differentiated the test group and control group. Both test outlines can be found in Appendix B.

Data that were collected included visualized heat maps of the stimuli. Since not all content on the site was relevant to be analyzed in detail, the analysis of the native advertisements was facilitated by areas of interest (henceforth, AOIs). These areas were labeled in order to provide more detailed data of these regions identified as complete units. Data collected within the AOIs include the number of eye fixations each participant made as well as the

duration of fixations in total and average. Also, measurements of the total time of the visit were collected. The stimuli outline with highlighted AOIs can be viewed in Appendix E.

The experiment was executed in a seminar room at Jönköping University. The intention was to perform the test in a neutral environment to minimize any external influences that could affect participants' attention and reactions. Additionally, the research required several technical facilities which could also be provided at the university. Further, to prevent the experiment from resulting in undesirable outcomes, each participant was part of one treatment group only. The within-subject approach where each individual receives all treatments increases the risk that reactions might be transferred over from one treatment to another as well as hypothesis guessing becomes more likely (Söderlund, 2018). Henceforth, a within-subject approach was not adopted.

Accordingly, the experiment was designed as a between-subject experiment and consisted of two groups, one test group, and one control group. However, even though the population was controlled, the division of the two test groups was not. Both tests were added to the Timeline function as a group where individual treatments were randomly selected by the software, which provided the state of random allocation of participants. Participants were randomly allocated by the Tobii Pro Lab Software to one treatment group each without any predetermined order or influence by the researchers. Random allocation is a precondition for the interpretation and performance of a valid statistical analysis of the test outcome and it increases the comparability between groups (Söderlund, 2018).

Since the sample frame was set to students at the university, one could argue that the environment was familiar to all, and participants could, therefore, be assumed to feel comfortable at the location. Participation was voluntary due to the self-selection sampling and interested individuals that had identified their desire to take part in the experiment were assigned to a time slot by the researchers. Each session was estimated to last approximately 30-minutes based on the pilot study implementation. The test started with participants signing a consent describing how the researchers aimed to use, analyze, and protect test data. An outline of the consent is available in Appendix F. A brief description of the equipment they were about to use, and its function was also provided since

researchers assumed most participants had limited knowledge or experience of eye-tracking tests and perhaps wanted to raise potential concerns. This step was essential for the researchers due to ethical as well as reliability reasons for the test result. The researchers emphasized the importance of participants feeling comfortable and in a secure environment since participants with negative emotions could affect the test result by for instance stress through the experiment to leave sooner. As soon as the consent of processing and collecting data was signed on the participant initiative, participants received their test identification number used to provide anonymity and the experimental process could start.

To assure participants received identical instructions regarding the test execution, the researcher in charge of the tests followed a predetermined script. All participants were further obliged to accomplish a calibration to assure equipment was working and that participants' eye-movements were able to track. Additionally, the distance from the screen and face position was adjusted to correct levels. Not until the software approved the calibration result, the real test could start. Participants were then asked to follow the instructions provided individually. To avoid attrition, the state where participants start a test without fulfilling it due to boredom or other circumstances (Söderlund, 2018), the researchers were present during the complete test in detached roles. The test implementation was followed via an external computer screen placed at a suitable distance to avoid participants feeling distracted or stressed by the researchers' presence.

## **5.6 Survey**

Questionnaires are a common method to collect data in survey strategies since each participant can receive the same questions in a predetermined order. It is of great significance to conduct questionnaires where the questions are formulated to generate useful answers since it will affect the reliability and validity of collected data (Saunders et al., 2016). When the eye-tracking experiment was completed, each participant was directly given a self-completed questionnaire. As in the experiment, all answers in the questionnaires were anonymous but participants used their identification number so that the answers could be matched with the eye-tracking data.

The purpose of the questionnaire was to receive more precise data regarding the effect on ad recognition ability the brand disclosures had in each of the three native articles included in the test. The questionnaire included mainly closed-ended questions, but a few open-ended questions were asked to receive a more complete picture of participants' experience of the native articles reviewed just before. To collect opinions in order to understand whether participants agreed or disagreed with the statements given in the survey, a five-point Likert scale was used. Frequent use of the five-point Likert scale provided clear reflections of respondents' point of view. However, these types of responses do not provide any explanations or underlying reasons to the participants' choices of certain degrees on the scale which should be emphasized. Since the purpose of the questionnaire was to complement the data collected by the eye-tracker equipment, the implementation of the five-point Likert scale was suitable for the analysis. The survey questions can be viewed in Appendix G.

## **5.7 Data Analysis**

In order to undertake quantitative data analysis, the type of data had to be considered to guide the selection of useful statistical techniques. This research compares groups in which the techniques used are based on underlying theory as well as statistical principles (Pallant, 2013). Statistical techniques can be divided into either parametric or non-parametric statistics. The most significant difference regarding the two techniques refers to the distribution of the results. Parametric statistics often draw conclusions about an entire population, which further leads to normally distributed assumptions, meaning that the greatest frequency of the scores can be found in the middle whereas the more extreme results represent smaller frequencies. Non-parametric statistics, however, do not draw conclusions based on the underlying population distribution (Pallant, 2013).

This research falls under a non-parametric study. Using a non-parametric technique has a drawback since the parametric technique can be considered as more powerful and stringent. However, a non-parametric technique is optimal to use when having ordinal and ranked scales which is the case within the survey conducted in this research where a five-point Likert scale was included. Moreover, a non-parametric technique is favorable when small sample sizes are used which applies to this research where a sample size of 30 participants in the test group as well as in the control group was used (Pallant, 2013).

### 5.7.1 Coding

Data from the experiment were exported to Microsoft Excel from the Tobii Pro Lab software. However, the results of the survey were analyzed through SPSS Statistics. Before the information was implemented into the SPSS software, a codebook was prepared. The codebook guides how the information obtained from the experiment and survey was converted into SPSS Statistics in a format which the program could understand. Two crucial steps had to be considered, how to define and label each of the variables as well as how to assign numbers to the possible responses (Pallant, 2013). Therefore, all questions were shortened to fulfill the requirements and be understandable by SPSS Statistics. Since a five-point Likert scale was used for the responses in the survey, the alternatives which varied from *Strongly Disagree* to *Strongly Agree* were transferred into a scale of 1-5. Some of the questions within the survey required the participant to list characteristics that made them recognize promotional content on the website. To transfer this information to SPSS Statistics, the responses were scanned for themes and divided into six recurrent themes which could be transferred into numbers. The same procedure was used in question number 3 regarding the major of study. Lastly, the alternative responses of *Yes*, *No*, or *Don't know* were transferred into *Yes=1*, *No=2*, and *Don't know=3*. The complete codebook can be found in Appendix H.

To avoid data errors, several methods were applied to detect potential deviations. The data were screened for illegitimate codes. A coding scheme is only allocated certain numbers which means that numbers aside from these represent errors. Most common errors emerge in letters instead of numbers, such as O instead of zero, or the letter l instead of the number 1. Further, when looking for errors, the primary reason was to find values outside the range of possible values for each variable, since these risks distorting the analysis.

### 5.7.2 Mann-Whitney U Test

The non-parametric statistics to test potential differences between the groups are represented by the Mann-Whitney U test. The assumptions for using this test indicates that the research must contain random samples as well as independent observations. Additionally, a Mann-Whitney U test is mainly used in research using small samples as well as ordinal data (Pallant, 2013) which aligns with the procedure of this research.

The test is mainly used to compare the medians between groups to present potential differences. Additionally, where a significant difference is discovered, the Mean rank values are used to provide a more accurate result of the difference among the groups. Moreover, the test provides a probability value, from which it can be determined whether the hypothesis provided should be rejected or not (Pallant, 2013). In contrast to the hypotheses provided, the null hypothesis, which states that there is no significant difference between the groups, is rejected if the probability value is less than the chosen significance level which in this research was set to 0.05. The significance level represents the probability of rejecting the null hypothesis when it is actually true (Söderlund, 2018). In this research, the risk of rejecting the null hypothesis stating that a difference exists when there is no actual difference is 5%.

The Mann-Whitney U test further presents a Mann-Whitney U value, (U), and a Standardized Test Statistic, (z). The value of U refers to the degree of overlap in ranks between the experimental groups and explains how close the medians provided are to each other. The U value range from 0 to  $n_1 * n_2$  where n refers to the number of participants in each experimental group (Hauben, 2018). This research has  $n=30$  and thus, the highest value U can take is 900. A value of 0 would indicate a complete separation between the two groups and hence no overlaps are made. Additionally, a low U value supports the hypotheses provided whereas a value nearly the maximum U rather supports the null hypothesis (Hauben, 2018).

