WHAT INFLUENCES ENGAGEMENT?

A CONTENT ANALYSIS OF INFLUENCER BRANDING AND FOLLOWER ENGAGEMENT

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Abstract:

Social media has evolved rapidly since the beginning of the 21st century. One of the most popular and fastest growing social media platforms is Instagram, with over one billion active users monthly. This has facilitated the emerge of influencers, those who are popular with many followers relative to others. The global Instagram influencer market size is estimated to be worth about 1.7 billion USD in 2019. Still, little research has been conducted to study what type of content drives this engagement. Therefore, the purpose of this thesis is to explore some factors that constitute an influencer brand by examining what type of content on Instagram drives engagement for female, Swedish, fashion influencers.

To address this, a content analysis was conducted on Instagram posts to see how themes like selfies, nudity, vulnerability, exotic elements and sponsored posts affect the number of likes and comments. Results show that selfies and displaying vulnerability significantly increases the number of likes while sponsored content decreases it. Further, being vulnerable also positively impacts the number of comments. This indicates that followers prefer to see pictures of the influencer herself and when she is being open and sincere, and discourages paid endorsements. In conclusion, this thesis provides a framework for how some factors influence engagement, which provides useful practical implications both for influencers and organizations using influencer marketing. It also fills a theoretical research gap about influencer content and followers, which can be used as foundation for further research.

Keywords:

Influencers, Social media, Instagram, Content Analysis, Engagement

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1. Introduction

"Digital content creator who travels the world", "TV-personality, designer, entrepreneur", "Swedish mommy, fashion and travel-influencer" and "Influencer, model, self-love believer and vintage lover" are how some of the most popular Swedish fashion influencers shortly describes themselves on Instagram. Influencers can be seen as the new version of icons, whether it is the Kardashians or the Wahlgren-Ingrosso family, people all around the world wants to follow their every step. Instagram has enabled this by giving us a way to not only follow, but also engage with, social media superstars. Today, Instagram is one of the most popular and fast-growing social media platforms with over one billion active users monthly (Statista, 2019). While many might not see it as a "real job", the global influencer market size is estimated to be worth about 1.7 billion USD in 2019 only on Instagram (Mediakix, 2019).

Influencers are disrupting the marketing industry by finding ways to monetize their personal brand and, in extension, their followers. The previously quite distinct relationship between personality and brand is becoming blurred as influencers are on the one hand, seen almost as "friends" by followers, while on the other as a means for increasing commercial sales by marketers. Still, followers hold the ultimate power as their engagement is a critical measurement of the influencers' success. Therefore, it is crucial to understand what the followers are expecting from influencers and by studying what type of content drives and discourages engagement, the industry can become more effective which would benefit advertisers and influencers.

1.1. Background

Social media has evolved rapidly since the beginning of the 21st century. One of the most popular social media platforms is Instagram, a social photo-sharing application. Between June 2016 and June 2018, the number of monthly active Instagram users doubled, from 500 million users to 1 billion, making it one of the most popular platforms for social networking worldwide (Statista, 2019). The rise of Instagram has facilitated a new type of advertising; influencer marketing. Influencers can be defined as those people with relatively many followers, thereby perceived as "popular" online (Nandagiri, 2018) with a greater reach and an informal authority over a large audience (Brown & Fiorella, 2013). By sponsoring specific posts on their accounts, brand can reach out to their followers via a form of virtual word-of-mouth (Woods, 2016). Recently, this industry has experienced massive growth and now has an estimated global market size of 2.86 billion USD (Statista, 2019) and a Swedish estimated value of 660 million SEK (Institutet för reklam och mediestatistik, 2018).

In some ways, an influencer brand is much like a conventional brand, given the commercial nature often associated with it. The success of social networking platforms has enabled the creation and exchange of User Generated Content (Kaplan & Haenlein,

2009). Consequently, building a personal brand has become more important for everyone (Shepherd, 2005). Those with many followers and high engagement in terms of number of likes and comments on their content can be seen as successful in managing to create a strong personal brand (Nandagiri, 2018). The virtual word-of-mouth approach has blurred the line between genuine and paid endorsements of products and brands and research show that, for followers, influencers are trusted almost as much as friends (Woods, 2016). Still, it is relatively unknown how influencers have managed to create such strong personal brands for themselves. What type of content attracts followers? Research on what factors impact engagement and how has up until now been remarkably limited.

