PERSUASION IN SPONSORED CONTENT ON YOUTUBE

ABSTRACT

Marketers are making use of Social media influencers reach to advertise their products and sponsored content on Youtube is replacing more traditional means of advertising. Research has however shown that these influencers do not always disclose sponsorship in YouTube content. The aim of this study is to lay the groundwork for the development of a software tool that can automatically scan sponsored content on YouTube for persuasiveness, indicating whether the video is a persuasive attempt. For the development of this tool Brunswik's lens model is used to determine the predictive value of certain nonverbal indicators that van be perceived by a software tool for verbal indicators present in sponsored content. Nonverbal as well as verbal indicators of persuasion were derived from literature, and measured for a sample of 95 sponsored videos related to beauty downloaded from YouTube. Regression analysis was used to determine the predictive value of the nonverbal indicators for the verbal indicators. Although the explorative nature of the study did not yield strong predictive power, results show that the presence of certain verbal indicators of persuasion can be predicted by the presence of nonverbal indicators of persuasion. Further research could lead to a software tool that can help consumers as well as video hosting sites and authorities distinguish between purely persuasive attempts and informative videos.

Author: Kirstin Loos
Master Thesis Business Administration
Supervisor: A.B.J.M. Wijnhoven
University of Twente

CONTENTS

1. INTRODUCTION

The social media revolution has changed the landscape of communication and had a huge impact on marketing communication. Social media like Facebook, YouTube, Twitter and Instagram are becoming increasingly important in consumers' lives and influencing the way they communicate and their purchasing behavior. Park and Cho (2012) mention that, for example when shopping in fashion, consumers tend to turn to social media as an information source for brands and products and to seek approval from their peers before making a purchase decision. This new advertising platform therefore presents opportunities for brands to build reputation (Correa et al, 2010; Spillecke & Perrey, 2012) and encourage purchase intention. In this study the focus will be on YouTube as an advertising platform. Some creators on the platform have massive followings of up to 100 million subscribers. These creators upload content regularly. Vloggers upload videos about products they use or their personal life. The ability for people to share their experiences across such a huge platform inexpensively and instantaneously makes it an attractive platform to marketers.

Authenticity and transparency are important to YouTube users. This becomes apparent when studying the case of Lonelygirl15 (Deliso, 2015). This creator was the subject of viewer outrage when her videos were exposed as fake blogs. Lonelygirl15 was an actress out of work posing as a teenage girl who posted blogs discussing her daily struggles. Big companies have also been scrutinized for creating content that posed as blogs or vlogs. Sony paid an advertising company to create blogs and vlogs that appeared to be the positive experience of real people (Crisisblogger, 2006). This 'buzz' marketing backfired when the conversation turned from the content of the blog to how the company was trying to dupe and manipulate consumers.

With the growing popularity of Social Media Influencers, and in particular YouTubers, companies have found a new way to advertise their products. By paying YouTubers to create content promoting their brands they are creating buzz through testimonials. This is not just happening on YouTube, but on other Social Media platforms like Twitter, Facebook and Instagram as well. While changing tactics, this does not change the fact that content is being created that is payed for. While it is not created by fabricated persons created by an advertising agency, people are being paid to speak positively of a brand or product. This makes them less genuine electronic word of mouth (EWOM) recommendations and more advertisement for companies. The deception that took place when fake people were created to promote products is no longer applicable, but this raises another the question. Just because the people aren't fabricated anymore does this mean that the content is also not fabricated? To answer this question this study aims to develop a framework to determine to what extent this type of content is focused on being purely persuasive. Proxies will be developed on the basis of which a tool can be made to automatically evaluate sponsored content on YouTube.

The following section discusses social media influencers. Next, there will be a focus on user generated content and sponsored content or native advertising, highlighting the need for a method to determine to what degree the content in question is persuasive. The basis for this method is derived from existing literature in the following section. The methods used during this study are then described, followed by the analyses of the data obtained. Finally, a discussion follows in which conclusions are drawn.

2. CONTEXT

2.1 Social media influencers

Research has shown that consumers may trust product information from peers more readily than corporate sources (Cheong & Morrison, 2008). Further research has also shown that for generations Y and Z peer opinions and peer acceptance are important factors when making decisions regarding product and brand choices (Williams & Page, 2011; Soltan, 2004). Art (2009) found that referrals from people they know influence Millennials. From this it follows that word-of-mouth advertising is very important in reaching Millenials and Gen Z. Considering that 2.46 billion people use social networking sites (statistica, 2017), this would mean that these sites facilitate a great network of peers to influence decision making. Pate and Adams (2013) discuss how social media sites influence buyer behavior and found that Millennials are indeed influenced by what their friends "like" and "share" on social media. Weigand (2009) found the same and concludes that in general social media is positively associated with providing instrumental value that assists consumers in making decisions about what product to buy, when to buy it and where to buy it. It is however not only real-time friends that are considered peers that influence these decisions.

Senft (2008) coined the term micro-celebrities during research on how 'camgirls' gained popularity over the web using technologies like video, blogs and social networking sites. She found that their popularity was reliant on the fact that they built and sustained relationships with the audience that were more 'real' than the conventional one between mainstream celebrities and their fans. Kim, Pai, Bickart and Brunel (2015) did a study into how social media influencers build brand following by sharing secrets and found that online influencer disclosure of a large amount of intimate personal information and secret sharing among this group is a strategic and purposeful brand building act in order to build relationships with the audience. They are positioning themselves as celebrity figures, while at the same time establishing a peer-relationship with consumers.

Colucci and Cho (2014) studied blogging communities, interviewing bloggers and surveying vlog users, and found that personalized posting of information introduces an emotional component that allows blog readers to develop temporary social relationships by developing trust ($\beta = .53$, $t = 4.63$, $p < .005$). Trust in this study referred to an individual's belief that an online exchange partner is dependable, able to fulfill promised roles or obligations, genuinely interested in the welfare of consumers and refrains for

opportunistic behaviors if given that change. Johnson and Kaye (2004) in turn found that blogs play a crucial role in creating trends, sharing news and opinions, and spreading information through eWOM. These bloggers are building personal relationships with large audiences on the internet and in turn becoming the peers that influence consumer decisions. Williams, Page, Petrosky and Hernandez (2010) even found that information provided by blogs, specifically in the form of peer recommendations, is often valued over expert opinions. The influencers who are not personally connected to, but do succeed in building a social relationships with their viewers or readers and being a source of peer-influence fall in the category of social media influencers. Hearn and Schoenhoff (2016) give a summarization of SMI as someone who 'works to generate a form of "celebrity" capital cultivating as much attention as possible and crafting an authentic "personal brand" via social networks, which can subsequently be used by companies and advertisers for consumer outreach' (p. 194). Marketers seek influencers out to make use of the audience they have grown and to benefit from the intimate relationship they have built (Hearn & Schoenhoff, 2016; Gormley, 2016). One way to do this is to pay influencers to promote their brand or product by creating content centered around it. Success of influencer-marketing is determined in terms of return on influence. Return on influence is essentially the same as return on investment, and constitutes the increase in sales, or profit derived from the marketing effort minus the marketing investment divided by the marketing investment. Wu (2016) found that sponsoring companies enjoy marketing return on investments (ROIs) as high as 124, 21, and 6 times the amount invested for 6 million, 1 million, and 300.000 respective viewers on a video.

2.2 Consumer Generated Content and Sponsored content

As mentioned before the internet has changed the way people are communicating, however it has also changed the way advertising operates and the relationships that advertisers and consumers share. Web 2.0 is much more open, user-centric, and responsive and Cheong and Morrison (2008) found that although it was seen as likely to empower firms, it has also empowered consumers. Traditionally, firms and advertising agencies created advertisements that were sent through one or more channels to audiences to inform, persuade or remind them of their offerings and the firm's existence (Barton, 1950). Firms and advertising agencies were in full control of the content that was presented to consumers. It was a one-way street for communicating brand messages to consumers. However, the firm is no longer in control of the brand-related media, with consumers posting product and brand reviews on social networking sites. It has been found that social media networking disrupts firm-controlled power relations in digital marketing communication (Deighton & Komfeld, 2009). Pitt, Campbell and Parent (2011) mention that any person with a built-in camera and basic video-editing software is able to ridicule, honor, or mimic any company, product, or service. Free video-hosting sites like YouTube give consumers the opportunity to spread this content in the form of ads about the brands, products and services they love, hate, or simply want to comment on.

While the marketing landscape has changed drastically for advertisers, consumers have also changed. Younger generations have been bombarded with advertisement from a very young age and therefore have become ad-fatigued. They aren't easily persuaded and influenced by traditional advertising, but rather look to their peers for information on new products, brands and services. This is probably one of the reasons why user-generated content in the form of consumer generated advertising has become so popular. Brunel, Fournier, Guzman & Papavasileiou (2007) did an experiment that investigated advertising-message and execution factors driving response to consumer-generated advertising and found that consumer-generated ads had advantages. Attitude toward these types of ads was higher as well as viewers begin more engaged in the experience of watching cosumer-generated ads, processing more advertising message claims. The same study also found that viewer responses differed depending on whether advertisements were the result of a firm-sponsored contest or described as generated spontaneously. Hansen, Lee and Lee (2014) did a similar study by investigating consumer attitudes and behaviors for interacting with YouTube features and passing along electronic word of mouth and source credibility. They found that consumers as source had positive effects on enhancing advertising attitudes ($F= 3.26$, $p = .07$, $F= 2.46$, $p = .12$) and interactivity behaviors ($F = 2.96$, $p = .09$). Respondents were more likely to use YouTube interactive features like 'liking', commenting on and sharing a video, when content was consumer generated. Halliday (2016) found in her study that 'great use is made of peer review to subvert monologues emerging directly from the brand owners' (p. 142). It is therefore no surprise that companies are investing more and more in partnering up with or influencing social media influencers.

Sponsored content or native advertising can be incorporated into user generated content. Usually it takes the form of a review or recommendation of a product or service. This fits the form of prior user generated content, with the exception that this user generated content is paid for by companies. The goal of successful native advertising is to be cohesive with the creator's content, assimilated into the creator's design, and consistent with the creator's platform behavior so that the viewer feels it belongs (Casale, 2015).

Smith, Fischer and Yongjian (2012) make a distinction between brand-related user generated content on YouTube, Facebook, and Twitter. They found that brand related content on YouTube stems from a culture of self-promotion. The content community's slogan, 'broadcast yourself', encourages users to be the star of their video posts, and its architecture and culture support the development of micro-celebrities (Green & Burgess, 2009). YouTube can provide factual information about a brand, but it is often peripheral to the main messages that posts convey. Twitter on the other hand is least likely to feature consumer self-promotion. Brand centrality was found to trend highest for UGC on Twitter. Facebook falls somewhere in between. The focus of this study is on content posted on YouTube. Smith, Fischer and Yongjian (2012) recommend this channel as a great opportunity for marketers 'seeking subtle life-world

placement and association with a particular constellation of brands' (p. 111). The reason for this being that not the brand or product, but rather the influencer promoting themselves is the main focus of the post.

2.3 The need to determine persuasiveness of user generated content

It has been claimed that native advertising is 'based on deceiving customers' and 'relies heavily on consumers not realizing they are being advertised to' (Public Citizen, 2013). Van Reijmersal et al. (2016) studied the effects of disclosure of sponsored content in blogs and found that disclosures activate persuasion knowledge and evokes resistance strategies against persuasion attempts made in blogs. Wojdynski and Evans (2015) found that disclosure of native advertising in editorial content using the words "sponsored" or "advertising" increased advertising recognition in native advertising and led to more negative evaluations. This points to the conclusion that it would indeed be in favor of marketers to disguise this native advertising as much as possible. Public Citizen (2013) argues that consumers must be able to make the distinction between native advertising and original content, and it must be made clear 'who is doing the advertising'.