### ***5.7.3 Chi-Square Test***

In addition to the Mann-Whitney U test, a Chi-Square test was conducted to explore relationships between two categorical variables that have two or more categories each (Pallant, 2013). In this research, the Chi-Square test was applied to explore hypothesis four, (H4), in order to provide an overview of the ad recognition ability of the test groups among all of the three treatments. The test was applied to the categorical values of Brand Prominence and Ad Recognition. The variable of Brand Prominence was further divided into High and Low and Ad Recognition was measured on a five-point Likert scale. The test is based on a crosstabulation table which compares the observed frequencies as well as proportions of cases that might occur between the two variables being measured (Pallant, 2013).

The crosstabulation table presents the number of participants who responded to each alternative on the five-point Likert Scale used to measure Ad Recognition. Moreover, the table presents in what percentage the responses of the participants are distributed to the alternative answers varying from *Strongly Disagree* to *Strongly Agree*. The number of responses to each alternative as well as the percentage is presented both for the test group as well as the control group.

The most significant value of the Chi-Square test to consider is the Asymptotic Significance value which indicates whether the null hypothesis should be rejected or not. The Asymptotic Significance value works as a probability value, meaning that if it shows a value of less than 0.05, which is the chosen significance level within this research, the null hypothesis should be rejected.

#### **5.7.4 Type I and Type II Errors**

The purpose of the statistical techniques used in this research is to test hypotheses. However, there is always a risk of reaching an incorrect conclusion. Two types of errors that might occur can be categorized into Type I and Type II errors. Type I errors refers to occasions when the null hypothesis is rejected when it is actually true and should not be rejected (Pallant, 2013). To minimize the risk of Type I errors, the significance level was carefully considered to make sure the value chosen was appropriate within the experiment and therefore helped to avoid unnecessary errors. By contrast, Type II errors occur when the null hypothesis is not rejected in situations where it is actually false and it should have been (Pallant, 2013).

In experimental studies, the recommended significance level presented by Fisher (1926), is a value of 0.05 and it indicates how much confidence the research has in the results achieved. However, when determining the significance level, the sample size needs to be considered to avoid that a significant or non-significant result occurs due to insufficient power and further cause Type I or Type II errors. Stevens (1996) suggest a significance level of 0.10 or 0.15 in research with a sample of fewer than 100 participants. However, this research adopted the recommendation by Fisher (1926) to assure the significance level was applicable to experimental design.

To further minimize the risk of Type I and Type II errors, the researchers carefully considered sample size and effect size. The sample size in this research was supported by Söderlund (2018) who states that 60 participants are sufficient in experimental designs to conduct a reliable analysis. The effect size ( $r$ ), was calculated by dividing  $z$  by the square root of  $n$ , following recommendations associated with the Mann-Whitney U test. The effect size is essential to evaluate the strength of the findings since it measures the magnitude of differences, in this case, the magnitude of the means (Pallant, 2013). According to Cohen (1988), the value of 0.1 is considered a small effect, 0.3 is considered a medium effect, and 0.5 is considered as having a large effect. Therefore, the researchers aimed to reach an effect size above 0.3 to assess the importance of the findings.

## **5.8 Quality of Research**

In order to conduct high-quality research, objectivity is an essential factor from the perspective of findings and ethical considerations. Objectivity refers to the truthfulness of the researchers and involves that deception, dishonesty, partiality, and misrepresentation are all avoided (Saunders et al., 2016).

Likewise, validity and reliability are two central aspects to consider when evaluating the quality of quantitative research. Reliability refers to replication and consistency within the research and this is usually higher in positivism studies compared to pure interpretivism studies (Collis & Hussey, 2014). Validity refers to the suitability of the measures used, the exactness of the result, analysis, and the generalizability of research findings (Saunders et al., 2016).

### **5.8.1 Objectivity**

To assure the quality of research, it is essential that the research process and reporting remain unbiased. Thus, research must be objective. Objectivity in research is achieved when there is an absence of bias and subjective selection during the research process. This is highly essential for positivist research to be reliable (Saunders et al., 2016).

By critically reviewing previous literature, researchers viewed the research scope from multiple perspectives to receive a thorough understanding of the problem and research topic. Literature that was obviously angled by the authors' perspective was excluded to

avoid this research being based on individuals' opinions rather than objective research findings. Additionally, objective collection and representation of data is a prerequisite for quantitative research to be valid. If objectivity is not maintained, data is likely to be misrepresented and unreliable (Saunders et al., 2016). In this research process, the researchers remained detached from the collection of data during the eye-tracking experiment and survey. Participants followed identical given instructions and the eye-tracking equipment recorded and stored the data without influence from the researchers. By being detached from the participants, the likeliness that the researchers influenced the test result was very low which increased the objectivity of collected data.

The analysis of data was done via structured methods using SPSS Statistics, where researchers had low influence on the result since the software calculated relevant statistics with the data collected from the experiment. Further, reporting was honest and transparently presented. There was no active selection from the researchers on which data that was suitable to present or exclude, and the exactness of statistical data was not manipulated or misrepresented. It is a major ethical factor that researchers remain objective to present truthful and valid conclusions which is emphasized through this complete research process.

### ***5.8.2 Internal Validity***

Internal validity refers to reactions within the research. It measures the extent to which the independent variable in the form of experimental treatments explains reactions of the participants in the dependent variable which refers to the ad recognition ability. If the independent variables cause systematic changes in the dependent variable, researchers can assure that the test involves high internal validity (Anderson & Bushman, 1997). There are several options on how to control internal validity. According to Campbell (1969), significance tests can be used to provide answers concerning the risk that the researcher might reject the null hypothesis when it is actually true or accept the null hypothesis when it is false. However, the internal validity is further affected by other factors unrelated to statistical inference.

One crucial factor that can be a threat to internal validity is history. History in this context refers to events that might arise in-between a pre-measurement and a post-measurement which risk affecting participants' reactions (Söderlund, 2018). To avoid this from

occurring, the researchers only allowed one participant in the room at a time to make sure the participant could not be interrupted when performing the experiment. Moreover, the researchers made sure the participants were allocated the survey directly after the eye-tracking experiment was accomplished, to avoid them being exposed to other occurrences that might cause reactions or decrease the attention for the research. To allocate the survey directly after the eye-tracking experiment was accomplished, further decreased the risk of instrument changes which is another threat to internal validity. It refers to risks involved with the switch between different measurement methods (Söderlund, 2018), which in this research occurred when going from eye tracking-experiment to survey.

To avoid biases caused by hypothesis guessing, participants were asked after the eye-tracking session to provide their perception of the experiment's purpose. It is a common phenomenon that individuals search to be "perfect participants" if they are aware of the goal of the test, which might influence their behavior and reactions (Söderlund, 2018). Ethical perspectives in the prevention of hypothesis guessing must be emphasized since it often involves deceiving or lying to participants. Accordingly, no information about the experiment's purpose was given to participants prior to the test in order to not provide false information. Instead, responses where participants guessed the correct purpose were intended to be excluded from the analysis. However, no participant presented a correct perception of the experiment purpose which thus derived in that no test was necessary to exclude from the analysis.

Another factor that might threaten internal validity is selection effects, meaning that reactions might differ due to the fact that the test group and control group consisted of participants being different already from the start (Söderlund, 2018). To minimize this risk, the random allocation was used to assign each participant into one of the two test groups since the randomization neutralizes potential differences that might be present within the sample. The random allocation was provided by the Tobii Pro Lab Software at the start of the eye-tracking experiments. Additional common threats to internal validity such as maturity or testing, refers to things that might happen over time between two tests or the fact that the results of the measurement might change from one time to another was eliminated since the test in this research was carried out at one time only (Söderlund, 2018).

### **5.8.3 External Validity**

The concept of external validity measures to what extent the research can be generalized (Saunders et al., 2016). A prerequisite for external validity is that the research must first assure internal validity. Threats to external validity might occur if the participants are being exposed to more than one treatment (Söderlund, 2018). This is partly the case in this research, but to minimize consequences on the results, the treatments were separately presented in the experiment to assure they did not cause any effect on each other. Thus, results could easily be separated between the different treatments in terms of what caused specific reactions. Additionally, the variables involved in the treatments were presented in various forms which diminished the risk of participants noticing a treatment due to recurrence.

As in the concept of internal validity, the selection of participants might be a threat if they are not a representative group to the test (Söderlund, 2018). Therefore, the test was carried out by a sample including only students at Jönköping University to assure they were a tolerably homogenous test group. Several participants had increased knowledge in marketing due to educational experiences which could affect their understanding of the test. Hence, the hypothesis testing was essential to allow the researchers to avoid drawing conclusions of results based on participants' already existing experience.