1.2. Problem & Research Gap

While much research has been conducted regarding social media and marketing in general, research about Instagram is still limited. Studies of influencers are even more scarce, especially when narrowing down to the Swedish market. The few previous studies on influencer marketing has historically mostly been taking a business perspective; i.e. how organizations and brands can benefit from using influencers as a part of their marketing strategy (e.g. Jaakonmäki et al., 2017; Woods, 2016), with the aim of increasing profits. Although it is important to understand how influencers can be utilized from an organizational perspective, little research seem to have been conducted to study the relationship between influencers and their followers and try to understand the underlying dimensions that constitute an influencer brand. Considering that the influencer industry is worth 660 million SEK only in Sweden (Institutet för reklam och mediestatistik, 2018), there are surprisingly few studies that have investigated the underlying dimensions of an influencer brand and what type of content drives engagement.

1.3. Purpose & Research Question

The purpose of this thesis is to explore some factors that constitute an influencer brand by examining what type of content on Instagram drives engagement for female, Swedish, fashion influencers. Specifically, this thesis will analyze how elements of vulnerability, nudity, selfies, exotic and sponsored content impacts follower engagement in terms of increasing or decreasing the number of likes and comments. Therefore, the research question to be investigated is the following:

What influences engagement on Instagram?

1.4. Limitations

This thesis focuses on the Swedish industry with regards to both where the influencer is located and her main audience. A broader industry definition than Sweden would complicate the assessment of understanding how certain factors influence engagement

since there are different norms, cultures and legislation with potential to influence the results. However, narrowing the industry to one or a few cities would be irrelevant as the industry is more or less entirely based online and not geographically limited.

Furthermore, this thesis only investigates female, fashion-oriented influencers on Instagram to limit the risk of in-group variances. As the majority of all users worldwide are women (Statista, 2019) and fashion is one of the biggest sub-categories of influencers (Statista, 2019), this provides a larger base of influencers with similar features to collect data from.

Lastly, research is limited by only collecting data from posts on Instagram. This is due to logistical reasons; to explore one phenomenon in depth rather than many phenomena superficially. The thesis will only investigate some factors that influence follower engagement, in terms of number of likes and comments. It will not analyze all potential themes that impacts engagement, nor will it analyze the nature of the comments.

1.5. Expected Contribution

To the authors' knowledge, there is yet no previous research on what factors of an Instagram post that influence engagement in Sweden1. This thesis will offer an understanding of some of the key elements of an influencer brand based on real, robust data that is observed, collected, coded and analyzed. Therefore, the theoretical contributions are large and this thesis can be used as a basic framework for future research in similar areas. It also opens up for the possibility of conducting deductive, quantitative content analysis of influencer content as it provides a framework of themes to study.

This research will also be useful practically for influencers to know what type of content drives follower engagement and consequently how they can potentially improve their brand. The results will also be useful for organizations who wants to use influencer marketing for advertising, and hopefully for other stakeholders as well who are interested in, or are a part of, the industry in one way or another.

¹ After searching in numerous databases including Google Scholar and Scopus on different combinations of keywords like "influencers", "social media", "content analysis", "engagement", "Instagram".

2. Literature Review

The purpose of this thesis is to explore some factors that influence engagement on Instagram and how by analyzing Swedish fashion influencers' content; what they post and how that impacts the number of likes and comments. To fully understand this, the following section will present previous studies and the theoretical framework that this research is based on. First, the previous research will be introduced, followed by a brief examination of branding and thereafter personal branding. The literature review will then dig deeper into social media and influencers, and lastly explore some of the main themes in content on Instagram and how they influence engagement.

2.1. Previous Research

Existing research on influencer content on Instagram is limited, to the authors' knowledge2. Still, Smith et al. (2012) conducted a study across several social media platforms with the purpose of comparing brand-related User Generated Content (UGC). They conducted a very similar study as this thesis by performing an inductive, quantitative content analysis and found that the brand-generated content characteristics differed across the platforms. However, they did not analyze UGC on Instagram.