Native advertising in YouTube can be categorized into three forms:

- direct sponsorship where the content creator partners with sponsors to create videos,
- affiliated links where the content creator gets commission resulting from the purchase of products through the links attributable to the content creator, and
- free product sampling where products are sent to content creators free of charge to be featured in videos.

Recently, the Federal Trade Commission has required content creators under federal law to disclose whether content is an endorsement. However, Wu (2016) found in her study that disclosure of sponsorship in YouTube content is seriously lacking and there are inconsistencies as to how content creators disclose this sponsorship as well as a lack of conspicuousness for disclosures buried in description boxes. This resonates with the concerns of Public Citizen (2013) about native advertising being inherently deceptive. Once one accepts that sponsored content is indeed nothing more than an advertisement, another way to measure deceptiveness of user generated advertising is to take a more traditional approach and evaluate the measure persuasion in the advertisements. To this ends the goal of this study is to create a tool to evaluate sponsored content on YouTube for persuasion.

3. THEORY AND HYPOTHESES

There is and always has been a debate among advertisers regarding the function of advertising. Advertisements can be considered to be informative or persuasive. Informative advertising helps consumers make informed decisions, while persuasive advertising 'aims to create liking, preference, conviction, and purchase of new products' (Keller & Kotler, 2009, p. 499). Ads can however also be both informative and

persuasive with information and persuasion appeals working together providing the "what to say" and "how to say it".

In the past there have been many studies regarding information and persuasion in advertisements. Back in 1977, an analysis of newspaper and magazine ads that showed that twice as many consisted of persuasion as of information (Marquez, 1977). Marquez (1977) analyzed the content of advertisements as to whether they were basic persuasion, basic information, high in persuasion but low in information, high in information but low in persuasion, or mainly intimidation. Dictionary meanings of the terms persuasion, information and intimidation were used and videos were categorized into the groups by the researcher. Another more recent example is that of Parker and Alford (2017), who used Resnik and Stern's information cues to determine whether ads played on YouTube could be categorized as informative. They found that in the sample of 179 ads, only one would be considered non-informative. Studies evaluating the persuasiveness of native content on YouTube however are lacking. With the rise of Social Media Influencers and the creation of sponsored content on Social Networking Sites that influence consumers through peer recommendations that in practice act as advertisements, it is necessary to analyze the persuasive nature of this kind of content.

3.1 Underlying framework

The design of the tool developed in this study is based on a modified Brunswikian lens model (1956). According to Brunswik's model a particular trait or state of the sender is externalized or expressed in distal indicator cues. These distal cues are perceived by an observer and represented as proximal percepts in the observer's cognitive structures (Burgoon, Birk and Pfau, 1990). Certain behaviors are associated with certain underlying characteristics. These behaviors can be observed and conclusions can be drawn about characteristics and the underlying construct (Gosling et al., 2002). A particular trait or state of the sender is externalized or expressed in distal indicator cues. These distal cues are perceived and represented as proximal percepts in the observer's cognitive structures.

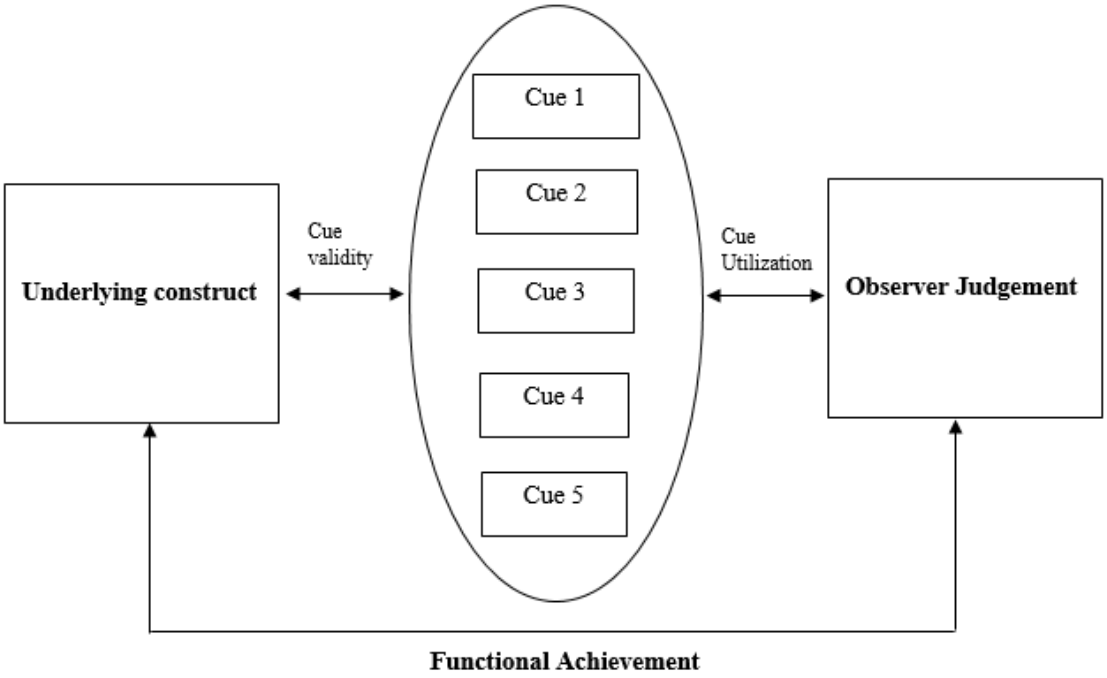

Figure 1. Brunswik's lens model (1956)

In the model, cue utilization refers to the link between the observable cue and an observer's judgement. The link between the observable cue and the level of the underlying construct is referred to as cue validity. If both of these links are intact, observer judgement should closely approach the level of the underlying construct, resulting in greater validity of the observer judgement, or functional achievement.

3.2 Brunswik's framework applied to the study

In this study the underlying construct that can be measured is persuasiveness of a sponsored video on YouTube. The observer judgement refers to how persuasive the observer views a video to be. The persuasiveness is expressed by the sender through the use of meaningful utterances that are used to persuade the watcher of the video. According to Burgoon, Birk and Pfau (1990) anything with meaningful words is classified as verbal. The distal cues are in this study then verbal indicators of persuasion.

These verbal cues for persuasion can be directly observed by a human observer, however the goal of this study is for the observer to be an automated tool. And automated tool is not capable of interpreting verbal persuasive techniques as persuasive. There are however nonverbal indicators of persuasion that can be measured through the use of software. Proximal percepts in the case of this study are then nonverbal indicators of persuasion, or nonverbal proximal percepts. Following Burgoon, Birk and Pfau (1990) these nonverbal behaviors can be categorized as vocalic nonverbal persuasion indicators or kinesic/proxemics nonverbal persuasion indicators.

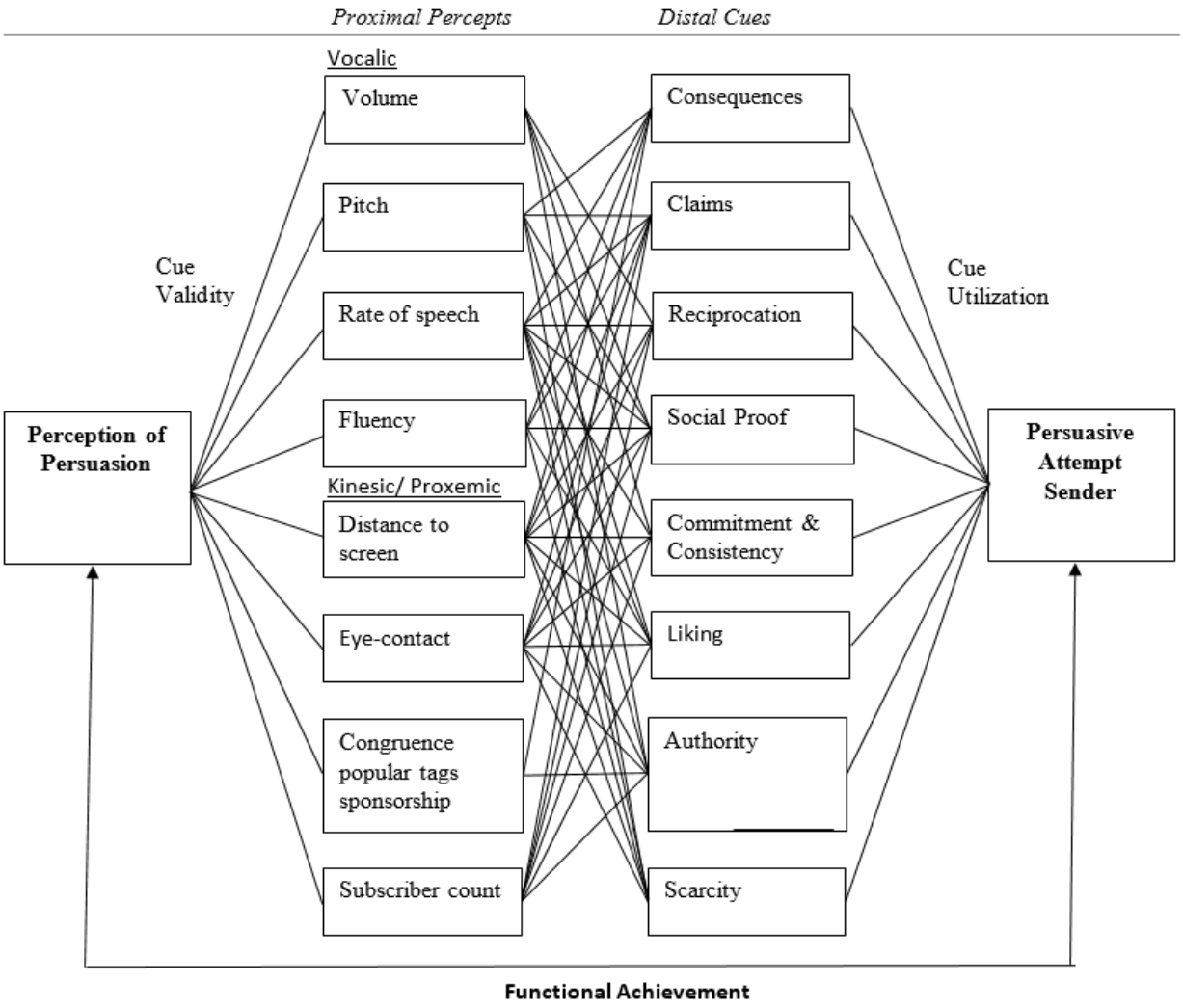

Figure 2. Brunswik's lens model (1956) adapted to current study

3.3 Distal Verbal Indicator Cues of Persuasion

Perloff (2010) describes persuasion as concerned with the understanding and subsequently changing of attitudes by influencing other people's minds. Persuasive advertising is concerned with enticing consumers to purchase certain products. To reach that end their attitudes toward such products must be influenced in such a way that they decide to make that purchase. Miller (1980) found that persuasive communication aims at three effects; changing, reinforcing and shaping responses. Persuasive advertising is advertising in which the assumption is that the consumer needs to be convinced of the desirability and benefits that set this particular product apart from the competition.

Bolatito (2012) mentions how change, reinforcement and shaping of responses can take place through persuasive advertising. In trying to change consumers' responses counterarguments for consumers' doubtfulness against products can be provided. To reinforce responses he suggests messages which suit

individuals' existing preferences can be created. A common way to shape responses he mentions is to create associations between the advertised product and a positively perceived object of person. For this study that would mean for example a beauty-guru with a large following swearing by a certain product in her daily routine.