To achieve external validity, it is further of importance to be aware of attrition biases, also referred to as missing data (Söderlund, 2018). When conducting research with human beings involved, it cannot be pre-determined that each one will complete the data. To prevent the occurrence of attrition, the creation of the experiment was carefully evaluated. The researchers decreased the risk of the participants dropping out due to boredom by presenting a website of short length as well as a questionnaire involving only relevant questions to the eye-tracking test.

### **5.8.4 Reliability**

If replication of the research design can be performed and provide the same result with an absence of differences, the research can arguably be viewed as reliable. In research, reliability refers to the ability to maintain consistency and enable research replication (Saunders et al., 2016). In positivist studies, the importance of reliability is vital since a

lack of quality in the research design generally results in invalid outcomes. For the results to be reliable, the construction of the entire study must be as well (Collis & Hussey, 2014). A fundamental first step to provide reliability is to keep transparency in the methods and techniques used in the research (Saunders et al., 2016). Hence, the researchers' aimed to provide a transparent description of the process and underlying reasoning about choices made throughout this research.

This research was conducted by two researchers, which increased reliability since not only one perspective was taken into consideration, and biases from individual perspectives could be avoided by implementing a consistent structure of work. Consistency was achieved by ongoing evaluation of how to collect, interpret, and analyze data throughout the process. By achieving a state to which researchers could agree upon data and perform the research without differences, consistency was developed in each stage of the research which increased the reliability. Furthermore, memos on how to collect, interpret, and analyze data are helpful tactics to assure consistency (Saunders et al., 2016) which were continuously developed throughout the research process.

In the collection of data, reliability was assured since all participants in the experiment received identical instructions on the test and the survey. Researchers followed a pre-written transcript that was presented by the responsible researcher prior to every test start. To assure reliability for the survey, Cronbach's Alpha coefficient was applied to evaluate the questions on the five-point Likert scale. This is a common measurement used to control the internal reliability and consistency of scale items to assure the questions are correlated. The test provides an alpha coefficient with a value between 0 and 1. Values above 0.7 are usually perceived as reliable and indicate that the relation between the set of items in a scale used in surveys is on an appropriate level (Saunders et al., 2016; Pallant, 2013). The results for the questionnaires resulted in alphas of 0.79 both for the test group and control group and are available in Appendix C. This provided strong indications that the questionnaires used had internal consistency, that the scale is unidimensional and that the questions asked were measuring the same mutual factor.

## **5.9 Ethical Considerations**

Research ethics refers to the manner research is performed and how findings are presented (Collis & Hussey, 2014). In this research, guidelines presented by Bell and Bryman (2007) was followed to assure the research was ethically conducted. First, it was assured that there were no potential harm participants risked by being part of the research. The eye-tracking equipment does not risk causing injuries on the sight which was emphasized. Further, psychological well-being was highly essential as well, and the researchers aimed to treat every participant and each other with great respect, assure privacy, and provide a comfortable environment.

Additionally, before the experiment could start, all participants received information about the equipment they were about to use as well as they were handed a consent of how data would be stored and analyzed. The consent assured anonymity and the participation was completely voluntary which is essential for being ethical in research (Collis & Hussey, 2014; Bell & Bryman, 2007).

Collected data and findings were reported transparent and honestly and researchers did not have any intentions to deceive or hide information from parties interested or involved in the research. The last guideline proposed by Bell and Bryman (2007) is referred to as reciprocity which means that the research should be of benefit for both researchers and participants. The experiment gave participants the possibility to increase their awareness of the nature of native advertisements in news articles and the difficulties to sometimes identify sponsored content. Further, the research and its findings provide consumers with insights and deeper knowledge of native advertising.

## 6. Empirical Analysis of Findings

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*The following section will present the data collected for this research. Results from the eye-tracking experiment as well as the questionnaires will be summarized and presented. Results are presented and analyzed individually with relation to each of the chapters in the theoretical framework that derived in the hypotheses suggested by the researchers.*

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### 6.1 Brand Logo Presence in Native Ads Effect on Ad Recognition

Hypothesis one, (H1), predicts a positive relationship between brand logo presence and native ad recognition. The outline of the experiment conducted to test H1 for the test group as well as the control group can be found in Appendix D1. The positive relationship between the variables was supported by the Mann-Whitney U test which revealed a significant difference in the ad recognition ability levels of the test group (Md = 4, n = 30) and the control group (Md = 2, n = 30),  $U = 173$ ,  $z = -4.210$ ,  $p = 0.000$ ,  $r = 0.54$ . The median of each group shows a distinct difference with 2 in the control group compared to 4 in the test group. Furthermore, since the highest possible value of U is 900, the result of 173 is considerably low and the effect size of 0.54 is considered as strong. The result of p represents the probability value and is referred to as Asymptotic Sig. in Table 1. The probability value of 0.000 is lower than the adopted significance level of 0.05 which indicates that H1 should not be rejected.

Table 1

*Mann-Whitney U Test Summary (Logotype)*

<b>Independent-Samples Mann-Whitney U Test Summary</b>	
Total N	60.000
Mann-Whitney U	173.000
Wilcoxon W	638.000
Test Statistic	173.000
Standard Error	65.793
Standardized Test Statistic	-4.210
Asymptotic Sig. (2-sided test)	0.000

Figure 2 illustrates which of the experimental groups that has the highest ad recognition overall. The test group (HIGH) had a higher mean rank of 39.73 compared to the control group (LOW) presenting a value of 21.27. The diagram clearly illustrates the differences between the group regarding the highest and lowest value of the five-point Likert Scale.

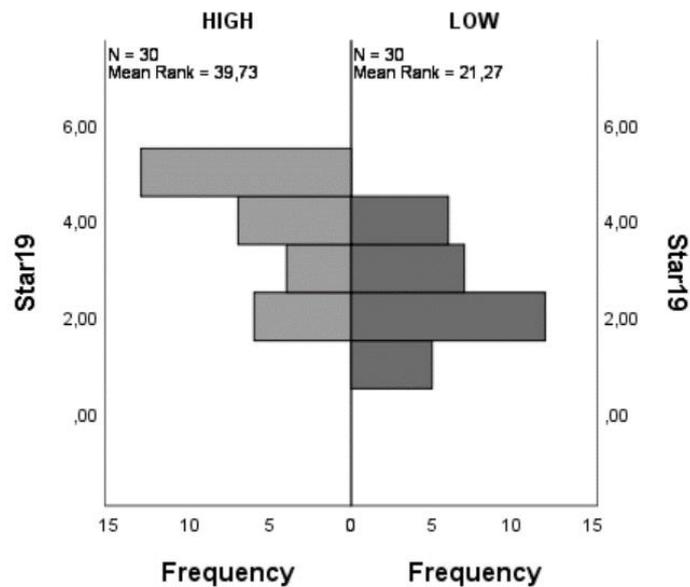


Figure 2. Mann-Whitney U Test (Logotype)

H1 was further supported by the results of the survey. The results showed a significantly higher mean value generally in the provided answers by the test group where treatments were high in prominence compared to the results of the control group where no treatments were given. The mean values of the test group ranged from a maximum of 4.23 to a minimum of 1.86, whereas the control group correspondingly ranged from a maximum of 2.53 to a minimum of 1.36.

The results of the question “*The article was promotional content?*” provided a comprehensive result whether the brand logo of Starbucks led to increased ad recognition. In the test where the treatment was provided, 20 out of 30 participants responded with 4 or 5 points on the five-point Likert scale, meaning that they *Agree* or *Strongly Agree* to the statement. The result was significantly high compared to the results of the control group where only 6 out of 30 participants responded that they did *Agree* or *Strongly Agree* that the article was promotional content. The difference is further viewable in Table 2, which show that the mean value on the question was 3.90 among the test group while

only 2.47 for the control group. The responses align with the results to the question “*The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?*” where the test group showed a mean value of 3.47 compared to the mean value of 1.6 in the control group. These results support the theory of Wojdyski & Evans (2016) who argue that disclosures with high visual prominence are easier recognized by the reader which is discussed in section 3.1. *Native Ad Recognition and Visual Appeals*

Table 2

*Mann-Whitney U test- Mean and Median value (Logotype)*

<b>Brand Disclosure</b>	<b>N</b>	<b>Median</b>	<b>Mean</b>
HIGH	30	4	3.9000
LOW	30	2	2.4667
Total	60	3	3.1833

Moreover, the results of the survey indicate that brand logo presence leads to increased ad recognition since the responses from the test group declared that it was clear that content was branded as well as a product or service promoted while it was not as obvious for the control group. The questions “*The communication was clearly branded?*” and “*The communication clearly conveyed that a product or service was being promoted?*” provided mean values of 3.30 and 3.53 in the test group compared to 1.97 and 1.67 in the control group. The question of whether a product or service was being promoted resulted in the largest range of responses within the survey. The test group provided the low result of only five participants who answered with a 1 or 2 on the five-point Likert scale while the majority responded with a 4 or 5 meaning they *Agree* or *Strongly Agree* they recognized the product or service being promoted. Contrary, 26 out of 30 participants in the control group responded with a 1 or 2 on the five-point Likert scale meaning that they *Disagree* or *Strongly Disagree* with the same question. These results indicate that the test group showed an increased understanding of the intent of the article.