Similar research has been conducted by Bakhshi et al. (2014) who studied how the presence of a face impacted the following social engagement factors; likes and comments. By conducting a quantitative visual content analysis on Instagram, they found that photos coded as containing faces were 38 percent more likely to receive a "like" and 32 percent more likely to receive a "comment" (Bakhshi et al., 2014). However, they did not explain why faces increase engagement, which also limits the study by not examining more explanatory variables.

Hu et al. (2014) chose a broader yet similar approach when conducting an analysis of Instagram photo content and user types. They coded Instagram content into 8 different categories including friends, selfies and captioned photos and found that friends and selfies was the most commonly posted themes. Their results also show that based on the user content posted, 5 types of users can be derived, however these user clusters have no significant relationship between the number of followers. While Hu et al. (2014) developed different photo categories and user types, they did not analyze how these groups impact likes differently, nor did they study the impact on comments.

Jaakonmäki et al. (2017) analyzed the relationship between user engagement and content features on Instagram, but only from a social media marketing perspective. By investigating engagement from three separate categories; creator-related, contextual and content features, they established that creator-related factors are the most important predictor of engagement, i.e. aspects like number of followers, age and gender. Further,

² After searching in numerous databases including Google Scholar and Scopus on different combinations of keywords like "influencers", "social media", "content analysis", "engagement", "Instagram".

the content elements that impacted engagement the most was proven to be pictures containing people, scenery and positive captions.

Lastly, Liu and Suh (2017) conducted a study on style bloggers and how they brand themselves on Instagram. By analyzing 243 posts from 10 popular bloggers, they found 9 subcategories of image content, including themes such as selfies and revealing of breast area. The self-portrait theme was discovered to be the most popular, followed by pictures with friends/family and landscapes. Further, they found that the bloggers wore slightly revealing clothing in 35 percent of the pictures, whereas the remaining 65 percent of the pictures did not contain revealing elements.

2.2. Branding

A brand can be described as an intangible asset that is intended to "identify goods, services or entities, or a combination of these" to create distinctive images in the minds of stakeholders and thereby "generating economic benefit/values" (International Organization for Standardization, 2019). Since the 1980s, the significance of intangible assets has dramatically increased in relation to overall corporate value (Lindemann in Clifton & Simmons, 2003). A strong brand can be crucial for a company's sales and reputation (Chang, 2014), and for many businesses it is their most important intangible asset, critical for commercial success and the creation of shareholder value (Lindemann in Clifton & Simmons, 2003). A strong brand recognition or familiarity heavily influences the choice-stage for consumers when choosing among brands to consume (Hoeffler & Keller, 2003), and while consumption is usually associated with purchase, it could also be considered as the choice a follower makes to engage in a post online.

2.3. Personal Branding

Personal branding is a broad and relatively new concept with multiple definitions existing (Khedher, 2010). The very first definition was coined in an article in 1997, stating that "We are CEOs of our own companies: Me Inc. To be in business today, our most important job is to be head marketer for the brand called You" (Peters, 1997). A few years later, Shepherd (2005) defined the closely related phenomenon of self-marketing as "those varied activities undertaken by individuals to make themselves known in the marketplace, usually, (though not exclusively) for the purpose of obtaining gainful employment". Historically, self-marketing has mostly been undertaken by celebrities, politicians and business leaders. However, social networking platforms has enabled individuals to post their own content and engage with others, making personal branding increasingly relevant and important for all (Shepherd, 2005). Today, everyone can brand and market themselves (Peters, 1997), and those with many followers can be seen as those who successfully managed to create a strong personal brand (Nandagiri, 2018).

Khedher (2010) offered a more specific definition of personal branding as the "process of establishing a unique personal identity, developing an active communication of one's

brand identity to a specific target market and evaluating its impact on one's image and reputation, and that to fulfill personal and professional objectives". Lastly, some propose that personal branding is merely an extension of "regular" branding, described in section 2.2.