Verbal techniques used to persuade in advertising are claims and consequences (Bolatito, 2012). Claims function as sources of information regarding quality of a product, but the trustworthiness of the information could be questioned. This is especially the case when social media influencers are paid to make certain claims about products they are promoting. For this reason these claims should not be accepted as factual and show the persuasive nature of the content. Consequences represent the reason a product is important to someone and why it is positively or negatively valued (Reynolds, Gengler & Howard, 1995). Consequences are an expression of the way a product makes a person feel. Consequences and their attractiveness are important when they seem to have the ability to satisfy personal values.

Goldstein, Martin & Cialdini (2008) discuss Cialdini's 6 principles of persuasion and how they can be and are applied to marketing communications. The six principles are: reciprocation, social proof, commitment and consistency, liking, authority, and scarcity.

Reciprocation refers to people feeling indebted to those who do something for them. An example given is that of free samples. In YouTube videos giveaways are often organized where subscribers or watchers can win free products from a certain brand. These are often products that were sent to content creators for free, and therefore this would also fall under sponsored content as it was described earlier on. In return for receiving a chance to win a certain product viewers might feel indebted to the influencer and buy products recommended or linked by the influencer. French and Raven's (1959) identify five power bases that can be used to influence others, and the principle of reciprocation calls on reward power. According to them, a consumer will comply in order to gain reward.

Social proof is described as consumer's orientation toward their peers, or others similar to them, for guidance concerning decisions or actions they are uncertain of. Sponsored content as described earlier is hinged on the concept of peer recommendations. When social media influencers recommend a product or brand or describe how much they have enjoyed it they are participating in this principle of persuasion, making the product more attractive to their viewers. Endorsement of a product should be recognizable by dominantly positive wording. This principle calls on the power base referent power, which is the power that results when others emulate a person (French and Raven, 1959).

Commitments and consistency concerns consumers striving for consistency in commitments. Goldstein, Martin and Cialdini (2008) state that people follow pre-existing attitudes, values and actions. Getting them to commit to something makes them more likely to follow through with an action or purchase.

This verbal technique van be tied to what French and Raven (1959) call coercive power, as influencers are trying to coerce consumers to commit to buying a product or clicking a link.

Liking refers to people preferring to say yes to those they know and like. Physical attraction, similarity and complimenting also lead to more 'liking'. Social media influencers often position themselves as similar to the viewers and as mentioned before these influencers are often influencers because they are viewed as peers. Furthermore, they are often considered to be physically attractive by their viewers. YouTubers can also use compliments to engage with their subscribers. All these can be observed in videos and comments and would lead to an increased persuasiveness of sponsored content.

Goldstein, Martin and Cialdini mention that giving the appearance of authority increases the likelihood that others will comply with requests – even if that authority is not legitimate. In the YouTube community people who make videos about certain subjects position themselves as experts in the field. They have also gained a title and YouTube is often their full-time job. They therefore gain an authoritative characteristic when discussing a certain product, service or brand. This is of course only the case when the product being featured is in line with the subject of content creation. Authority gives the influencer expert power, and according to French and Raven (1959) in the case of expert power internalization of opinions of the influencer is likely to occur. An indicator for this persuasive principle would be amount of videos on the creator's channel with a subject related to "make-up" or "beauty", or the content featured in the sponsored post.

Scarcity is the final principle. The less there is of something, the more valuable it is perceived to be (Goldstein, Martin & Cialdini, 2008). If the potential for wasted opportunity is emphasized in an advertising message this principle is applied. Also, emphasizing the uniqueness of a certain product would also imply scarcity. Scarcity is meant to make a product seem more attractive.

The above principles combined with claims and consequences provide a structure on which to evaluate the persuasiveness of sponsored content on YouTube videos. The presence of the criteria for persuasion above indicate the persuasive nature of a message. The more criteria present, the more persuasive a message is considered to be.

The criteria for persuasion used in this study are person dependent. Content cannot be judged on the basis of these criteria without a human coder. In order to develop a person-independent way to judge sponsored content on YouTube on a much larger scale, percepts that correspond with these criteria need to be found that an automated tool can perceive and interpret.

3.4 Proximal Percepts of Persuasion

As mentioned, an automated tool is not capable of interpreting verbal persuasion tactics, however there are also nonverbal persuasion tactics that are applied when producing persuasive content. In order to develop an automated tool that can check sponsored content for persuasiveness, the proximal percepts that

the tool is able to perceive need to therefore be measurable by software. Developing an automated tool that analyzes all verbal indicators would be nearly impossible, as indexing all possible keywords related to the above mentioned indicators of persuasion would be time-consuming. The focus of this study will be on finding nonverbal proximal percepts that reflect the verbal distal cues for persuasiveness. If these nonverbal proximal percepts could function as indicators for or replacements of the before mentioned verbal distal cues, a software tool could be developed that scans content uploaded to YouTube to determine the persuasiveness of that content.

3.4.1 Nonverbal Proximal Percepts of Persuasion

Fennis and Stel (2011) argue that when a verbal influence strategy is embedded in a nonverbal style that fits its orientation, this boosts the strategy's effectiveness. In fact, nonverbal communication forms a larger part of the communication process than verbal communication. It therefore should follow that it also plays a significant role in persuasion.

Nonverbal immediacy was introduced by Mehrabian (1968). Immediacy herein is defined as a communication behavior that reinforces the perception of closeness in interpersonal relationships. As mentioned before, the influence of social media influencers hinges on the fact that they build and sustain a relationship with their audience. Mehrabian (1968-2) identified a range of nonverbal immediacy cues, which he claims are related to the positive evaluation of a communicator. These include immediacy cues related to positions and postures, movements, facial expressions, and verbalizations. In his paper, Mehrabian (1968-2) describes the criteria for scoring these cues. Mehrabian's work in turn led to a stream of research on nonverbal immediacy in a range on persuasive contexts, including public speaking (Burgoon, Birk & Pfau, 1990) and sales presentations (Leighs & Summers, 2002). Both are relevant to this study. A social media influencers is partaking in a form of public speaking by releasing a video in which they are addressing large audiences. Furthermore, the influencer is of course promoting the product to an audience, thereby functioning as a salesperson for that product of brand.

In the context of public speaking, Burgoon, Birk and Pfau (1990) did a study using Brunswik's framework to determine how nonverbal indicators of persuasion affected source credibility and persuasion. They hypothesized that kinesic immediacy, in the form of more eye contact, forward lean, and facial pleasantness, along with fluency and pitch variety would increase perceived speaker persuasiveness and sociability. Participants were students delivering persuasive speeches for a public speaking course. Audience members evaluated the speakers. In addition, two trained coders independently evaluated the speakers as well.

In the context of sales presentation, Leigh and Summers (2002) found that display of relatively steady eye gaze by the salesperson resulted in more favorable buyer judgment. They also found that frequent speech hesitations yielded less favorable judgments. Teven and Winters (2007) explored the relationship

between self-perceived nonverbal immediacy and self-assessments of motivation, competence, and physical attractiveness, and found that nonverbally immediate pharmaceutical sales representatives perceived themselves to be more competent, motivated, and attractive than did the nonverbally non-immediate group. Mehrabian and Williams (1969) did a study, and found that pitch variety, speech rate, volume, facial activity, gesticulation and eye-contact to be nonverbal indicators of persuasion.

For the purpose of this study, eye contact, distance, fluency, pitch variety, volume and speech rate are used as nonverbal proximal percepts to measure persuasion. Due to limitations presented by measurement software, facial pleasantness, facial activity and gesticulation can unfortunately not be measured. Burgoon, Birk and Pfau (1990) distinguish between vocalic nonverbal persuasion and kinesic/proxemic nonverbal persuasion. Volume, rate of speech, pitch and fluency in this study represent vocalic percepts, while distance to screen and eye-contact represent kinesic/proxemis percepts.

Unrelated to these nonverbal indicators of persuasion, Cialdini's (Goldstein, Martin & Cialdini, 2008) criteria authority can directly be measured through the congruence of popular tags used by the influencer related to sponsorship. Bolatito (2012) mentioned the use of celebrities as a persuasive technique. Celebrities are used to persuade through credibility. Furthermore, celebrities persuade through power. Following French and Raven's (1959) different power bases, celebrity calls on legitimate power. Legitimate power is power that comes from holding a high-status position that is sanctioned by society. When social media influencers with a large following are used this is an inherent persuasive feature of the sponsored content. Celebrity can easily be measured by subscriber count. The use of celebrities can enhance the credibility of claims. Amount of tags on channel related to sponsored content, and subscriber count are therefore also included as percepts to measure persuasion.

3.4.2 Hypotheses

In order for persuasion to be successful, the nonverbal proximal percepts are of importance. Fennis and Stel (2014) state that when a verbal influence strategy is embedded in a nonverbal style that fits its orientation, this boosts the strategy's effectiveness. The approach-avoidance model (Dollard & Miller, 1950) is a psychological gravitational model that describes the basic mixed motive situation that characterizes social interactions. Goals, attitude objects, offers, and opinions are complex stimuli that engage multiple motives. Some of these motives are approach motives, pushing opinions and behaviors toward the goal, while others are avoidance motives, pushing opinions and behaviors away from the goal. Knowles and Linn (2004) applied this model to persuasion. An implication of this is that there are two fundamentally different ways to create change, or persuade. Alpha strategies persuade by activating the approach forces, whereas Omega strategies promote by minimizing these avoidance forces. It is important to understand which of the two is relevant, because different nonverbal delivery styles match different strategies. Alpha persuasion strategies defined by Knowles and Linn (2004) are to make goals, like the

purchase of a certain product or service, more desirable. The indicators of persuasion, or persuasion techniques, used to determine persuasiveness in this study are those indexed by Goldstein, Martin and Cialdini (2008) and fit the Alpha strategies as defined by Knowles and Linn (2004).

Cesario and Higgins (2008) studied the influence of fit between a recipient's orientation and an agent's delivery style. They distinguished between an eager and a vigilant nonverbal delivery style. The eager nonverbal delivery style is approach oriented, while the vigilant delivery style is avoidance-oriented. Promotion-focus people, who represent goals as hopes and aspirations, prefer eager, advancement strategies of engaging with tasks (Cesario & Higgins, 2008). In Cesario & Higgin's study, eagerness is conveyed by gestures that involve animated, broad opening movements; hand movements openly projecting outward; forward-leaning body position; fast body movements; and fast speech rate. This indicates that the two nonverbal measures, speech rate and distance to screen, used for persuasiveness in this study should be accompanied by all the approach-oriented verbal persuasion strategies used to measure persuasion.

H1a: Higher speech rate predicts the presence of consequences
H1b: Higher speech rate predicts the presence of claims
H1c: Higher speech rate predicts the presence of reciprocation
H1d: Higher speech rate predicts the presence of social proof
H1e: Higher speech rate predicts the presence of commitment and consistency
H1f: Higher speech rate predicts the presence of liking
H1g: Higher speech rate predicts the presence of authority
H1h: Higher speech rate predicts the presence of scarcity

H2a: Closer distance to screen predicts the presence of consequences
H2b: Closer distance to screen predicts the presence of claims
H2c: Closer distance to screen predicts the presence of reciprocation
H2d: Closer distance to screen predicts the presence of social proof
H2e: Closer distance to screen predicts the presence of commitment and consistency
H2f: Closer distance to screen predicts the presence of liking
H2g: Closer distance to screen predicts the presence of authority
H2h: Closer distance to screen predicts the presence of scarcity

Persuasiveness of nonverbal behavior is mediated by the sense of attraction and similarity that certain behaviors create. In a lot of interactions, nonverbal behaviors reflect a motivation to create a sense of intimacy and find common ground, as well as a motivation to exert control and influence over the receiver

(Burgoon & Saine, 1978; Patterson, 1983). Burgoon, Birk and Pfau (1990) grouped sets of nonverbal persuasion indicators related to pleasantness, dominance, and arousal. Similarly, Burgoon, Dunbar and Segrin (2002) distinguish three categories of nonverbal appeals for influencing others; appeals to attraction, intimacy, trust and similarity; appeals to dominance, power and status; and expectancy signaling and expectancy violations. Distal cues of persuasion in this study are verbal techniques that draw on attraction and dominance. Scarcity, claims and consequences are verbal techniques that function to make the product seem more attractive, while social proof and liking draw on similarity to persuade and reciprocation, authority, commitment and consistency, and social proof rely on dominance or power of the influencer. Following Fennis and Stel's (2004) logic that verbal influence strategy should be embedded in nonverbal influence strategy, the nonverbal proximal percepts associated with dominance and attraction and similarity as defined by Burgoon, Dunbar and Segrin (2002) should fit with the verbal distal cues for persuasion.