The statement *“I could determine whether the content was promotional or not without reading the entire article”* resulted in a mean value of 3.83 in the test group versus 2.00 in the control group. It can, therefore, be argued that the visual stimuli of the disclosure helped the receiver to identify the article as promotional and further decreased the likeliness of being deceived which is, as discussed, an essential problem within native advertising. Furthermore, it was clear that the test group to a greater extent recognized the company name than the control group. The question *“The communication did feature a company name?”* showed a result of 3.33 in the test group and 1.60 in the control group which might be a reason to the test group recognizing the article as promotional without reading the entire article. This might also be the reason why the control group showed a higher mean value of 2.00 regarding the question *“The article was editorial content?”* compared to the test group’s value of 1.86.

To assure that the survey results were trustworthy and not affected by biases, the results were compared to the real-time reactions measured in the eye tracking-experiment. The average *“Total duration of fixation in AOI”* was evaluated which represents the average time in seconds participants paid attention to the area of interest, (AOI), that involved the Starbucks logo. An overview of the AOIs is available in Appendix E. The result showed that the test group was fixated to the logo for an average of 7.82 seconds compared to 3.38 seconds in the control group. The results were further supported by looking at the heatmaps, presented in Appendix I, which illustrates that the control group seemed to pay more attention to the text in the article. This aligns with the previously discussed result of the question if the participants could determine it was promotional content without reading the entire text.

The results align with the theory of Liu and Zhang (2013) who presented that brand logos attract attention. When evaluating the eye tracking-experiment, it must be acknowledged that even though the results indicate that the brand logo did draw attention, conclusions about whether the participants perceived the logo as an ad disclosure cannot be drawn. Henceforth, researchers cannot determine if exclusively the logo affected the native ad recognition ability or if other factors influenced their ability as well. Nevertheless, results support that a present brand logo enhances native ad recognition.

## 6.2 Brand Disclosure in Headings Effect on Native Ad Recognition

According to previous literature, the reading pattern of webpage users is somewhat resembling the shape of the letter F (Nielsen, 2006) which made the researchers implement hypothesis two, (H2), stating that brand disclosure in the heading of native advertising articles increases native ad recognition. The outline of the articles conducted for the experiment can be viewed in Appendix D2.

The result of the Mann-Whitney U test showed a probability value of 0.000. Since the value is less than the applied significance level of 0.05, the result could be interpreted as significant. Accordingly, H2 was not rejected. Results of the Mann-Whitney U test, presented in Table 3, further supports that there was a significant difference in the level of native ad recognition ability between the test group (Md = 4.5, n = 30) and the control group (Md = 2, n = 30), U = 126, z = -4.915, r = 0.63. The U value is considered as low and the effect size is large, thus the result supports the decision not to reject H2.

Table 3

*Mann Whitney U Test Summary (Disclosure in Heading)*

<b>Independent-Samples Mann-Whitney U Test Summary</b>	
Total N	60.000
Mann-Whitney U	126.000
Wilcoxon W	591.000
Test Statistic	126.000
Standard Error	65.927
Standardized Test Statistic	-4.915
Asymptotic Sig. (2-sided test)	0.000

The test group (HIGH) represents a higher mean rank value of 41.30 compared to 19.70 in the control group (LOW) which indicates that the test group presents higher ad recognition ability overall. Figure 3 further provides a comparison of frequency in each value of the five-point Likert Scale. The results of the test group (HIGH), had zero respondents on the lowest value of 1 which declares no participant did *Strongly Disagree* that the content was promotional. Besides, a majority, specifically 24 participants, in the

test group provided an answer above 3, the neutral number on the scale. The control group provided mainly answers below 3. This implies that the test group had easier to recognize the intent of the article.

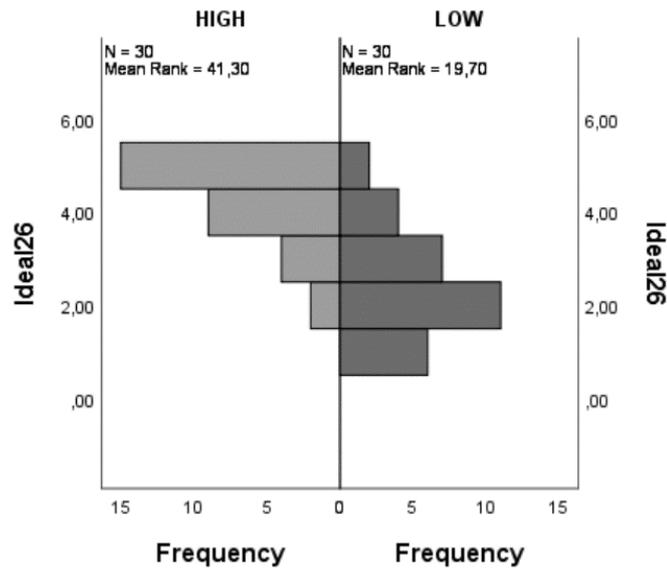


Figure 3. Mann-Whitney U Test (Disclosure in Heading)

Further, H2 was supported by the results of the survey where the test group had a mean value of 4.23 compared to 2.50 in the control group regarding the question “*The article was promotional content?*” which is presented in Table 4. Moreover, the median to this question showed a result of 4.5 in the test group which clearly indicates that the majority of the participants were not deceived or misled by the advertisement. The contrary question, whether “*The article was editorial content?*” further supported the result in the test group since a mean value to the question resulted in a value of 2.07, meaning the participants on average disagreed with the statement. In the control group, on the other hand, the mean value to the two questions presented resulted in a value of 2.60, which indicates that the participants of the control group had difficulties in determining whether the article was promotional or editorial. The result to the question if the article was perceived as promotional content was further supported by the mean values to the question “*The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?*” since the test group showed a mean value of 3.20 compared to 1.43 in the control group.

Table 4

*Mann-Whitney U Test – Mean and Median value (Disclosure in Heading)*

<b>Brand Disclosure</b>	<b>N</b>	<b>Median</b>	<b>Mean</b>
HIGH	30	4.5	4.2333
LOW	30	2	2.5000
Total	60	3.5	3.3667

Moreover, H2 is supported by the survey responses since it was shown that the test group perceived it clear that the communication was branded, and a product or service being promoted. The questions *“The communication was clearly branded?”* and *“The communication clearly conveyed that a product or service was being promoted?”* provided mean values of 3.90 and 4.07 in the test group compared to 1.53 and 1.86 in the control group. Additionally, the question *“The communication did feature a company name?”* presented a mean value of 4.13 in the test group which is a significantly high result compared to 1.67 in the control group. The results support the F-shape pattern theory which suggests that significant attention will be drawn to the heading since the readers first scan the article in a horizontal movement at top of the page (Nielsen, 2006).

To analyze whether the null hypothesis could be rejected and decrease the risk of Type I errors, the data from the eye tracking-experiment were evaluated. It was found that the heading received significantly more attention when the brand name was included. The test group allocated 3.65 seconds on average viewing the heading compared to an average of 1.29 seconds within the control group where the brand name was not presented in the heading but only in the text. The heat maps support the results presented since they indicate that the heading did receive attention in the test group whereas the control group focused more on the body text of the article. Heat maps for both experimental groups can be viewed in Appendix I. This result further aligns with the responses to the statement *“I could determine whether the content was promotional or not without reading the entire article”* where the test group provided a mean value of 3.96 compared to the result of 1.73 in the control group.

The results of the survey, as well as the eye-tracking experiment, supports the theory presented in section 3.2. *Brand Prominence and Position Effect* where it is stated that both prominence and position of disclosures must be acknowledged to determine disclosure efficiency.