2.4. Social Media & Influencers

Social media can be defined as "a group of Internet based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (Kaplan & Haenlein, 2009). Instagram, a global social networking app and platform mainly focused on picture sharing, is one of the most popular and fastest-growing platforms of social media. In June 2018, the number of active users on Instagram were estimated at over one billion monthly (Statista, 2019). Although the users are demographically spread, globally over 40 percent are under 24 years old (Statista, 2019) and in Sweden, 60 percent of all users are women (Statista, 2019). In 2019, Instagram is predicted to generate revenues of 8.4 billion USD (Statista, 2019). Because of the high rate of engagement, large revenues and the visual nature of the platform, Instagram has become a common tool for marketing of companies and products. For instance, in March 2016 98 percent of fashion brands had a profile on the platform (Statista, 2019).

The rise of social media has enabled the emerge of influencers and influencer marketing. Influencers can be explained as those accounts who have many followers relative to others, and thereby are perceived as "popular" (Nandagiri, 2018). These are individuals with the great reach and perceived authority over a large audience (Brown & Fiorella, 2013). Influencer marketing refers to advertising through certain individuals and their social media accounts (Woods, 2016), thereby reaching the specific person's followers. The global market size of Instagram influencers is estimated at 2.86 billion USD in 2019 (Statista, 2019). One of the main reasons this type of marketing has been proven so successful is because it is more or less a virtual word-of-mouth approach where the line between genuine appreciation of a product and paid sponsorship is blurred (Woods, 2016). Simultaneously, many view influencers as the new version of celebrity endorsers (Kapitan & Silvera, 2016).

2.5. Instagram Elements

2.5.1. Engagement

Instagram is a social networking app where you see content, in the form of pictures and videos, from people you have chosen to follow, which is sometimes also called "feed" (Instagram, 2019). These posts are sometimes accompanied by embedded text, called "captions" (Hu et al., 2014). Bakhshi et al. (2014) explained that there are two main ways

to engage on images posted by other accounts; likes and comments. If an account is public, i.e. visible to anyone using Instagram which it is by default when an account is created (Hu et al., 2014), anyone can show interest in a post by engaging with it (Jang et al., 2015). Users can press a "like"-button on posts to indicate enjoyment, and the number of likes is a way to quantify a measure of engagement on each photo posted (Bakhshi et al., 2014). These like-activities can also generate business opportunities, both for organizations using social media marketing (Kaplan & Haenlein, 2009) but also for influencers. Jang et al. (2015) found that the number of likes correlates with, among other factors, posting interesting photos often and having many followers, and can be seen as a measurement of the popularity of photos from the users' perspective. Further, users can "comment" on the photo, and the number of comments on a post is a way to measure both engagement and discussion (Bakhshi et al., 2014), as it requires more time and cognitive thinking than only pressing like.

2.5.2. Selfies

Between 2012 and 2014, photos containing human faces increased 900 times (Souza et al., 2015). These digital self-portraits are commonly known as "selfies", and can be used as an effective medium to capture engagement (Souza et al., 2015). After analyzing 1.1 million Instagram posts, Bakhshi et al. (2014), concluded that photos with faces are 38 percent more likely to receive a like and 32 percent more likely to receive a comment. Souza et al. (2015) agrees, by stating that selfies generates 1.1-3.2 times more engagement (likes and comments) on average than other content. On average, women post more selfies of themselves than men, and young females are the most prominent group to appear in these self-portraits globally (Souza et al., 2015).

Hu et al. (2014) found that selfies were the single most common photo category posted (24,2 percent). Further, Souza et al. (2015) argued that individuals tend to prefer to interact with people who are alike themselves. They go on to show that this tendency is amplified on Instagram selfie posts. In conclusion, empirical studies suggests that selfies are a very common type of photo to post on Instagram, and that they on average receive more engagement than other themes.

2.5.3. Elements of Nudity

The display of nudity is a theme that has been increasingly common in advertising and media during the past few decades (Dudley, 1999). Marketing products using revealing models can be controversial but has also been proven to catch more attention and appealing to consumers. Dudley (1999) conducted a study that showed that nudity creates both negative feelings for consumers who regards such advertising as offensive and exploitative, but also positive ones by creating more interest and appeal to the brand and product.