In terms of appeals to attraction and similarity in many interactions, nonverbal behaviors simultaneously reflect a motivation to create a sense of intimacy and common ground as well as a motivation to exert control and influence over the receiver (Burgoon & Saine, 1978; Patterson, 1983). Those same behaviors that signal attraction and similarity between a source and receiver act to enhance the effectiveness of persuasive appeals. Verbal techniques that draw on attraction and similarity are also often used in persuasion (Cialdini, 2001, Bolatito, 2012). In this study claims, consequences, social proof, liking and scarcity are verbal distal cues for persuasion that draw on attraction laws and similarity to persuade.

Power, dominance, and status by their very nature imply influence. Most definitions of power are centered on the ability to influence others through a variety of resources or power bases (Burgoon, Dunbar & Segrin, 2002). Nonverbal behavior is a major avenue for the communication of power, dominance, and status (Henley, 1995). Verbal distal cues that draw on power and dominance considered to measure persuasiveness in this study are reciprocation, authority, commitment and consistency, and social proof.

Among the most powerful indicators of attraction are eye contact and mutual gaze (Burgoon, Dunbar & Segrin, 2002). Studies have shown that eye contact is both encoded (Rubin, 1970) and decoded (Kleinke, Bustos, Meeker & Staneski, 1973) as a sign of attraction and relational positivity. Its absence has been shown to be an indicator of relational distress (Nollar, 1980). Eye contact is a powerful tool used in persuasion. Mehrabian and Williams (1969) found that speakers attempting to be more persuasive used more eye contact with their audience. Burgoon, Birk and Pfau (1990) found that more eye-contact leads directly to more persuasion and also to greater immediacy, which in turn also positively correlated with persuasion. In persuasive contexts, increased use of gaze has been associated with greater success in hitchhiking (Snyder, Grether & Keller, 1974), in asking strangers for change to make a phone call (Brockner, Pressman, Cabitt & Moran, 1982), and in requesting donations to charity (Bull & Robinson,

1981). Because more eye contact is an indicator of attraction and similarity, it is expected that eye contact will positively correlate with the verbal distal cues that draw on attraction and similarity.

More eye contact while speaking is not only related to attraction, but also to dominance of a speaker. Higher status individuals display more visual dominance and are seen as more powerful by observers (Dovidio & Ellyson, 1985 in Burgoon, Dunbar & Segrin, 2002). Eye contact is therefore also hypothesized to be positively correlated to the presence of verbal distal cues that draw on dominance and power.

H3a: Eye contact predicts the presence of consequences
H3b: Eye contact predicts the presence of claims
H3c: Eye contact predicts the presence of reciprocation
H3d: Eye contact predicts the presence of social proof
H3e: Eye contact predicts the presence of commitment and consistency
H3f: Eye contact predicts the presence of liking
H3g: Eye contact predicts the presence of authority
H3h: Eye contact predicts the presence of scarcity

There are a number of vocal variables that are associated with attraction and dominance as well. Siegman (1978), for example, found that a fast rate of speech that is fluent is associated with more favorable attributes than a slower rate of speech. Faster speech rate is also associated with dominance (Burgoon, 1994). Faster rate of speech is, as mentioned earlier, tied to an eager delivery style, which fits approach-oriented persuasion techniques. It is thought to positively correlate with all verbal distal cues used in this study.

Silent pauses, filled pauses, and speech hesitations, or non-fluent speech, are all found to be negatively correlated with listeners' attraction toward speakers (Pope & Siegman, 1966). Higher fluency is therefore thought to predict the presence of verbal distal cues related to attraction and similarity.

H4a: Higher fluency predicts the presence of consequences
H4b: Higher fluency predicts the presence of claims
H4c: Higher fluency predicts the presence of social proof
H4d: Higher fluency predicts the presence of liking
H4e: Higher fluency predicts the presence of scarcity

Burgoon (1994) found dominance to be associated with loudness, a vocal cue that connotes confidence and authority. Volume should therefore be accompanied by the presence of verbal distal cues that use dominance or power to persuade.

H5a: Higher volume predicts the presence of reciprocation
H5b: Higher volume predicts the presence of social proof
H5c: Higher volume predicts the presence of commitment and consistency
H5d: Higher volume predicts the presence of authority

Vocal Pleasantness is another cue of attractiveness, attraction, and similarity according to Burgoon, Dunbar, and Segrin (2002). Burgoon, Birk and Pfau (1990) found greater vocal pleasantness to be associated with greater perceived persuasiveness. Vocal pleasantness, according to them, consists of variables such as fluency and pitch variety. Further research on vocal pitch suggests that low-pitched voices are perceived as more pleasant, and are associated with credibility, trustfulness, safety, tranquility, naturalness, persuasion, power, closeness, attractiveness, and trust (Chattopadhyay et al., 2003). Furthermore, low-pitched voices generate higher levels of unaided and aided recall (Rodero et al., 2010).

H6a: Lower pitch predicts the presence of consequences
H6b: Lower pitch predicts the presence of claims
H6c: Lower pitch predicts the presence of social proof
H6d: Lower pitch predicts the presence of liking
H6e: Lower pitch predicts the presence of scarcity

Studies have shown that people generally select closer interacting distances with those who are perceived to be attractive, friendly, and positively reinforcing (Byrne, Ervin & Lamberth, 1970; Gifford, 1982). Distance is also mentioned as a nonverbal expression of dominance or power by Burgoon, Dunbar and Segrin (2002). Burgoon, Buller, Hale, and deTurck (1984) found that closer proximity conveys greater dominance, because it means a person with higher status is invading the space of a subordinate. Research has also shown that close proximity is related to increased credibility (Mehrabian, 1969). A closer distance is also an indicator of an eager delivery style. A closer distance should therefore predict the presence of approach-oriented verbal distal cues.

As mentioned earlier subscriber count is an indicator of celebrity, and with that in itself an appeal to dominance, power and status. It is therefore assumes to predict the presence of all verbal distal cues that appeal to dominance or power in order to persuade.

H7a: Higher subscriber count predicts the presence of reciprocation

H7b: Higher subscriber count predicts the presence of social proof

H7c: Higher subscriber count predicts the presence of commitment and consistency

H7d: Higher subscriber count predicts the presence of authority

Finally, the most popular tags on a channel can be an indicator of authority on the subject of the sponsored video if they are related to that subject. Popular channel tags indicate that video's containing those tags are the most viewed, or most popular, videos uploaded by that influencer. Tags refer to the subject of a video. Popularity of tags indicate that viewers turn to the influencer for content related to that subject, giving that person authority on the subject.

H8a: Number of channel tags predicts the presence of authority.

4. METHOD

This study's aim is to evaluate sponsored content on YouTube for persuasiveness. N=100 sponsored videos were coded on the verbal distal cues that indicated persuasive content. These verbal distal cues were person-dependent, and all initial coding was done by 3 coders, although two separate methods were used. Only the first coder coded all 100 videos, and did so by indicating the frequency in which the distal cues occurred during the video. The second and third coder coded the same 25 videos in order to check for interrater reliability by indicating whether the distal cues were present or not. The videos were then coded using an array of available software tools that measured the nonverbal proximal percepts that indicate persuasiveness. Results from both coding methods were compared and analyzed to determine if the human-independent proximal percepts are indeed representative of the human-dependent distal cues. If this is the case, then an automatic process can be developed to scan content uploaded onto YouTube to determine whether the information in the video is persuasive in nature.

4.1 sampling

The unit of analysis were individual sponsored videos posted on YouTube. Because there is such a large amount of videos uploaded daily, roughly one hundred hours of video every minute, all with differing subject matter, it was necessary to narrow this amount down. In this study the focus was on "beauty channels" where vloggers, sometimes referred to as "beauty gurus", give makeup tutorials, review cosmetics products, share skincare routines, etc. Three of the top one hundred most subscribed-to channels on YouTube are beauty vlogs, including those of Bethany Mota ("Macbarbie07") from the United States, Zoe Sugg ("Zoella") from the U.K., and Marian Castrejon ("Yuya") from Mexico. Castrejon's channel has

the second highest number of subscribers in her country. There are over 45.000 YouTube channels that upload fashion and beauty related content, and each month over 50 million people watch over 1.6 billion minutes of consumer-created fashion and beauty videos on YouTube (Georgia, 2015). It is fair to say that these types of channels have a significant presence on YouTube.

25 beauty channels were randomly chosen for this study by entering the search term 'every-day makeup tutorial' on YouTube. Only channels with more than 100,000 subscribers were included to ensure that the content creators are indeed influencers with a large following. 4 sponsored videos per channel were selected for the purpose of this study, with a total of 100 videos being coded. To determine whether a video is sponsored or not the description box under the video had to state the video was sponsored, that the creator partnered with a brand or company to make the video or that the video was an advertisement. In some cases it was not included in the description box that the video was sponsored, but rather the influencer mentioned during the video that a company was sponsoring said video. Youtubers are required by federal law in the US to disclose when videos are sponsored, and in the UK influencers are explicitly required to put a text disclaimer on screen indicating the video is an ad or sponsored.

4.2 Analyzing videos for verbal distal cues

Coding categories were derived from Cialdini's principles of persuasion as described by Goldstein, Martin and Cialdini (2008) with the addition of claims and consequences as defined by Bolatito (2012). The researcher used a coding scheme (see table 1) in which questions were posed about the content of the sponsored videos. A distal cue was present if the question posed describing the percept could be answered with yes. Resnik and Stern (1977) developed a similar procedure to measure the information content of advertisements, and since then this procedure had been used in almost 60 studies by the year 1996 (Abernethy & Franke, 1996) and has been cited in more than 700 studies. This study aims to introduce an improved measurement procedure that is more comprehensive. For each verbal distal cue the coder indicated the frequency of occurrence. A score for persuasion was derived in the following manner:

*Score persuasion = criteria*frequency/length of video*

The scores for each distal cue were derived in the same manner; by dividing the frequency in which the proximal percept was observed by the length of the persuasive attempt.

Persuasion		Code	Frequency
Consequences	Is the influencer tying the consequences of using the product to increased personal value?	Yes/No	
Claims	Is the influencer making claims about the product that cannot be objectively substantiated?	Yes/No	
Reciprocation	Is the influencer offering something in return for purchasing of the product (for example a discount) or offering free samples of the product?	Yes/No	
Social proof	Is the influencer endorsing the product?	Yes/No	
Commitment and consistency	Is the influencer asking for a commitment of any kind?	Yes/No	
Liking	Is the influencer comparing their use of the product to the viewer?	Yes/No	
Authority	Is the influencer an authoritative figure on the subject?	Yes/No	
Scarcity	Is the influencer claiming in any way that the product is scarce or implying that non-purchase is wasted opportunity?	Yes/No	

Table 1. Coding Scheme Distal Cues

4.2.2 Interrater Reliability

In order to determine whether the verbal distal cues indeed represent persuasiveness of a sponsored video, the first 25 videos of the first round of coding were coded by 2 additional coders. The 2 additional coders were asked to code the first video from each channel, scoring yes or no on the criteria for persuasion described in the coding scheme. They did not measure the frequency of occurrence, but only whether the verbal distal cues were present or not in the video. The additional coders were an avid watcher of the YouTube content included in the study, and a published researcher. Both coders each sat down with the researcher in two separate sessions and were instructed on the coding procedure. The coders then independently conducted the manual coding at their own discretion. Results were sent to the researcher via email.