### 6.3 Brand Voice Effect on Native Ad Recognition

The third hypothesis, (H3), tested if brand presence in the form of language and use of brand voice affects the native ad recognition. The outline for the articles for the test group respectively the control group can be viewed in Appendix D3. The Mann-Whitney U test resulted in a probability value of 0.001. Since this value was less than the significance level of 0.05, the result could be interpreted as significant. Accordingly, this implied that there was a significant difference in the ad recognition ability between the test group (Md = 4, n = 30) and control group (Md = 2, n = 30), U = 219.5, z = -3.507, p= 0.001, r = 0.64 that was not likely to be due to chance. The hypothesis is strengthened with a considerably low U value of 219.5 as well as a high effect size. Thus, the result from the Mann-Whitney U test, presented in Table 5, indicates that H3 should not be rejected.

Table 5

*Mann Whitney U Test Summary (Brand Voice)*

<b>Independent-Samples Mann-Whitney U Test Summary</b>	
Total N	60.000
Mann-Whitney U	219.500
Wilcoxon W	684.500
Test Statistic	219.500
Standard Error	65.733
Standardized Test Statistic	-3.507
Asymptotic Sig. (2-sided test)	0.000

The mean rank value was higher presented in the test group (HIGH) with a value of 38.18 compared to 22.82 in the control group (LOW). The diagram in Figure 4 illustrates the frequency of each value on the five-point Likert scale among the two groups. The results show that the values are significantly lower among the control group, and 16 values are

below 3 which is the neutral state. This indicates that more than half of the participants found it unclear whether the article was an advertisement or not. Contrariwise, none of the participants within the test group responded with the lowest value and 15 out of the 30 participants responded with a value of 4 or 5 which represents the higher values on the five-point Likert scale. These numbers support H3 further due to the test group's significantly higher ability to identify the promotional nature of the article.

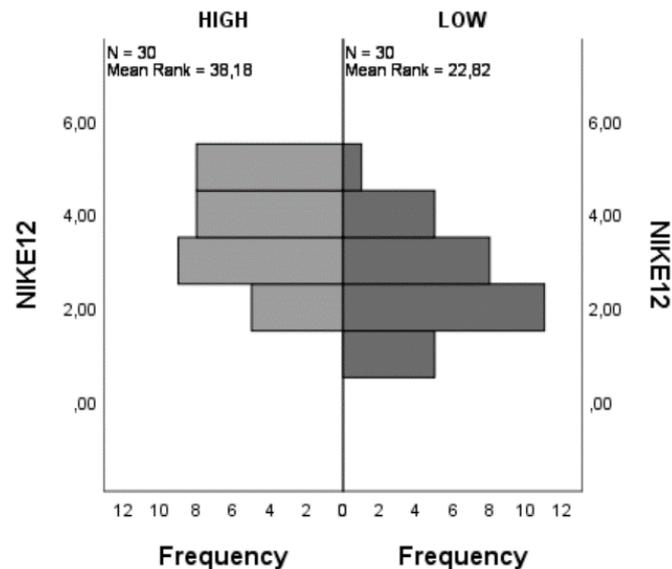


Figure 4. - Mann-Whitney U Test (Brand Voice)

The result showed that the ability to recognize the article as advertising content tended to differ significantly between the test group and the control group which further supports H3. On the question “*The article was promotional content?*” participants that were shown the web site with high brand prominence and use of brand voice had a mean value of 3.63 on a five-point Likert scale while the low brand prominence in the control group’s responses had a mean value of 2.53. This difference could perhaps be even more clear by viewing Table 6 and comparing the medians of both groups. The test group’s median response value was 4 compared to 2 in the control group. Hence, the use of brand voice and well-known taglines can be assumed to affect consumers’ perception of whether the content is promotional or not. This result is somewhat in line with what An et al. (2019) suggested regarding the use of different types of language in advertising. It is proposed that language that distinguishes from the original content is more likely to be recognized as promotional content. Since the use of brand voice usually gives another type of

language more emphasized on brand attributes and characteristics, there is more likely that it also stands out from other content on a web page which might be one explanation of the results in this experiment. However, the mean values regarding the question “*The article was editorial content?*” had low differences among the groups. The test group had a mean value of 2.73 while the mean value of the control group was 2.13.

Table 6

*Mann Whitney U Test – Mean and Median value (Brand Voice)*

<b>Brand Disclosure</b>	<b>N</b>	<b>Median</b>	<b>Mean</b>
HIGH	30	4	3.6333
LOW	30	2	2.5333
Total	60	3	3.0833

Neither of the two groups seemed to agree with the statement that “*The fonts, logos, or colors used in the communication were recognizable to me as being promotional content*”. Both the test group and control group had mean values below 3, the neutral value on the scale. This result indicates that other factors affected the ad recognition ability and caused the differences between the experimental groups rather than solely the format and visual appeals of the article.

On the questions regarding brand prominence, the result from the two groups differed as well. The test group had a mean value of 3.37 when evaluating if they perceived that “*The communication did feature a company name*” and “*The communication clearly conveyed that a product or service was being promoted?*” had a mean value of 3.16. Contrary, the results from the control group were significantly lower. A mean value of 2.63 as well as 2.03 on the questions of the features of a company name and whether the promotional intent of a product was clear or not. The mean value on the statement of “*The communication was clearly branded*” was 3.27 in the test group compared to 2.03 for the control group. There were 11 participants responding that they *Agree* or *Strongly Agree* that the content was clearly branded, while only one participant perceived the same within the control group. This result strongly indicates that the use of brand voice or branded language influenced brand recognition significantly which accordingly tends to increase

the ad recognition ability. Krouwer et al. (2017) suggest that brand prominence and repeated mentions of the sponsor can increase the reflection of content among consumers which might further lead to ad recognition. These insights might be one explanation of the experiment result.

Further, regarding the statement of “*I could determine whether the content was promotional or not without reading the entire article*” the test group claimed that they perceived they could and the responses had a mean value of 3.43 compared to the control group which had a mean value of 1.36. When evaluating the results from AOIs in the eye-tracking test, it is shown that the test group spent 25.15 seconds on average looking at the article while the control group paid attention to this area on average 15.10 seconds. Thus, there was a difference between the groups of nearly 10 seconds. The heat maps also visualize that the last sentence is drawing a significant amount of attention from the participants in the article with high brand prominence. Heat maps from the experiment are available in Appendix I. Since this particular sentence also includes NIKE’s tagline “Just Do It”, this finding can be highly relevant to elaborate on. It does not necessarily explain what made the test group more likely to identify the article as advertising since there is no evidence that this exact sentence is the only factor, however, the correlation could be interesting to study in a more isolated environment. Nevertheless, it can be concluded that the test group to a greater extent identified that the content was promotional which implies that the use of brand voice enhances the native ad recognition ability.

#### **6.4 Brand Presence in Native Ad Disclosures Effect on the Conceptual Persuasion Knowledge**

According to the conceptual model presented by the researchers, brand disclosures in the form of logo, brand voice, and presence in the heading are three factors that are proposed to affect consumers' ad recognition ability. These three factors are also supposed to affect the conceptual persuasion knowledge which refers to the recognition, interpretation, and reflection of promotional content. Results from the experiment declared that H1, H2, and H3 could not be rejected, which provides indications that the ability to recognize the content as advertising is affected by the brand presence in the form of logo, brand voice, and presence in the heading. Participants that received articles with high brand

prominence did to a significantly greater extent also recognize the content as advertising. In correspondence to these results, hypothesis four, (H4), should not be rejected since it can be argued that these factors are all increasing the conceptual persuasion knowledge.

The eye-tracking experiment also showed that the test group had a higher average duration of fixation in each of the specified AOIs. This shows that participants have in general been fixated to these areas for a longer time compared to the control group. The experiment conducted in this research cannot analyze the reason behind why these articles tend to draw more attention or if it affected participants' ad recognition. However, as discussed in section 3.4. *Persuasion Knowledge Model*, Krouwer et al. (2017) as well as Friestad (1994) declare that there is a higher possibility to recognize advertisements as such the more time is spent reflecting and interpreting the messages and the perceived intent from the sender. This is supported by the results where the test group that viewed the native advertisements longer also ended up identifying it as advertising to a greater extent compared to the control group.