These findings can also be applied on user-generated content on social media. Mascheroni et al. (2015) investigated how young people construct their self-identity online through

the pictures they post of themselves. Some girls choose to conform to sexualized gender stereotypes to gain social acceptance from their social network. Mascheroni et al. (2015) went on to argue that being revealing in a traditionally sexualized manner is rewarded by social legitimation and validation. This acceptance is shown in engagement by number of likes in photos.

However, there are also conflicting studies indicating that non-stereotypical advertising is preferred over stereotypes by consumers. Åkestam (2017) demonstrated that non-stereotypical portrayals of gender (among other factors) in marketing can result in improved social and brand-related effects. All in all, studies indicate both positive and negative effects from displaying traditional elements of nudity in photos.

2.5.4. Exotic Elements

Jang et al. (2015) described that common themes posted on Instagram are nature (e.g. sky, nature, flowers, ocean, beach) and holiday or vacation. In their study, they concluded that out of 20 topics, the nature theme received the highest number of likes. One possible explanation that they gave is that this category might include more high-quality pictures than other categories generally have, which could increase user engagement (Jang et al., 2015). Additionally, posting pictures of landscapes has been proven to be relatively common, as Liu and Suh (2017) stated that it is the third most frequently posted theme of image content for style bloggers on Instagram.

Boley et al. (2018) designed a scale to measure anticipated social return from travelling. Their results indicate that in the process of selecting a destination to travel to, social return is a prominent factor. Those who travel can receive instant gratification from posting photos of their travels on social media, and this has become one of the most important reasons to travel more. By posting travel experiences online, social return increases because of the anticipated image enhancement (Boley et al., 2018). In conclusion, the reviewed studies suggests that users like to post content of trips and nature, and that this may increase engagement.

2.5.5. Sponsored Content

The rapid growth of social media has provided marketers a new way of advertising: using influencers. Larger and larger shares of marketing budgets are being allocated towards sponsoring influencers and thereby reaching their specific audience; their followers (Woods, 2016). In fact, 25 percent of all sponsored posts are within the fashion industry, making it the most active one in social media marketing (Statista, 2019). In many countries, this type of marketing is regulated to force marketers and influencers to disclose the commercial nature of a post (Boerman et al., 2017). For instance, in Sweden, advertisement must be easy to distinguish from other content by explicitly stating in the beginning that the post is sponsored (Konsumentverket, 2018). While influencer marketing can be very impactful for the advertising company, it is also a risk that sponsored content can damage the influencer's credibility. Research show that disclosing

paid endorsements can cause consumers to show disbelief and disappointment towards the post, which sequentially leads to decreased engagement (Boerman et al., 2017). However, consumers are having difficulties recognizing commercial endorsement when posted by an influencer or celebrity rather than the brand itself (Boerman et al., 2017), thereby disclosing that it is in fact "sponsored" even more important. In fact, there has even been cases in which the influencer deliberately withholds information about the commercial nature of a post, and these incidences has become more common in the past few years (Karlén, 2017).

2.5.6. Elements of Vulnerability

Already in 1997, Aaker argued that one of five key elements of a brand personality is sincerity, which she described in terms of down-to-earth, honest, wholesome and cheerful. Although usually associated with humans, Aaker (1997) explained that these are characteristics that can also be applied to the self-expression of brand personality. Consequently, this framework becomes even more relevant for an influencer, which is both a person and a brand simultaneously.

Research suggests that followers tend to trust the influencers they follow almost as much as their friends (Woods, 2016). Kaplan and Haenlein (2009) argued that self-disclosure, which they define as the "…revelation of personal information (e.g. thoughts, feelings, likes, dislikes) that is consistent with the image one would like to give", is a crucial aspect on social networking sites. It is the critical step of developing relationships (Kaplan & Haenlein, 2009), which in an Instagram setting would refer to the influencer-follower relationship. Other studies support this, for instance by showing that authenticity is a key element in personal branding which enhances the relationship quality. Being "too inauthentic" is discouraged and even criticized, suggesting that who you are online should not be too different from the offline self (Labrecque et al., 2011). Cunningham and Craig (2017) further adds to this by arguing that social media entertainment is firmly governed by a norm that puts "the highest value on authenticity...".