Interrater reliability between the three raters was measured using intraclass correlation measure in IBM's statistical analysis software SPSS. Intraclass correlation is a correlation coefficient that assesses the consistency between measures, and is an appropriate measure to assess the consistency between judges' ratings of a set of objects (Field, 2013). As can be observed in table 1, Analysis of interrater reliability between all three coders resulted in an intraclass correlation of .644 ($p<0.001$). However, correlation between ratings by all coders show that the ratings from coder 3 had a low correlation with coder 1 and

coder 2. The third coder was interviewed following these results, and indicated that coding did not occur in optimal conditions. The coder was distracted while performing the task. For this reason, interrater reliability was based on congruence between data from the researcher and second coder.

	Coder 1	*Coder 2*	*Coder 3*	
Coder 1	1.00	0.785	0.188	
Coder 2	0.785	1.00	0.251	
Coder 3	0.188	0.251	1.00	
Average Measure Intraclass Correlation Coefficient				0.644*

**at a significance level >0.001*

Table 2. Interrater Reliability Coder 1, Coder 2 & Coder 3

Analyzing interrater reliability between the researcher and first additional coder was conducted using Cohen's Kappa and showed a score 0.758. According to Landis and Koch (1977) a score between 0.60 and 0.80 can be considered substantial. It can therefore be concluded that the human-dependent codebook is indeed a reliable tool to measure persuasion.

Consequences			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*12*	*1*	*13*
		No	*7*	*5*	*12*
		Total	*19*	*6*	*25*
				Agreement	*68%*
Claims			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*17*	*2*	*19*
		No	*0*	*6*	*6*
		Total	*17*	*8*	*25*
				Agreement	*92%*
Reciprocation			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*7*	*1*	*8*
		No	*0*	*17*	*17*
		Total	*7*	*18*	*25*
				Agreement	*96%*
Social Proof			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*25*	*0*	*25*
		No	*0*	*0*	*0*
		Total	*25*	*0*	*25*
				Agreement	*100%*
Commitment & Consistency			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*1*	*1*	*2*
		No	*0*	*23*	*23*
		Total	*1*	*24*	*25*
				Agreement	*96%*
Liking			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*17*	*2*	*19*
		No	*1*	*5*	*6*
		Total	*18*	*7*	*25*
				Agreement	*88%*
Authority			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*18*	*0*	*18*
		No	*5*	*2*	*7*
		Total	*23*	*2*	*25*
				Agreement	*80%*
Scarcity			***Rater 2***		
			Yes	*No*	*Total*
	Rater 1	*Yes*	*1*	*3*	*4*
		No	*1*	*20*	*21*
		Total	*2*	*23*	*25*
				Agreement	*84%*
				Cohen's Kappa Score all items	*0.758**

**at a significance level >0.001*

Table 3. Interrater Reliability Researcher & Coder 1

4.4 Analyzing videos for nonverbal proximal percepts

The proximal percepts that were determined to represent persuasion included in this study were volume, pitch, rate of speech, fluency, distance to screen, eye-contact, authority, and celebrity. These were nonverbal cues that could be detected by the use of software, which would in future cases be 'the observer', and were derived from the literature available surrounding nonverbal methods of persuasion.

Software tools PRAAT and Noldus Facereader were used to analyze the videos. All videos were downloaded as mp4 format for visual analyses and as mp3 format for audio analyses. To prepare the videos for analysis each video was viewed by the researcher, determining the timeframe in which the influencer was discussing the sponsored content. Visual analyses were only run on the seconds of the video that included sponsored content, and audio files were edited to only include sponsored content. This was necessary in order to be able to run the video and audio files through the analysis software.

Speech recognitions software PRAAT was used to analyze volume and pitch. Audio files were converted from .mp3 format to .wav format to ensure analysis was more precise. The program measured mean intensity in dB and mean pitch in Hz. Fluency and rate of speech were analyzed running the script Praat Script Syllable Nuclei v2, developed by Nivja de Jong and Ton Wempe (2011) for the purpose of measuring speech rate in a large-scale study carried out at the University of Amsterdam (Boersma, 2001). To measure rate of speech number of syllables divided by the duration of the audio clip was used. In order to determine fluency, the measure for breakdown fluency was used. Breakdown fluency equals the number of silent pauses divided by the total phonation time. De Jong and Bosker (2013) advise to use a threshold of 250-300 milliseconds pause duration. A measure of 0.3 was indeed chosen as threshold for pause duration.

Noldus FaceReader was used to analyze eye contact. In order to prepare videos for analyses, seconds including sponsored content needed to be recorded. In this study a trial version of FaceReader was used, in which analyses of up to 120 seconds were possible. After that videos needed to be loaded into a new analysis to analyze the next 120 seconds of video, and so on. Furthermore, due to it being a trial version bulk analysis was not possible. Each analysis had to be done consecutively. FaceReader measured gaze direction for every third frame of the video, where gaze direction could be classified as forward, left, right, unknown, find_failed or fit_failed. The occurrence of 'forward' was divided by the total number of frames analyzed to derive a measure.

To determine distance to screen, a screenshot was made of each video of a frame including sponsored content. This screenshot was analyzed in Adobe Photoshop for total pixels versus pixels of the influencer. The amount of pixels filled by the influencer was divided by the total amount of pixels to derive a measure.

Authority on the subject that the sponsored video was about was determined using a chrome extension by VidIQ. The extension offers the possibility to view top performing tags on YouTube channels. The number of top performing tags that were related to the content of the sponsored videos were recorder for each video. The higher the number of tags the greater the influencer's authority on the subject.

Finally, in order to determine celebrity, the amount of subscribers for each channel was derived from YouTube. A higher number of subscribers indicated more popularity and a higher amount of celebrity for the influencer.

Scores on these variables were standardized using Z-scores and log-transformation in order to transform the data to fit the measurement models.

Persuasion		Code
Volume	How loud is the person speaking?	dB
Pitch	Are they speaking in a high pitch?	Hz
Rate of speech	How many words are spoken per minute (normal rate 120 to 160 words per minute)?	Nr of syllables/duration of video
Fluency	free of lengthy pauses, hesitations, repetitions, sentence changes, interruptive vocalizations	Nr of silent pauses/phonation time
Distance to screen	Speakers who were actually persuasive leaned back less or adopted closer distances. physical proximity, direct body orientation, forward lean	Pixels influencer/total pixels
Eye-contact	Speakers who were actually persuasive used more eye contact with their audience	Frames gaze direction forward/total frames analyzed
Congruence popular tags & sponsorship	Number of top performing tags on channel pertaining to sponsored video subject.	Nr of tags
Subscriber count	How many subscribers does the influencer have?	Subscriber count

Table 4. Coding Scheme Proximal Percepts

4.5 statistical analyses

All statistical examinations were conducted with the statistical software SPSS by IBM, after collecting all data via excel. First, distribution of frequencies were analyzed. Descriptive statistics were used to inspect the data.

An analysis of the validity of the measurement scale for persuasion based on verbal distal cues, and the measurement scale for persuasion based on nonverbal proximal percepts was the next step. Factor analysis is applied to determine whether all variables measured persuasion.

In order to determine the predictive value of the nonverbal proximal percepts for the verbal distal cues, a regression analyses is conducted (Field, 2013). The next step is to check data for violation of assumptions of both data sets, in order to determine if the use of statistical model for multiple linear regression is justified.

With regard to sample size, according to Green's (1991) recommendations on sample size at least 116 observations are needed in this study for regression analysis to have statistical power. In this study there were a total of 100 observations, of which 95 valid.

Further assumptions for linear multiple regression are a lack of significant outliers, a linear relationship between predictor variables and dependent variables, independence of errors, homoscedasticity of residuals, normal distribution of errors**,** and no multicollinearity (Field, 2013).

Data was first checked for violation of assumptions and bias by determining whether there were any outliers. Outliers can bias the parameter estimates and influence the error associated with that estimate (Field, 2013).

Next, linearity was determined. Multiple regression analysis is based on a linear model, so it is of importance that the outcome variables are linearly related to any predictors (Field, 2013). Data was explored using a scatter plot to check for linear relationships between variables. Studentized residuals were plotted against predicted values, with a horizontal band indicating a likely linear relationship. Homoscedasticity was assessed by virtual inspection of the plot of studentized residuals against undstandardized predicted values as well. Independence of errors was checked for using the Durbin-Watson statistic.

Data was then checked for normal distribution of errors. For the estimates of the parameters that define a model to be optimal the residuals in the population must be normally distributed (Field, 2013).

Finally, the problem of multicollinearity is of importance in regression analysis. Multicollinearity leads to problems in understanding which independent variable contributes to the variance explained in the dependent variables.

Lastly, the regression analyses was run after adjusting for violation of assumptions. A multiple linear regression analysis was used to determine the predictive value of the independent variables for the dependent variables in this study. Using this method, conclusions can be drawn regarding to what extend the nonverbal proximal percepts can predict the presence of verbal distal cues relating to persuasion.

5 RESULTS

5.1 Descriptive Statistics

Descriptives show that 100 cases were included in the analysis of nonverbal proximal percepts eye contact and channel tags, while 95 cases were included to measure the remaining proximal percepts and distal cues. This was due to the fact that 5 of the videos selected did not include any speaking by the influencer, but were more visually oriented with a music added as a soundtrack. Because these videos could not be analyzed for most of the verbal distal cues and nonverbal proximal percepts, these 5 cases were excluded from any further analyses. Descriptive statistics are set out for the scale to measure verbal distal cues as well as the scale to measure nonverbal proximal percepts. Descriptives for the scale of distal cues contains frequencies of occurrence in order to inspect the data.

	N	Not present	Present	Min	Max	Mean	St. Dev.
Distal Cues							
Consequences	95	66%	34%	0	4	0.5368	0.92034
Claims	95	6%	94%	0	30	7.4632	6.28374
Reciprocation	95	68%	32%	0	5	0.6316	1.12091
Social Proof	95	2%	98%	0	26	5.5789	4.77043
Commitment & Consistency	95	56%	44%	0	4	0.6842	0.93698
Liking	95	13%	87%	0	24	4.4842	4.69691
Authority	95	80%	20%	0	4	0.3053	0.73040
Scarcity	95	85%	15%	0	5	0.2421	0.71035
Proximal Percepts							
Volume	95			48.87	74.85	64.5882	5.60157
Pitch	95			185.78	299.71	227.2932	21.71578
Rate of Speech	95			2.51	5.37	4.2320	0.56841
Fluency	95			0.00	0.47	0.1275	0.10378
Screen Fill	95			0.02	0.86	0.3472	0.12612
Eye Contact	100			0.00	0.86	0.3463	0.19405
Channel Tags	100			0.00	49.00	10.2500	10.55182
Subscriber Count	95			150,463	5,489,810	1,206,089.080	1,120,740.328

Table 5. Descriptive Statistic Coding

The scale on which the distal cues were measured as described earlier was the frequency of occurrence of the cues divided by the length of the video. The minimum measure for distal cues in the first round of coding was 0, which occurred when a video did not contain the distal cue. For each distal cue there was at least 1 video that did not contain that verbal distal cue. Results also show in what percentage of cases distal cues were and weren't present. It can be observed that the distal cues social proof and claims occur in almost all videos, while scarcity and authority were the least occurring distal cues. Liking occurred in

most videos as well. Not only did liking, social proof and claims occur most, but they also have an average frequency of occurrence much higher than the other distal cues. By inspecting descriptives alone, the early conclusion can be drawn that these are the most used persuasive verbal techniques observed in the videos in this study.