To test H4 further, the researchers conducted a Chi-Square test. This test is suitable to explore relationships between two categorical variables that have two or more categories each (Pallant, 2013), which in the experiment in this research consisted of the two categorical variables Brand Prominence and Ad Recognition. Brand Prominence was then divided into High and Low while Ad Recognition was measured with the five-point Likert scale which thus involved five subcategories that ranged from *Strongly Disagree* to *Strongly Agree*. This test enables a comparison of the native ad recognition ability of the two experimental groups and to spot potential differences within the crosstabulation table. Results from the experiment indicated that there is a difference between the two tested groups. The results from the Chi-Square test can be viewed in Table 7. The Asymptotic Significance which also represents the probability value was 0.000. This is below the significance level of 0.05, which therefore provides a result that can be interpreted as significant and supports H4. The Chi-Square does not necessarily tell us how the association behaves and what is the cause and effect, it rather tells that there is an association between the ad recognition ability and brand disclosure levels.

Table 7

*Chi-Square Test Summary*

**Chi-Square Test**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	56.108*	4	0.000
Likelihood Ratio	67.997	4	0.000
Linear by-Linear Association	54.118	1	0.000
N of Valid Cases	183		

\*. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.36

Nevertheless, by analyzing the cross-tabulation in Table 8, the result shows that within the test group, 66.7% of responses landed on the higher values of the five-point Likert scale where responses on whether the content was advertising were either *Agree* or *Strongly Agree*. Additionally, 0% responded that they *Strongly Disagree* which can be compared to 18.3% of responses from the control group. The control group only had 3.2% that did *Strongly Agree* and another 18.3% that did *Agree*. These numbers indicate that more prominent brand disclosure enhances the likeliness to identify the content as advertising. Thus, it supports that the researchers cannot reject H4.

Table 8

*Chi-Square Test Crosstabulation*

**Chi-Square Brand Disclosure \* Ad Recognition Cross Tabulation**

			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Brand Disclosure	HIGH	Count	0	13	17	24	36	90
		% within Brand Disclosure	0.00%	14.40%	18.90%	26.70%	40%	100%
		Adjusted Residual	-4.3	-3.4	-0.8	1.4	6.1	
	LOW	Count	17	34	22	17	3	93
		% within Brand Disclosure	18.30%	36.60%	23.70%	18.30%	3.20%	100%
		Adjusted Residual	4.3	3.4	0.8	-1.4	-6.1	
	<b>Total</b>	Count	17	57	39	41	39	183
		% within Brand Disclosure	9.30%	25.70%	21.30%	22.40%	21.30%	100%

## 6.5 Summary of Empirical Analysis of Findings

Results from the data collected in this research support the hypotheses provided for the experiment. The conceptual framework suggested by the researchers describes potential directions in how brand prominence in native advertisements can influence the native ad recognition ability. The research results supported each of the four hypotheses proposed by the researchers which indicate with significance that there exists a relationship between brand disclosures and increased native ad recognition ability. Thus, H1, H2, H3, and H4 are not rejected which is presented in Table 9.

Table 9

### *Summary of Hypotheses Test Result*

<b>Alternative Hypotheses</b>	<b>Result</b>
<b>H1:</b> Brand logo presence in native advertising increase ad recognition	Not rejected
<b>H2:</b> Brand disclosure in the heading of native advertising articles increase native ad recognition	Not rejected
<b>H3:</b> The use of brand voice in native advertising increase native ad recognition	Not rejected
<b>H4:</b> Brand presence in native ad disclosures results in increased conceptual persuasion knowledge	Not rejected

## 7. Conclusion

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*This section presents a summary of the empirical analysis and findings. The answer to the research question is provided which thus fulfills the purpose of this research.*

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The purpose of this research is to investigate whether brand prominence in native ad disclosures affects the native ad recognition ability. From analyzed results of this research, it appears to be an increased ad recognition ability that is aligned with the brand disclosure and its prominence.

Disclosure of a brand can appear in different forms which derived in that researchers involved three various formats of brand disclosures in the experiment based on hypotheses suggested to influence ad recognition. H1 refers to the visual appeals of a brand in the form of logotypes. It appeared that the article with a prominent and visible logo also resulted in higher ad recognition ability. The researchers cannot draw the conclusion that the logotype itself created the ad recognition among participants since no underlying reasons for their recognition were collected. However, results show that there exists a significant relationship between a present logo and increased ad recognition which implied that H1 was not rejected.

H2 refers to the importance of prominence and place of disclosure to determine its efficiency. The confirmed result of H2 was aligned with previous research presenting brand disclosures in heading have positive effects in terms of ad recognition. Further, H2 emphasizes the importance of position whereas the experiment clearly showed that the AOI represented by the heading, received considerable attention. The researchers found that the result supports the decision to not reject the H2.

In H3, more than half of the participants in the control group resulted in having a hard time recognizing the article as promotional content. Contrary, when the brand disclosure in the form of brand voice was implemented, half of the participants instead showed an understanding of the intent of the article. This draws to the conclusion that the result was significant and further supported the research question which made the H3 significant enough to not be rejected.

Lastly, since H1, H2, and H3 were supported, and thus, the null hypotheses rejected, it supported H4 as well. The ad recognition was increased in the test group compared to the control group in all treatments which derived in that brand disclosures in form of logo, brand voice, and presence in the heading did increase the conceptual persuasion knowledge. Henceforth, H4 was not rejected.

The four hypotheses that constituted the proposed conceptual framework, were all found significant and could not be rejected on statistical grounds. The answer to the research question results in that brand disclosures affects and increase consumers' native ad recognition ability.

## 8. Discussion

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*This section discusses the managerial implications of the conducted research. This is followed by an outline where limitations are addressed and to conclude, suggestions for future research are presented.*

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### 8.1 Implications

Native advertising is an approach designed to decrease interruptions in consumers' online experience by matching the form and the functions of the platform in which the advertisement appears (Campbell & Marks, 2015; FTC, 2015; Wojdyski 2016). The fact that native advertising is expected to overtake the online advertising approaches that already exists, makes this research of particular relevance to organizations aiming to utilize native advertising in their marketing strategy. Additionally, since predictions indicate that more than every second digital persuasion attempt will be native advertising in upcoming years (Enders Analysis, 2016), the relevance of this research is expected to endure. Thus, the research will not only be useful to established organizations but also potential start-ups in the upcoming years.

Furthermore, whereas native advertising tends to be difficult for the reader to identify, it risks being misleading (Amazeen & Wojdyski, 2018; Li & Wang, 2019). Policy setters such as FTC constantly work to set explicit regulations of the approach which today are vague and include loopholes used by organizations. Research results emphasize that brand disclosures in native advertising lead to increased ad recognition. Thus, the research can be demonstrated as versatile for practitioners as well as facilitate the implementation of a clear constitution for policy setters due to findings of this research illustrating the significance of brand disclosures.

Aside from this research being important to organizations and policy setters, it provides a more comprehensive understanding of native advertising for consumers. The experiment conducted in this research provides visual outlines of native advertising implemented as articles on a news site. Since each article presents different forms of ad disclosures, which is often the only characteristic that separates paid content from

commercial content, consumers are provided examples of how to distinguish native advertising when exposed to it in news sites which enables them the opportunity to make well-informed decisions.

## **8.2 Limitations**

This research involves limitations to be acknowledged. To start with, limitations associated with quantitative research exist. The survey provided in the research includes mainly closed-ended questions, thus this research might lack the in-depth-analysis of why and not only if brand disclosures affect the native ad recognition ability that a qualitative approach would focus on.

Moreover, another limitation concerns the sampling approach and sample size. The reason was mainly due to the resources available to carry out the eye-tracking experiment. The equipment needed to carry out the experiment was available during a limited time and thus, 60 participants were used. Besides, Covid-19 had an impact on the sample size since it decreased the number of students being available at the university. Unlimited access to the eye-tracking equipment as well as normal circumstances could have provided the opportunity to a more extensive sample which would have provided more accurate data.

Additionally, since the research falls under a non-parametric statistical technique due to the limited sample size and the implementation of ordinal data, the findings are limited in terms of drawing statistical conclusions about the underlying population distribution. Besides, the non-parametric statistics are less sensitive compared to parametric statistics which might cause difficulties to detect proper differences between groups. If the researchers would have increased the sample size, a parametric statistical technique could have been arguably beneficial to use to allow the research to draw further assumptions about an entire population.

Lastly, another potential limitation discovered throughout the research process was associated with the Tobii Eye-tracking Software. Results from the visualizations in the form of heat maps, available in Appendix I, declared that there was a significant difference among the experimental groups in terms of eye fixations, where the control group seems to have increased fixations. However, when comparing the total times for

experiments, the average time spent was approximately 13 seconds longer among the test group compared to the control group. This difference and its underlying reasons are highly difficult to elaborate further on with the data provided in this research, however, the researchers would like to underline that it cannot be disregarded that it might influence the test results. The heat maps provided only visualized fixations and not necessarily attention in cases where eyes are constantly moving. This might be one suggested reason for the difference in the heat maps' results. If the differences of attention from participants were due to coincidence, the distinction of the articles involved in the experiment or if it illustrates a limitation of using eye-tracking technology is not definite, however, the detection should nevertheless be highlighted.