Cambridge dictionary defines vulnerability as "able to be easily physically, emotionally, or mentally hurt, influenced or attacked" (Cambridge Academic Content Dictionary, 2019). This definition fits into the authors' definition of vulnerability in addition to how Kaplan and Haenlein (2009) defined self-disclosure; related to the revelation of personal information comes the ability to be easily influenced.

2.6. Summary of Literature Review

The literature review began by describing the previous research conducted in this area. Smith et al. (2012) conducted a study to compare brand-related User Generated Content across several social media platforms and found many differences. Bakhshi et al. (2014) studied how the presence of faces impacted social engagement factors online, and found that it increases engagement. Hu et al. (2014) chose a broader approach when conducting an analysis of Instagram photo content and different user types. Jaakonmäki et al. (2017) analyzed the relationship between user engagement and content features on Instagram from a social media marketing perspective, and lastly Liu and Suh (2017) conducted a study on style bloggers and how they brand themselves on Instagram.

Thereafter, the concept of branding was described as something that creates differential associations and images in the minds of stakeholders (International Organization of Standardization, 2019), which can be critical for commercial success (Chang, 2014). A subcategory of this is personal branding, where individuals market themselves (Shepherd, 2005). The rise of social media platform has made personal branding much more relevant for all people (Shepherd), and enabled the emerge of influencers, i.e. those who successfully managed to create a strong personal brand (Nandagiri, 2018). Influencers post content on Instagram that give rise to follower engagement in terms of likes and comments (Jang et al., 2015). From content, certain themes can be derived such as selfies, elements of nudity, vulnerability, exotic themes and sponsored posts, that could impact engagement in different ways.

3. Methodology

3.1. Research Method

The purpose of this thesis is to investigate some elements of influencer content and explore what influences follower engagement on Instagram. Because of the immense amount of data that already exists on Instagram, including pictures and information on posted date, number of likes and number of comments, there are many benefits to perform a study using natural occurring data rather than gathering data using questionnaires or interviews. Therefore, an explorative content analysis will be performed on Instagram posts. Bell et al. (2019) defines a content analysis as "an approach to the analysis of documents and texts that seek to quantify content in terms of predetermined categories and in a systematic and replicable manner". This research method has many perks, as it provides a transparent framework that makes it easy for follow-up studies to replicate. Further, it is a very flexible and appropriate method to apply when analyzing visual data (Bell et al., 2019). In fact, content analysis of images is highly useful in many business areas such as marketing.

For this study, a qualitative method was chosen when collecting the data to allow for themes to emerge inductively from the data (Bell et al., 2019). Themes are reoccurring categories identified in the data that relates to the research focus, builds on codes identified and can provide a basis for theoretical understanding of the data (Bell et al., 2019). Because the research on social media influencers is so limited (see section 2.1), conducting a quantitative analysis which requires pre-determined categories obtained from theory was not possible. Therefore, the categories were inductively derived which could create a risk for subjective judgement, rather than empirical evidence of the themes' importance. An inductive approach allows for empirical data and theory to emerge almost concurrently. However, the data collected will still be quantitatively analyzed to assure objectivity (clear, transparent rules of categorization) and systematicality (consistency in application of categories) (Bell et al., 2019).

A disadvantage with using an inductive approach is that it relies on observation for information collection, which opens for the risk of skewness and/or subjectivity. This disadvantage was reduced with the usage of a partly deductive approach in terms of the collection of categories partially derived from previous literature.

3.2. Data Collection & Research Design

To analyze what elements of Instagram posts influence engagement and how, the authors argue that the results are more widely analyzable if they are collected by more than one person. If two or more people collect data with observations, the overlap is diminished and the results are better synched and ready for analysis. Still, gathering data from more than one account increases the risk of in-group variances, where elements influence

engagement very differently depending on the person who posted the picture. To minimize this risk, the first step was to limit the data to influencers that are as alike one another as possible.

The first delimitation was geographical; that the influencer is Swedish or currently lives in Sweden, since regulation systems and cultural norms can differ considerably across countries. Data was also limited to only looking at female influencers for several reasons. First, because the influencer industry is dominated by female user accounts (Statista, 2019), secondly, because one can assume that female influencers share more similar characteristics than when comparing them to male influencers, and lastly, because of the assumption that they will then have more similar followers. Further, this thesis will only investigate data from the fashion influencers. Fashion is one of the largest categories of influencers, but also the single largest industry to adopt influencer marketing (Statista, 2019), thereby presumably ensuring that the influencers and their follower base are even more homogeneous.