Nonverbal roximal percepts volume, pitch, rate of speech, tags and subscriber count were measured in a continuous scale, and fluency, screen fill, eye contact were measured as a percentage of the total. The mean for fluency indicates that on average 12% of phonation time consisted of silent pauses. The measure screen fill indicates distance to screen, with a higher measure meaning less distance to screen. The mean shows that on average influencers filled 34% of the screen. Finally, the above table shows that on average eye contact was maintained for 34% of the video for all cases.

5.2 Reliability and validity of the instruments

A reliability analysis was run on the scale that measured verbal distal cues and showed a Cronbach's Alpha of .453. Removal of items reciprocation and scarcity would increase this score slightly to .468 and .463 respectively. Stepwise removal was done of items leading to a higher Cronbach's Alpha, and the highest was .531 after removal of all items except claims, social proof, and liking. This slight increase in Cronbach's Alpha does not warrant the removal of items.

As described earlier, verbal indicators can appeal to attraction or similarity, or call on dominance and power to persuade. A factor analysis was run on the scale that measured the verbal distal cues in order to determine if verbal indicators indeed loaded on 2 scales. As can be seen below in table 7, claims, consequences and social proof, all related to attraction or similarity, indeed loaded on the second factor, while reciprocation, commitment and consistency, and scarcity, indicators that call on power and dominance, loaded on the first factor. Authority and liking however, were found to load on a third factor. This however does make sense, as utterances coded under liking were often related to a tutorial style video, where the influencer was showing the consumers how to use a product and therein comparing their use of the product to that of the viewer. A tutorial can of course only be given if the influencer has knowledge or expertise, or authority, on the subject or product being discussed.

	Factor 1	*Factor 2*	*Factor 3*
Consequences	.093	**.625**	.069
Claims	-.094	**.822**	-.038
Reciprocation	**.877**	-.024	.010
Social proof	-.090	**.663**	.288
Commitment and Consistency	**.760**	.192	-.096
Liking	.107	.146	**.797**
Authority	-.083	.059	**.796**
Scarcity	**.534**	-.194	.079
Eigenvalue	1.856	1.663	1.137
% of variance after rotation	23%	20%	14%

Table 6. Factor Analysis of Verbal Distal Cues Scale

Running an exploratory factor analysis with principle component analysis extraction method and a varimax rotation on the scale that measured nonverbal proximal percepts, resulted in the items loading on three factors. Burgoon, Birk and Pfau (1990) categorize volume, pitch, rate of speech and fluency as vocalic nonverbal indicators for persuasion, and distance to screen and eye contact as kinesic or proxemic indicators for persuasion. Channel tags and subscriber count are direct measures of celebrity and authority. It was expected that variables would load on three factors, however the vocalic percepts for persuasion as well as the kinesic/proxemic percepts for persuasion do not all load on one factor each. Channel tags and subscriber count were expected to load on a one factor as well, but as can be seen in table 7 below, this is not the case.

It was expected that fluency would load negatively, as the measure used is hypothesized to negatively correlate with persuasion. Subscriber count was thought to positively load on a factor, as a larger subscriber count should be associated with higher persuasiveness. The table below however, shows that subscriber count loads negatively.

	Factor 1	*Factor 2*	*Factor 3*
Volume	**.800**	-.191	.198
Pitch	.050	-.076	**.803**
Rate of speech	**.869**	-.040	.186
Fluency	**-.862**	.083	.140
Screen fill	-.035	**.876**	.008
Eye contact	.095	.053	**.350**
Channel tags	-.212	**.822**	-.119
Subscriber count	.031	.145	**-.702**
Eigenvalue	2.541	1.380	1.156
% of variance after rotation	32%	17%	15%

Table 7. Factor analysis of Nonverbal Proximal Percepts scale

5.3 Assumptions

In order to determine whether a linear relationship was present between predictor variables, the nonverbal proximal percepts, and the dependent variables, the verbal distal cues, scatterplots were produced plotting the studentized residuals against predicted values. In all scatterplots the residuals formed a horizontal band, indicating that the relationships between the independent and dependent variables are all likely linear. Inspection of partial regression plots also shows linear relationships between the dependent and each independent variables, albeit weak linear relationships.

Independence of errors was checked for using the Durbin-Watson statistic. Each regression analysis showed a Durbin-Watson near 2, indicating that the errors are independent in the dataset. The results are summarized in table 8.

The plot of studentized residuals against predicted values was also inspected to check for homoscedasticity. Plots indicated that there was indeed homoscedasticity.

Multicollinearity was tested for by running collinearity diagnostics. Results showed that all VIF values were below 3, indicating that multicollinearity was not an issue for this data set (Field, 2013).

Outliers were detected using casewise diagnostics in SPSS. To correct for these outliers, regression analyses were run again filtering out cases with studentized residual values greater than 2.5 (Simonoff, 2016). Table 8 lists the outliers that were removed for each regression analysis.

Finally, normal distribution of errors was assessed. This was done by visually inspecting the P-P plot in the SPSS output. Data was normally distributed for the regression analyses where the dependent variables were claims, social proof, commitment & consistency, and liking. Data was found to be positively skewed for the regression analyses where the independent variables were consequences, reciprocation, authority and scarcity. Referring back to the descriptive statistics, it is worth noting that these are the variables where less occurrence was measured. This could be an explanation for a non- or less normal distribution. Because the linear regression model is fairly robust to non-normality however, this method will still be used to analyze results.

Dependent variable	*Independent variables*	*Durbin-Watson*	*VIF*	*Outliers*	*ZResid*
Consequences	*Pitch*	2.154	1.090	22	4.886
	Rate of Speech		1.774	59	3.382
	Fluency		1.699	72	4.388
	Distance to Screen		1.023		
	Eye Contact		1.024		
Claims	*Pitch*	1.992	1.090	59	3.222
	Rate of Speech		1.774	75	3.790
	Fluency		1.699	88	3.411
	Distance to Screen		1.023		
	Eye Contact		1.024		
Reciprocation	*Volume*	2.082	1.757	53	2.889
	Rate of Speech		1.725	67	3.920
	Distance to Screen		1.050	98	4.952
	Eye Contact		1.012		
	Subscriber Count		1.021		
Social Proof	*Volume*	1.660	1.905	79	5.148
	Pitch		1.176		
	Rate of Speech		2.176		
	Fluency		1.835		
	Distance to Screen		1.054		
	Eye Contact		1.025		
	Subscriber Count		1.095		
Commitment & Consistency	*Volume*	1.985	1.757	56	3.291
	Rate of Speech		1.725	92	4.296
	Distance to Screen		1.050		
	Eye Contact		1.012		
	Subscriber Count		1.021		
Liking	*Pitch*	1.763	1.090	94	3.153
	Rate of Speech		1.774		
	Fluency		1.699		
	Distance to Screen		1.023		
	Eye Contact		1.024		
Authority	*Volume*	2.197	1.812	50	3.289
	Rate of Speech		1.725	72	4.837
	Distance to Screen		1.330	74	4.585
	Eye Contact		1.012		
	Tags		1.409		
	Subscriber Count		1.037		
Scarcity	*Pitch*	2.022	1.090	67	3.884
	Rate of Speech		1.774	76	3.006
	Fluency		1.699	86	6.039
	Distance to Screen		1.023		
	Eye Contact		1.024		

Table 8. Assumptions for Multiple Linear Regression Analysis

5.4 Regression analyses

To analyze the combined predictive power of the nonverbal proximal percepts on the verbal distal cues as set out in the hypotheses on the distal cues, multiple linear regression was applied. Multiple linear regression is an appropriate method to examine the predictive value of multiple independent variables on one dependent variable (Field, 2013). Forced entry was used as a regression method, which is warranted when inclusion if independent variables is based on good theoretical reasoning (Field, 2013). For every verbal distal cue, a multiple regression was run using the hypothesized independent variables, the nonverbal

proximal percepts, theorized to predict the presence of the verbal distal cue. The R square and adjusted R square were used to calculate the explained variation.

A multiple regression was run to predict the presence of verbal distal indicator consequences from pitch, rate of speech, fluency, distance to screen and eye contact. R^2 for the overall model was 14.5% with an adjusted R^2 of 9.6%. Pitch, rate of speech, fluency, distance to screen, and eye contact significantly predicted the presence of verbal distal cue consequences, $F(5, 86)=2.926$, $p<.05$. However, only pitch and distance to screen added statistically significantly to the prediction, $p < .05$. Both results are in line with expectations regarding the relationship between the variables. Distance to screen was measured as the percentage of the screen filled by the influencer, thus with a higher number indicating a closer distance to screen. Regression coefficients and standard errors can be found below in table 9.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				2.926	5, 86	.017	.096
Intercept	.002	.000					
Pitch	.001	.000	.253*				
Rate of Speech	.000	.001	.041				
Fluency	.000	.001	-.029				
Distance to Screen	.001	.000	.256*				
Eye Contact	-.001	.000	-.156				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 9. Regression Analysis Consequences

Multiple regression was also run to predict the presence of verbal distal cue claims from nonverbal proximal percepts pitch, rate of speech, fluency, distance to screen and eye contact. R^2 for the overall model was 9.1% with an adjusted R^2 of 3.9%. Pitch, rate of speech, fluency, distance to screen, and eye contact did not significantly predict the presence of claims. It can be concluded that the presence of claims cannot be predicted by the presence of any of the proximal percepts based on the data from this study. Regression coefficients and standard errors can be found below in table 10.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				1.730	5, 86	.136	.039
Intercept	.031	.002					
Pitch	.004	.002	.199				
Rate of Speech	.004	.003	.187				
Fluency	.001	.003	.037				
Distance to Screen	-.001	.002	-.059				
Eye Contact	-.002	.002	-.104				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 10. Regression Analysis Claims

The predictive value of volume, rate of speech, fluency, distance to screen and eye contact on reciprocation was also analyzed using a multiple regression model. R^2 for the overall model was 10.3% with an adjusted R^2 of 5%. Volume, rate of speech, fluency, distance to screen and eye contact however was not found to significantly predict the presence of verbal distal cue reciprocation. The presence of reciprocation can therefore not be predicted by the presence of the distal cues mentioned. Distance to screen did add statistically significantly to the prediction of reciprocation, as can be seen below. The relationship is however not as expected, with an increase in the measure for distance to screen leading to a decrease in the use of reciprocation as persuasive technique. All statistics can be found in table 11 below.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				1.964	5, 86	.092	.050
Intercept	.003	.001					
Volume	.000	.001	-.063				
Rate of Speech	.001	.001	.209				
Distance to Screen	-.001	.001	-.227*				
Eye Contact	.000	.001	.074				
Subscriber Count	.000	.001	-.039				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 11. Regression Analysis Reciprocation