### **8.3 Future Research**

There exist opportunities for future studies within the field of native advertising. Future research could complement the limitations of this paper by investigating the topic using a mixed-method where a quantitative and a qualitative approach are combined. This could obtain a deeper and more comprehensive understanding of consumers' ad recognition ability when exposed to native advertising by using open-ended questions leading to a greater discussion and thereby increased understanding of the reasoning behind answers provided by the participants. Moreover, a mixed-method would allow researchers to broaden the study and examine whether the participants are affected or further act upon native advertising when it is recognized.

Due to acknowledged limitations, it is further suggested to carry out future research using a more comprehensive sample. This research solely focuses on Swedish students at Jönköping University. Future research could include samples where several generations, nationalities, and other demographics are involved. This would allow researchers to provide more accurate data, and generalizable the findings in a more extensive manner. Future research, with access to a more comprehensive sample, could carry out the experiment providing only one treatment per group. The adjustment would consequently make it possible to reject the uncertainty whether the treatments affected each other at any level.

Furthermore, since only one specific platform was involved in the research, it would be of interest to explore whether the findings of this research would be similar if carried out on other potential platforms. Future studies can apply the research process and elaborate upon the results of using another platform to contribute to the findings of this research. Additionally, since this research had a descriptive purpose, it could act as a basis for future explanatory or exploratory studies.

Lastly, since the research data was insufficient to determine the critical reason why there was a significant difference in overall fixations among the heat maps of experimental groups, this would be of importance to further elaborate upon in future research using eye-tracking technology.

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# Appendix

## Appendix A: Table of Literature

Author	Article	Journal	Year	Native Language & Position	Brand Prominence Effect	Persuasion Knowledge	Ad Recognition Ability	Methodology
An, S., Kang, H., & Koo, S.	Sponsorship Disclosures of Native Advertising: Clarity and Prominence.	<i>Journal of Consumer Affairs</i>	2019					Quantitative
Boerman, S. C., Van Reijmersdal, E. A., & Neijens, P. C.	Sponsorship Disclosure: Effects of Duration on Persuasion Knowledge and Brand Responses.	<i>Journal of Communication</i>	2012					Quantitative
Evans, N. J., & Park, D.	Rethinking the Persuasion Knowledge Model: Schematic Antecedents and Associative Outcomes of Persuasion Knowledge Activation for Covert Advertising.	<i>Journal of Current Issues and Research in Advertising</i>	2015					Quantitative
Friestad, M., & Wright, P.	The Persuasion Knowledge Model: How People Cope with Persuasion Attempts.	<i>Journal of Consumer Research</i>	1994					Qualitative
Grinsven, B. V., & Das, E.	Logo design in marketing communications: Brand logo complexity moderates exposure effects on brand recognition and brand attitude	<i>Journal of Marketing Communications</i>	2014					Quantitative
Harms, B., Bijmolt, T. H. A., & Hoeksma, J. C.	Digital Native Advertising: Practitioner Perspectives and a Research Agenda	<i>Journal of Interactive Advertising</i>	2017					Qualitative
Krouwer, S., Poels, K., & Paulussen, S.	To Disguise or to Disclose? The Influence of Disclosure Recognition and Brand Presence on Readers' Responses Toward Native Advertisements in Online News Media.	<i>Journal of Interactive Advertising</i>	2017					Quantitative
Li, Y., & Wang, Y.	Brand disclosure and source partiality affect native advertising recognition and media credibility.	<i>Newspaper Research Journal</i>	2019					Quantitative
Liu, X., & Zhang, B.	Automatic collecting representative logo images from the internet	<i>Singhua Science and Technology</i>	2013					Mixed
Nielsen, J.	F-Shaped Pattern for Reading Web Content	Report from Nielsen Norman Group	2006					Qualitative
Sahni, N. S., & Nair, H. S.	Sponsorship disclosure and consumer deception: Experimental evidence from native advertising in mobile search.	<i>Marketing Science</i>	2020					Quantitative
Tutaj, K., & van Reijmersdal, E. A.	Effects of online advertising format and persuasion knowledge on audience reactions.	<i>Journal of Marketing Communications</i>	2012					Quantitative
Wojdyński, B. W.	The Deceptiveness of Sponsored News Articles: How Readers Recognize and Perceive Native Advertising	<i>American Behavioral Scientist</i>	2016					Quantitative
Wojdyński, B. W., & Evans, N. J.	Going Native: Effects of Disclosure Position and Language on the Recognition and Evaluation of Online Native Advertising	<i>Journal of Advertising</i>	2016					Quantitative
Wojdyński, B. W., Evans, N. J., & Hoy, M. G.	Measuring Sponsorship Transparency in the Age of Native Advertising.	<i>Journal of Consumer Affairs</i>	2018					Quantitative

# Appendix B. Eye-tracking Experiment Outline

Test Group

Control Group

## Appendix C: Cronbach's Alpha Test

### Reliability Statistics – Control Group

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.793	0.790	21

### Reliability Statistics – Test Group

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.796	0.777	21

# Appendix D: Native Articles in Experiment for Test Group and Control Group

## Test Group

D1.

### 5 healthy reasons to drink coffee

Sponsored post



Your daily cup of coffee may be doing more for you than providing that early-morning pick-me-up. The health impact of coffee has long been a controversial topic, with advocates touting its antioxidant activity and brain-boosting ability, and detractors detailing downsides such as insomnia, indigestion and an increased heart rate and blood pressure. But the latest wave of scientific evidence brings a wealth of good news for coffee lovers. Here are 5 reasons drinking coffee may be healthier for you than you thought.

**1. Coffee is a potent source of healthful antioxidants.**  
In fact, coffee shows more antioxidant activity than green tea and cocoa, two antioxidant superstars. Scientists have identified approximately 1,000 antioxidants in unprocessed coffee beans, and hundreds more develop during the roasting process. Numerous studies have cited coffee as a major — and in some cases, the primary — dietary source of antioxidants for its subjects.

**2. Caffeine provides a short-term memory boost.**  
When a group of volunteers received a dose of 100 milligrams (mg) of caffeine, about as much contained in a single cup of coffee, Austrian researchers found a surge in the volunteers' brain activity, measured by functional magnetic resonance imagery (fMRI), as they performed a memory task. The researchers noted that the memory skills and reaction times of the caffeinated volunteers were also improved when compared to the control group who received a placebo and showed no increase in brain activity.

**3. Coffee may help protect against cognitive decline.**  
In addition to providing a temporary boost in brain activity and memory, regular coffee consumption may help prevent cognitive decline associated with Alzheimer's disease and other types of dementia. In one promising Finnish study, researchers found that drinking three to five cups of coffee daily at midlife was associated with a 65 percent decreased risk of Alzheimer's and dementia in later life.

**4. Coffee is healthy for your heart.**  
A landmark Dutch study, which analyzed data from more than 37,000 people over a period of 13 years, found that moderate coffee drinkers (who consumed between two to four cups daily) had a 20 percent lower risk of heart disease as compared to heavy or light coffee drinkers, and non-drinkers.

**5. Coffee curbs depression.**  
Multiple studies have linked coffee drinking to lower rates of depression in both men and women. In several studies, the data suggested an inverse relationship between coffee consumption and depression: in other words, heavy coffee drinkers seemed to have the lowest risk (up to 20 percent) of depression.

The potential health benefits of drinking coffee are exciting news, don't forget to grab yours at Starbucks!

## Control Group

### 5 healthy reasons to drink coffee

Sponsored post



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The potential health benefits of drinking coffee are exciting news, don't forget to grab yours at Starbucks!

D2.



### How to stop your phone breaking down - the number one tip revealed by iDeal of Sweden

Sponsored post

When we buy goods, we have certain expectations about how long we expect them to last — even though we may intend to replace them before their time is up. With bigger goods, we tend to expect things to be more substantial and therefore last longer. But weirdly, we seem to have lower expectations of smaller items. Maybe it's because they're portable, or easy to lose or damage. Chief amongst those items are mobile phones.

Smartphones nowadays are not cheap and it is even more costly to send the phone in to repair. Therefore, the number one tip to protect your phone is to use a good phone case. A phone case can help save you time and money, while keeping your phone looking fresh out of the box. iDeal of Sweden offers handmade products which are made of a durable and environmentally friendly premium material identical to leather. The only difference is that you instead have a product that is more durable and stays fresh longer. Each product is quality tested before delivery and made from carefully selected materials, which meet our high-quality standards. Those qualities will help you to save your phone, buy your phone case at iDeal of Sweden.