A large number of followers indicates popularity, which in the world of social media translates to a measure of success (Nandagiri, 2018) as discussed in section 2.4. Because of this, this thesis limited influencers to those with more than 350 000 followers and maximum 1 200 000 (as of 14 February 2019), to once again minimize in-group variances. Moreover, all women were in ages ranging from 20 (born 1998) to 28 years (born 1990), and all posted a minimum of one picture per week on average.

To find influencers that met all the criteria above, the authors used previous knowledge of the industry to source influencers to study, as well as searching for indexes of the largest fashion influencers in Sweden using online search engines. Further, Instagram provides a "suggested"-function that presents similar or related accounts to the one you are currently visiting. Using this approach, the following 8 influencers were found.

Name	Age	No. of followers*	No. followed*	No. of posts**	Period to collect 25 pictures
Angelica Blick	28, born 1990	1 200 000	898	4512	1/9 - 7/10 = 37 days
Bianca Ingrosso	24, born 1995	973 900	1430	4264	1/9 - 12/9 = 12 days
Lisa Olsson	24, born 1994	441 200	653	2471	1/9 - 8/10 = 38 days
Lisa Tellbe	23, born 1996	399 100	200	3098	1/9 - 30/9 = 30 days
Matilda Djerf	22, born 1997	506 500	1010	2343	1/9 - 19/9 = 19 days
Nicole Falciani	22, born 1997	353 400	298	2877	1/9 - 2/9 = 32 days
Victoria Törnegren	27, born 1991	773 600	369	1421	1/9 - 11/11 = 72 days
Wilma Holmqvist	20, born 1998	459 500	723	869	1/9 - 29/10 = 59 days

* As of 28 March 2019

** Total number of posts published by the influencer since they created their account

The data was collected from the first of September 2018 on each influencer's feed and the following 25 pictures, with no ending time limit. By selecting a date a few months back, the risk of changes in engagement, in terms of number of likes and comments depending on what exact date the data was collected was minimized. Still, the time period

is not too long ago that one could expect changes in the mechanisms of elements that influence engagement. The particular date was used among all observations between the eight influencers in order to diminish differences in data due to time period. An alternative method could have been random selection, but this was not chosen in this essay since the timing of particular posts could have impact on engagement (e.g. a picture posted during summer might receive more likes because people could prefer beaches over snow storms but also have more free time to spend on social media). Lastly, by selecting 25 pictures from each influencer rather than one or a few, the risk of engagement variances due to one-time occurrences is minimized. Since the procedure is time consuming (see 3.2.1), the numbers of observations needed to be limited to 200 in total, divided equally between 8 influencers for the most accurate results given the small relatively low data set.

3.2.1. Procedure

To ensure transparency and replicability, the data collection procedure is described in detail. The first step is to open the Instagram application on a smart device or computer. In the search tab, search for one of the selected influencers (e.g. "Angelica Blick"). By pressing on her name, you discover her content feed where the most recent pictures are displayed at the top. Then, continue to scroll down to the first picture that was posted on or after the first of September 2018. By pressing on that post, more information on likes, comments and the caption is revealed. Begin the data collection by registering date of the picture posted, a short description, the number of likes and comments. After this, code each post with the relevant categories, see following sections and coding scheme in appendix 7.6. Repeat the procedure for the subsequent 24 pictures and thereafter the rest of the influencers.

3.3. Coding of Elements

The following themes has been conducted inductively, parallel to the collection of data. In practice, to ensure replicability, this was done by analyzing the first five pictures from each influencer to find recurring patterns of elements. Altogether, 40 pictures, or 20 percent of the data, was analyzed in the first phase. After deciding the themes and finding relevant theory connected to the empirical setting, the main data collection process began where all data was analyzed again. The authors conducted the content analysis separately, then compared the coding schemes, which resulted in an agreement on the final definition of each theme.