The predictive value of volume, pitch, rate of speech, fluency, distance to screen, eye contact and subscriber count on social proof was analyzed with a multiple regression model as well. R^2 for the overall model was 11.1% with an adjusted R^2 of 3.9%. Volume, pitch, rate of speech, fluency, distance to screen, eye contact and subscriber count did not significantly predict the presence of verbal distal cue social proof. None of the independent variables were found to statistically significantly predict social proof. The

hypotheses regarding a predictive relationship between the proximal percepts and social proof are therefore rejected. All statistics for this regression analysis can be found in table 12.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				1.533	7, 86	.167	.039
Intercept	.024	.002					
Volume	-3.192E-6	.002	.000				
Pitch	.003	.003	.177				
Rate of Speech	-.004	.002	-.198				
Fluency	-.002	.002	-.097				
Distance to Screen	.000	.002	-.023				
Eye Contact	.001	.002	.081				
Subscriber Count	.003	.002	.159				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 12. Regression Analysis Social Proof

The regression model was also used to test whether the presence of commitment & consistency could be predicted by volume, rate of speech, distance to screen, eye contact and subscriber count. R^2 for the overall model was 14.7% with an adjusted R^2 of 9.8%. Volume, rate of speech, fluency, distance to screen and eye contact significantly predicted the presence of the verbal distal cue commitment & consistency, $F(5, 87)=2.988$, $p<.05$. None of the predictors statistically significantly added to the prediction however. Again, distance to screen negatively predicts the presence of commitment & consistency, which is in line with expectation. Subscriber count also again negatively predicts the presence of commitment & consistency, which goes against expectations. Table 13 contains all statistics.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				2.988	5, 87	.015	.098
Intercept	.003	.000					
Volume	.001	.001	.194				
Rate of Speech	.000	.001	.088				
Distance to Screen	-.001	.001	-.177				
Eye Contact	.000	.001	.031				
Subscriber Count	-.001	.000	-.118				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 13. Regression Analysis Commitment & Consistency

Regression analysis of the predictive value of pitch, rate of speech, fluency, distance to screen, and eye contact on the presence of distal cue liking showed an overall predictive value of 7.8%. R^2 for the overall model was 12.8%. Pitch, rate of speech, fluency, distance to screen, and eye contact together

significantly predicted the presence of distal cue liking, $F(5, 88)=2.565$, $p<.05$. Individually, only pitch and distance to screen significantly added to the predictive value. Pitch positively predicts liking, while the measure used for distance to screen negatively predicts liking. Both these findings are in line with expectations. Table 14 contains all statistics for the multiple regression analysis.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				2.565	5, 88	.033	.078
Intercept	.017	.001					
Pitch	.003	.002	.222*				
Rate of Speech	.002	.002	.136				
Fluency	.001	.002	.097				
Distance to Screen	-.003	.002	-.206*				
Eye Contact	-.002	.002	-.119				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 14. Regression Analysis Liking

Multiple regression was also run in order to predict the presence of authority with nonverbal proximal percepts volume, rate of speech, distance to screen, eye contact, channel tags, and subscriber count. R^2 for the overall model was 7.1% with an adjusted R^2 of 0.6%. Volume, rate of speech, distance to screen, eye contact, tags and subscriber count did not significantly predict the presence of authority. None of the individual proximap percepts have predictive power for the presence of verbal distal cue authority. It was expected that channel tags would strongly predict the presence of authority, as it is an unobtrusive measure of authority. A relatively strong relationship was found, but it was not statistically significant. All results of the analysis can be found in table 15 below.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				1.085	6, 85	.378	.006
Intercept	.001	.000					
Volume	.000	.000	.252				
Rate of Speech	.000	.000	-.145				
Distance to Screen	.000	.000	-.080				
Eye Contact	-9.351E-7	.000	.000				
Channel Tags	.000	.000	.211				
Subscriber Count	.000	.000	.105				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 15. Regression Analysis Authority

Finally, multiple regression was used to predict the presence of the last verbal distal cue scarcity. R^2 for the overall model was 4.6% with an adjusted R^2 of 1%. Pitch, rate of speech, fluency, distance to screen, and eye contact did not significantly predicted the presence of distal cue consequences. Again none of the nonverbal proximal percepts were found to statistically significantly add to the predictive power. Results are down below in table 16.

	B	SE_B	β	F	*df*	*p*	Adj. R^2
Overall Model				.824	5, 86	.536	-.010
Intercept	.000	.000					
Pitch	5.281E-5	.000	.044				
Rate of Speech	.000	.000	-.105				
Fluency	.000	.000	-.234				
Distance to Screen	-8.169E-5	.000	-.068				
Eye Contact	8.460E-5	.000	.069				

Note. *$p<.05$; *B* = unstandardized regression coefficient; SE_B = Standard error of the coefficient; β = standardized coefficient

Table 16. Regression Analysis Scarcity

Results are summarized in figure 3 below. Brunswik's lens model adapted to the current study was reused, this time only modelling the significant relationships. The figure shows that only the presence of consequences, commitment & consistency, and liking could be predicted by the presence of the nonverbal proximal percepts. In 9.6% of cases the presence of verbal distal cue consequences could be predicted by the presence of nonverbal vocalic proximal percepts pitch, rate of speech and fluency, and by the presence of nonverbal proxemic proximal percepts distance to screen and eye-contact. In 9.8% of cases the presence of verbal distal cue commitment could be predicted by the presence of nonverbal vocalic proximal percepts volume and rate of speech, and nonverbal proxemics proximal percepts distance to screen, eye contact and subscriber count. Finally, the last significant predictive value measured was the combined predictive power of pitch, rate of speech, fluency, distance, and eye contact, which predicted the presence of liking in 7.8% of the cases included in this study.

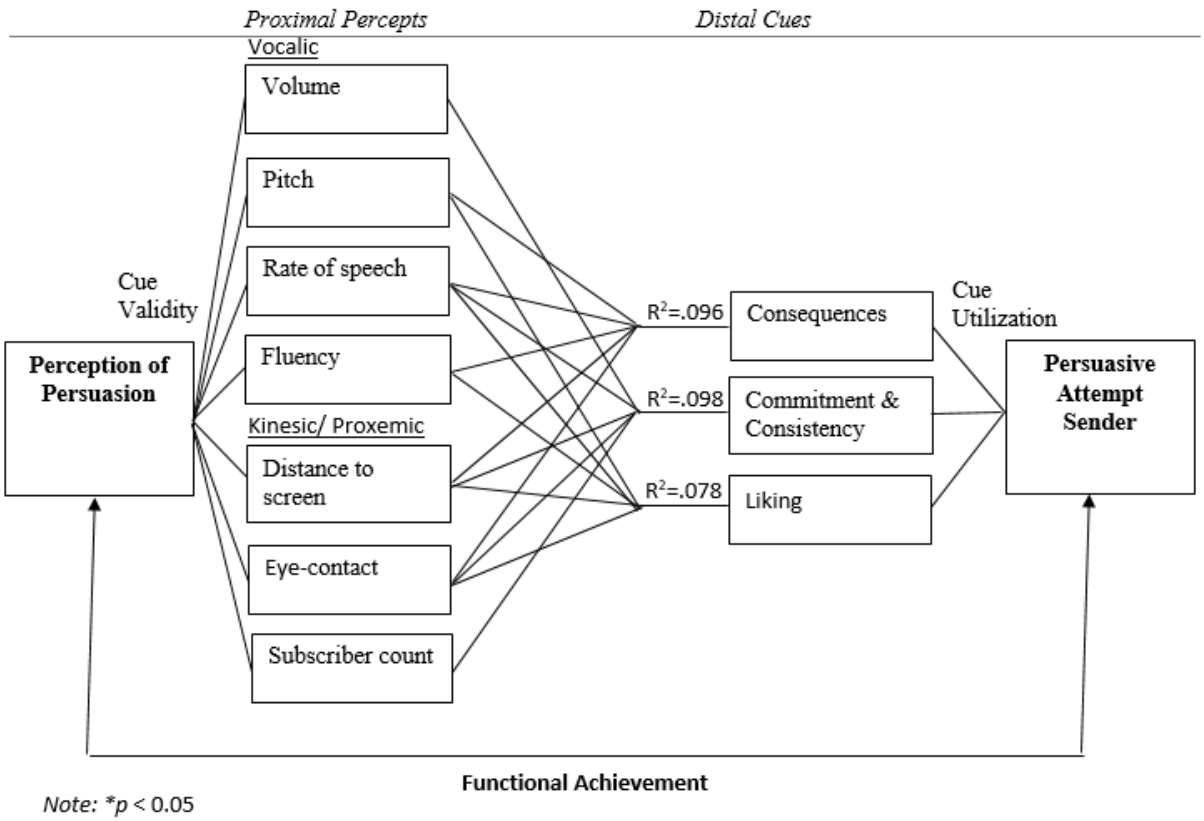

Figure 3. Brunswik's lens model (1956) adapted to current study results

6 DISCUSSION

Overall, it should be noted that while this research was set out with the best intentions to develop a tool to automatically scan sponsored content on YouTube for persuasion, it failed to find predictive value for all verbal distal cues of persuasion based on the nonverbal proximal percepts included in this study. A few of the predictive relationships expected however, were proven significant in this study.

Evidence was found that the presence of consequences, commitment & consistency and liking could be predicted by the nonverbal proximal percepts set out in this study. Furthermore, pitch has statistically significant power in predicting the presence of consequences and liking, and distance to screen has statistically significant power in predicting the presence of consequences, reciprocation and liking. These results indicate that nonverbal proximal percepts for persuasion can indeed predict the presence of verbal distal cues, reinforcing what Fennis and Stel (2014) claim, namely that the verbal influence strategy is embedded in a nonverbal delivery style. However, the predictive power of these nonverbal proximal percepts were low.

The low reliability measure on the scale to measure verbal distal cues make that interpretations of these results are not a definite basis on which to reject or accept the idea that a tool could be developed to predict persuasiveness in sponsored content. Future research is necessary to determine a valid and reliable measure

for verbal distal cues indicating persuasion in sponsored content on YouTube in order to develop a more comprehensive tool.

While not all relationships expected were proven in this study, it is a valuable addition to the body of research on persuasive content in advertising. It is one of a few studies that focuses on the persuasive nature of sponsored content on YouTube. While YouTube is becoming increasingly important as an advertising platform, and social media influencers are becoming the new channel through which to advertise (Hearn & Schoenhoff, 2016; Gormley, 2016), there is to this date little research into sponsored content and it's persuasive nature.

Limitations of this study

This study was subject to various limitations. The assumption was made that a modification of the scale for persuasion developed by Cialdini (2009) was a valid and reliable predictor of persuasion in sponsored content on YouTube. This scale proved to be unreliable in measuring persuasion in the sponsored content included in this study.

Another assumption that was made was that influencers make a conscious attempt to persuade their viewers when creating sponsored content. For that reason, scales to measure persuasiveness were based on literature surrounding techniques used by public speakers and sales representatives when making a conscious attempt to persuade. While sponsored videos are supposed to be persuasive in nature, social media influencers are not necessarily consciously aiming to persuade consumers, nor are they specialized in persuasion. As the introductory part of this paper shows, the success of user generated content (UGC) in persuading in fact lies in the fact that classic attempts at persuasion are no longer effective. The persuasiveness of social media influencers hinges more on peer influence in decision making (Weigand, 2009; Hearn & Schoenhoff, 2016; Gormley, 2016). Influencers increase their influence by building personal relationships or creating intimacy with their audience (Colluci & Cho, 2014; Kim, et al., 2015), not so much by attempting to apply classic persuasion techniques.

Furthermore, the assumption was made that this study was a fundamental examination, as limited results regarding persuasion and information analysis of sponsored content on YouTube currently exists in literature. Therefore, it could not be known what measures of persuasion would be applicable to sponsored content on YouTube. The predictive power found in this study was quite low. If more measure were included, it could be the case that predictors with higher predictive power could have been discovered. Only a few social measures were however included in the present study.

The content included in this study was randomly selected by the researcher. It is not guaranteed that this content is representative for all sponsored content on YouTube. There could have been content more suitable for inclusion in this study. Also, the number of valid cases was only 95, by including more cases, or sponsored videos, in the study the predictive power might also have been higher.