### How to stop your phone breaking down - the number one tip

Sponsored post

When we buy goods, we have certain expectations about how long we expect them to last — even though we may intend to replace them before their time is up. With bigger goods, we tend to expect things to be more substantial and therefore last longer. But weirdly, we seem to have lower expectations of smaller items. Maybe it's because they're portable, or easy to lose or damage. Chief amongst those items are mobile phones.

Smartphones nowadays are not cheap and it is even more costly to send the phone in to repair. Therefore, the number one tip to protect your phone is to use a good phone case. A phone case can help save you time and money, while keeping your phone looking fresh out of the box. iDeal of Sweden offers handmade products which are made of a durable and environmentally friendly premium material identical to leather. The only difference is that you instead have a product that is more durable and stays fresh longer. Each product is quality tested before delivery and made from carefully selected materials, which meet our high-quality standards. Those qualities will help you to save your phone, buy your phone case at iDeal of Sweden.

D3.

### Run like a champion - Break your marathon record



A better runner doesn't necessarily mean a faster runner. A better runner means a healthier runner, a less injured runner, a more efficient runner. Whether you're just starting out running or looking to beat your marathon personal best, the right choice of shoes will help you. Let the run tell you why. It is time for you to find your greatness.

Eliud Kipchoge, the first man to run a marathon in 2 hours using the Nike ZoomX Vaporfly shoe, is a classic case of a whole greater than the sum of its parts. Nike's latest running shoes provide specific balance, stability and support that many basic trainers are lacking. What makes these shoes different is, among other things, a carbon-fiber plate in the midsole, which stores and releases energy with each stride and is meant to act as a kind of slingshot, or catapult, to propel runners. The shoes also feature midsole foam that contributes to increased running economy. Kipchoge is not only a great athlete, but a Nike legend. It requires an individual with incredible dedication and desire to, despite having already achieved so much, still push forward to break new barriers. That's why legends run forever.

All good runners are smart runners. With Nike ZoomX Vaporfly, studies have confirmed that the shoes increase athletes' energetic efficiency by 4% or more, which yields significant dividends in long distances. The shoes' foam and carbon-fiber sole is designed to ensure that less energy is lost in each footfall. 4% might seem little, but there are a lot of steps in 42,000 meters. Use Nike+ Run Club App to keep a record of your pace and analyze the progress each week. Take the challenge and break your records!

If you have a body - you are an athlete. Yesterday you said tomorrow - Just Do It

### Run like a champion - Break your marathon record



A better runner doesn't necessarily mean a faster runner. A better runner means a healthier runner, a less injured runner, a more efficient runner. Whether you're just starting out running or looking to beat your marathon personal best, the right choice of shoes will help you.

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Take the challenge today!

# Appendix E: AOIs in Eye-tracking Experiment



Test Group



Control Group

## Appendix F: Consent for Collection and Processing of Personal Data



JÖNKÖPING UNIVERSITY  
Jönköping International  
Business School

### Consent for Collection and Processing of Personal Data

As part of the bachelor thesis in business administration at Jönköping University, we are conducting a study with the purpose to understand consumer behavior using eye-tracking.

As part of the study you will be asked to provide answers concerning yourself including gender, major of study, activities, preferences and experiences. Personal data will be used to analyze consumer behavior in order to answer the research purpose of this study.

All data will be stored and used anonymously through an anonymization process.

Your privacy is important to us. The researchers are controllers of the processing, and the legal basis for the processing of information is article 6.1. (a) in the General Data Protection Regulation, GDPR, (consent).

Personal data will be stored in the EU/EEA, or countries outside the EU/EEA that the EU Commission has determined to have an adequate level of protection, i.e. sufficiently high according to GDPR.

Data will be used by the researchers and be made available for teachers and examiners in the course. The data will be erased when it is no longer necessary or of use for the research. If you want, you have the right to request a copy of the personal data and information about the processing. To order a copy of your personal data contact us at:

[huel1796@student.ju.se](mailto:huel1796@student.ju.se) or

[faju1717@student.ju.se](mailto:faju1717@student.ju.se)

Your participation is completely voluntary. If you consent to the processing of your personal data as described above, you may withdraw your consent at any time whereby we will stop using your personal data. You also have the right to have your data erased.

*I hereby consent that Elin Hultin & Julia Fagerström may collect and process my personal data as described above.*

*Signature:*

*Name in Block Letters:*

*Place and Date:*

## Appendix G: Survey Questions

1. Test ID: \_\_\_\_\_

2. Gender:

Male      Female      Other/Prefer not to say

3. Major of Study: \_\_\_\_\_

4. What is your perception that the test was about?

Answer:

5. Do you remember any brand being present on the site?

Yes    No

6. What brand? \_\_\_\_\_

7. It was clear who paid for the communication?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

8. Was there any advertising on the page?

Yes    No    Don't know

**If yes** 10.

How many ads would you claim you just saw?

1    2    3    4    5

**If yes** 11. List 3 things that made you identify the advertised content as such:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**Regarding the content of “Run like a champion - Break your marathon record”**

**How would you rate following statements?**

12. The article was promotional content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

13. The article was editorial content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

14. I could determine whether the content was promotional or not without reading the entire article

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

15. The communication was clearly branded?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

16. The communication clearly conveyed that a product or service was being promoted?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

17. The communication did feature a company name

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

18. The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

**Regarding the content of “5 Healthy reasons to drink coffee”  
How would you rate following statements?**

19. The article was promotional content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

20. The article was editorial content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

21. I could determine whether the content was promotional or not without reading the entire article

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

22. The communication was clearly branded?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

23. The communication clearly conveyed that a product or service was being promoted?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

24. The communication did feature a company name

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

25. The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

**Regarding the content of *"How stop your phone from breaking down - the number one tip"*  
How would you rate following statements?**

26. The article was promotional content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

27. The article was editorial content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

28. I could determine whether the content was promotional or not without reading the entire article

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

29. The communication was clearly branded?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

30. The communication clearly conveyed that a product or service was being promoted?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

31. The communication did feature a company name

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

32. The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?

Strongly Agree    Agree    Neither Agree or Disagree    Disagree    Strongly Disagree

## Appendix H: Codebook for Empirical Analysis

Variable	SPSS Variable Name	Coding Instruction
Identification Number	ID	002, 004, 006...
Sex	Sex	1 = Male 2 = Female
Major of Study	Major	1 = Marketing 2 = Finance 3 = HR 4 = Engineering 5 = Health and Welfare 6 = Education
Do you remember any brand being present in the test?	Q5BrandPresence	1 = Yes 2 = No
What brand?	Q6BrandName	1 = Ideal of Sweden 2 = NIKE 3 = Starbucks 99 = Övrigt
It was clear who paid for the communication on the page?	Q8Clearpaidcomm	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
Was there any advertising on the page?	Q9AdvertsOnPage	1 = Yes 2 = No 3 = Don't know

How many ads would you claim you just saw?	Q10AdsNo	1 = 1 2 = 2 3 = 3 4 = 4 5 = 5
List 3 things that made you identify the advertised content as such	Q11List	1 = Heading 2 = Logotype 3 = Brand name/mention 4 = Ad disclaimer 5 = Position 6 = Size

### Ideal of Sweden

The article was promotional content?	Ideal26	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The article was editorial content?	Ideal27	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
I could determine whether the content was promotional or not without reading the entire article	Ideal28	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

The communication was clearly branded?	Ideal29	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The communication clearly conveyed that a product or service was being promoted?	Ideal30	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The communication did feature a company name	Ideal31	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?	Ideal32	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

**NIKE**

The article was promotional content?	NIKE12	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The article was editorial content?	NIKE13	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
I could determine whether the content was promotional or not without reading the entire article	NIKE14	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The communication was clearly branded?	NIKE15	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The communication clearly conveyed that a product or service was being promoted?	NIKE16	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

The communication did feature a company name	NIKE17	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree
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The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?	NIKE18	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
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**Starbucks**

The article was promotional content?	Star19	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
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The article was editorial content?	Star20	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
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I could determine whether the content was promotional or not without reading the entire article	Star21	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
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The communication was clearly branded?	Star22	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The communication clearly conveyed that a product or service was being promoted?	Star23	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The communication did feature a company name	Star24	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
The fonts, logos, or colors used in the communication were recognizable to me as being promotional content?	Star25	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

# Appendix I: Heat Maps from Eye-tracking Experiment



Heat Map for Test Group



Heat Map for Control Group