Practical implications

Assuming that creators use the persuasive strategies mentioned in this study to persuade when creating a sponsored video, the tool to automatically scan for persuasive content proposed in this study could have a huge impact on society. When we are able to automatically, with the help of specifically designed software, scan content uploaded on to YouTube for persuasiveness, we can categorize these videos based on their persuasive natures and flag them to viewers. As mentioned before, claims have been made that this form of advertising, which incorporates ads into the creator's native content, is based on deceiving customers and relies on customers not knowing they're being advertised to (Public Citizen, 2013). With this tool viewers can be made aware of when they are watching advertisements disguised as UCG.

Not only does the tool offer up advantages for the consumer, video hosting sites like YouTube could also benefit. By flagging videos as advertisements, even when influencers choose to disobey rules by omitting that a video is sponsored, they can offer their viewers a new service. A new feature YouTube recently introduced is the option for influencers to add text disclaimers that appear over their videos for the first few seconds, alerting users that the video they are watching 'includes paid promotion' (Cohen, 2016). It is in fact included in the YouTube terms and services that a paid promotion must be disclosed to viewers. The tool proposed can scan videos for persuasiveness, after which the can be flagged by YouTube when the video has not already been marked as 'including paid promotion'. Creators of these videos can then be reprimanded by the video hosting website. In the same way authorities like the Federal Trade Commission in the US and the Reclame Code Commissie in the Netherlands can benefit from a tool that scans for persuasiveness.

REFERENCES

Abernethy, A.M., & Franke, G.R. (1996). The Information Content of Advertising: A Meta-Analysis. *Journal of Advertising, 25*(2), 1-17.

Art, M.M. (2009). Marketing to Generation Y: Messages that Get Their Attention. *LIMRA's MarketFacts Quarterly, 28*(1), 16-23.

Barton, R. (Ed.). (1950). *Advertising handbook*. Englewood Cliffs, NJ: Prentice-Hall.

Boersma, Paul (2001). Praat, a system for doing phonetics by computer. *Glot International, 5(9/10),* 341-345.

Bolatito, O. (2012). Linkage between Persuasion principles and Advertising. *New Media and Mass Communication*, *8*, 7-12.

Brunel, F., Fournier, S., & Lawrence, B. (2008). Consuming the Consumer-Generated Ad. *NA-Advances in Consumer Research Volume 35*.

Brunswik, E. (1956). *Perception and the representative design of psychological experiments.* Berkley: University of California Press.

Burges, J. & Green, J. (2009) *YouTube (Digital Nedua and Society Series).* Cambridge, UK: Polity Press.

Burgoon, J., Birk, T. & Pfau, M. (1990) Nonverbal Behaviors, Persuasion, and Credibility. *Human Communication Research, 17(1),* 140-169.

Campbell, C., Pitt, L. F., Parent, M., & Berthon, P. (2011). Tracking Back-Talk in Consumer-Generated Advertising. *Journal of advertising research*, *51*(1), 224-238.

Casale, A.J. (2015) Going Native: The Rise of Online native advertising and a recommended regulatory approach. *Catholic University Law Review, 65* (1), 129-154.

Cheong, H. J., & Morrison, M. A. (2008). Consumers' reliance on product information and recommendations found in UGC. *Journal of Interactive Advertising*, *8*(2), 38-49.

Cohen, D. (2016) YouTube Allows Influencers, Creators to Add 'Includes Paid Promotion' Disclaimer. Accessed at http://www.adweek.com/digital/youtube-includes-paid-promotion/ (17 October 2017).

Colucci, C., & Cho, E. (2014). Trust inducing factors of Generation Y blog-users. *International Journal of Design*, *8*(3).

Correa, T., Hinsley, A.W. & De Zuniga H.G. (2010) Who Interacts on the Web? The Intersection of Users' Personality and Social Media Use. *Computers in Human Behavior, 26*(2), 247-253.

Crisisblogger (2006) Another Flog Controversy – This Time Sony Creates a Fake Blog. Accessed at http://ww2.crisisblogger.com/2006/12/another-flog-controversy-this-time-sony-creates-a-fake-blog/ (14 December 2016).

De Jong, N. H., & Bosker, H. R. (2013). Choosing a threshold for silent pauses to measure second language fluency. In *The 6th Workshop on Disfluency in Spontaneous Speech (DiSS)* (pp. 17-20).

Deighton, J., & Kornfeld, L. (2008). *Digital interactivity: unanticipated consequences for markets, marketing, and consumers*. Harvard Business School.

Deliso M. (2006) LonelyGirl15 just another way to try to get attention. *Advertising Age, 77*(4)

French, J. R. & Raven, B., (1959). The bases of social power. In *Classics of organization theory* (pp.251-260). Boston, MA: Cengage Learning.

Georgia, A.R. (2015) The Leading Role of Influencers in the YouTube Beauty Community. *Thesis Project submitted on 13 May 2015 at Linnaeus University, Sweden.*

Goldstein, N. J., Martin, S. J., & Cialdini, R. (2008). *Yes!: 50 scientifically proven ways to be persuasive*. New York: Simon and Schuster.

Gosling, S. D., Ko, S. J., Mannarelli, T. & Morris, M. E. (2002) A room with a cue: Personality judgments based on offices and bedrooms. *Journal of personality and social psychology,* 82(3), 379-398.

Hansen, S. S., Lee, J. K., & Lee, S. Y. (2014). Consumer-generated ads on YouTube: Impacts of source credibility and need for cognition on attitudes, interactive behaviors, and eWOM. *Journal of Electronic Commerce Research*, *15*(3), 254.

Hunt, S. (1976). Informational vs. persuasive advertising: an appraisal. *Journal of Advertising, 5*(3), 5.

Johnson, T. J., & Kaye, B. K. (2004). Wag the blog: How reliance on traditional media and the Internet influence credibility perceptions of weblogs among blog users. *Journalism & Mass Communication Quarterly*, *81*(3), 622-642.

Keller, K. & Kotler, P. (2000). *Marketing management* (Millennium ed.). Upper Saddle River, N.J.: Prentice Hall.

Laczniak, G. R. (1979). Information content in print advertising. *Journalism Quarterly*, *56*(2),

324-337.

Leigh, T. W., & Summers, J. O. (2002). An initial evaluation of industrial buyers' impressions of salespersons' nonverbal cues. *Journal of Personal Selling & Sales Management*, *22*(1), 41-53.

Madden, C. S., Caballero, M. J., & Matsukubo, S. (1986). Analysis of information content in US and Japanese magazine advertising. *Journal of Advertising*, *15*(3), 38-45.

Marquez, F. T. (1977). Advertising content: persuasion, information or intimidation?. *Journalism and Mass Communication Quarterly*, *54*(3), 482.

Mehrabian, A. (1968). Inference of attitudes from the posture, orientation, and distance of a communicator. Journal of Consulting and Clinical Psychology, 3,296-308.

Mehrabian, A. (1968-2). Some referents and measures of nonverbal behavior. *Behavior Research Methods*, *1*(6), 203-207.

Mehrabian, A., & Williams, M. (1969). Nonverbal concomitants of perceived and intended persuasiveness. *Journal of Personality and Social psychology*, *13*(1), 37.

Miller, G.R. (1980) On being persuaded; Some basic distinctions. In Miller, G. R., & Roloff, M. E. (1984). *Persuasion: New directions in theory and research*. Sage.

Mueller, B. (1991). An analysis of information content in standardized vs. specialized multinational advertisements. *Journal of International Business Studies*, *22*(1), 23-39.

Page, R., (2012) The linguistics of self-branding and micro-celebrity in Twitter: the role of hashtags. *Discourse & communication, 6* (2), 181–201.

Park, H., & Cho, H. (2012). Social network online communities: information sources for apparel shopping. *Journal of Consumer Marketing*, *29*(6), 400-411.

Pate, S. & Adams, M. (2013) The influence of social networking sites on buying behaviors of millennials. *Atlantic Marketing Journal, 2 (1),* 92-109.

Perloff, R. M. (2010). *The dynamics of persuasion: communication and attitudes in the twenty-first century*. Routledge.

Press Release, Public Citizen (Dec. 4, 2013) FTC Should Ensure that Online "Sponsored Content" is Clearly Identified as What It Is: Advertising. Accessed at http://www.citizen.org/pressroom/pressroomredirect.cfm?ID=4036.

Reijmersdal, E.A. van, Fransen, M.L., Noort, G. van, Opree, S.J., Vandeberg, L., Reusch, S., Lieshout, F. van & Boerman, S.C. (2016) Effects of disclosing sponsored content in blogs: How the use or resistance strategies mediates effects on persuasion. *American Behavioral Scientist, 60* (12), 1458-1474.

Resnik, A., & Stern, B. L. (1977). An analysis of information content in television advertising. *The Journal of Marketing*, *41*(1), 50-53.

Reynolds, T. J., Gengler, C. E., & Howard, D. J. (1995). A means-end analysis of brand persuasion through advertising. *International Journal of Research in Marketing*, *12*(3), 257-266.

Sekaran, U. (2006). Research methods for business: A skill building approach. John Wiley & Sons. New York.

Senft, T.M., (2008) *Camgirls: celebrity and community in the age of social networks*. New York: Peter Lang.

Simonoff, J.S. (2016) Regression Diagnostics. Accessed at http://people.stern.nyu.edu/jsimonof/classes/2301/pdf/diagnost.pdf on 1 September 2017.

Smith, A. N., Fischer, E., Yongjian, C. (2012) How does brand-related user-generated content differ across YouTube, Facebook, and Twitter? *Journal of Interactive Marketing, 26*, 102-113.

Soltan, R. (2004). The Tween Market: Keeping Our Collections Attractive, Practical and Effective. *Library Youth Services Consultant and Staff Person, Educational Resources Laboratory at Oakland University, http://www. mlaforum. org/volumeIII/issue1/Article2Tweens. html*.

Spillecke, D. & Perrey, J. (2012) *Retail Marketing and Branding: A Definitive Guide to Maximizing ROI.* Wiley, Somerset, NJ, USA

Statistica (2017) Number of social media users worldwide from 2010 to 2021. Accessed on 28 June 2017 at https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

Stern, B. L., Resnik, A., & Krugman, D. M. (1981). Magazine advertising: An analysis of its information content. *Journal of Advertising Research*, *21*(2), 39-46.

Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics* (6th ed.). Essex, UK: Pearson.

Teven, J. J., & Winters, J. L. (2007). Pharmaceutical representatives' social influence behaviors and communication orientations: relationships with adaptive selling and sales performance. *Hum Commun*, *10*, 465-86.

Weigand, H (2009). “Value modeling for the pragmatic web – the case of social advertising.” Proceedings of I-KNOW ’09 and I-SEMANTICS ’09. September, 2009, Graz, Austria.

Williams, K. C., & Page, R. A. (2011). Marketing to the generations. *Journal of Behavioral Studies in Business*, *3*, 1.

Williams, K. C., Page, R. A., Petrosky, A. R., & Hernandez, E. H. (2010). Multi-generational marketing: Descriptions, characteristics, lifestyles, and attitudes. *The Journal of Applied Business and Economics*, *11*(2), 21.

Wojdynski, B.W. & Evans, N.J. (2015) Going native: Effects of disclosure position and language on the recognition and evaluation of online native advertising. *Journal of Advertising, 0*(0), 1-12.

Wu, K. (2016) YouTube marketing: Legality of sponsorship and endorsements in advertising. *JL Bus. & Ethics, 22,* 59.

Zanot, E. J. (1985). Unseen but effective advertising regulation: The clearance process. *Journal of Advertising*, *14*(4), 44-68.