By coding each category as dummy variables of existing "1" or not existing "0" on a given observation, the results becomes more robust and less subjective than using a scale where each theme can be graded from "not visible at all" to "very visible". This enables a stronger possibility of replication. The following sections will explain in detail how each category was coded. See appendix 7.1 for more detailed descriptions of how to code each theme.

The coding approach that was used was deemed the most appropriate given the subjective nature of the categories. It is easier for someone to decide if a theme is occurring in a photo or not, rather than decide to what extent it is occurring. An alternative method could have been using scales from 1-5 or 1-7, e.g. "how much of the theme 'selfie' is evident in this photo, where '1' is 'not at all' and '7' is 'the photo is containing nothing but a selfie/the selfie is extremely evident". This level of subjectivity would be very hard to derive any accurate patterns from.

3.3.1. Engagement

The dependent variables will be number of likes, as well as number of comments. As written in the literature review, likes on Instagram posts are a clear indicator of popularity that demonstrate follower engagement and interest in the content (Jang et al., 2015). Comments are also a form of engagement, while also a measurement of discussion as it requires more time and cognitive thinking (Bakhshi et al., 2014). Therefore, a study will be conducted to measure if, and how, the independent variables influence engagement in the form of number of likes and comments. As numbers of likes and comments are explicitly stated on each post, it is easy to collect this data.

3.3.2. Selfie

As seen in section 2.5.2, photos with faces increase engagement in terms of number of likes and comments (Bakhshi et al., 2014). The selfie-theme is coded as occurring when the influencer is visible in the picture and it is clear that it is in fact that person. If that is the case, one must then decide if the theme is prominent enough to be considered in the selfie-category. For instance, if only a part of the hand is visible or if the person is very far away and barely a part of the background, the theme is not coded as occurring. If the picture is a close-up of the face, a selfie or generally in the foreground, the theme is evident. Generally, if the influencer is the main attraction in the picture, or takes up at least 20 percent of the picture, the post can be coded as "1".

3.3.3. Nudity

This category is separated from the category selfie because nudity involves partly different elements that could potentially impact engagement differently than a post where the influencer is only visible. While Instagram does not allow for complete nudity (Instagram, 2019), for example showing female nipples (Slater-Robins, 2015), there are still posts that contains elements that can be considered as "revealing". The theme should be coded as "1" when influencers shows significant parts of their body. A bikini or underwear would still be considered as displaying nudity, and a picture where a person is either not wearing anything on the lower or top part of the body, should be coded as such. Consequently, pictures should be coded as containing elements of nudity also if the person is wearing socks, shoes or bottoms but not anything on the top or bottom half of the body.

3.3.4. Exotic

The category called exotic is existing when the environment or scenery plays an important part of the picture. The surroundings should not only be clearly visible and identifiable, but also exotic in the sense that it is clear that the image was photographed outside of Sweden, usually in a tropical environment. The picture must have been taken outside and the scenery must be conspicuous, for instance containing vibrant colors, tropical palm trees, crystal clear oceans or mile-long beaches.

3.3.5. Sponsored

Marketing, and therefore also influencer marketing, is regulated in Sweden, and the coding for a sponsored post follows these guidelines. The advertisement needs to be easily distinguishable from other content by expressing in the beginning of the post that the following is paid endorsement (Konsumentverket, 2018). A sponsored post is therefore distinguished either in the beginning of the caption or in the headline under the account's name and above the picture and should be explicitly stated with keywords such as "sponsored", "advertisement" or "paid endorsement".

When coding this category, there is a risk that elements that indicate sponsored endorsement is not explicitly labelled as such. For instance, a person expressing positive opinions about a product or brand or offering a discount code. While one might be tempted to categorize this as "sponsored", only posts which are clearly marked as "sponsored" should be coded as such.

3.3.6. Vulnerability

Section 2.5.6 describes the underlying dimensions of this theme; a sense of being vulnerable, authentic, sincere or personal, for example when an influencer talks about topics like heartbreak, mental illness, body insecurities or depression. This category requires a deeper analysis of the post both in terms of photo elements and text (caption), which can make it more subjective and harder to ensure reliability. Still, the posts in this theme have relatively long captions, in this case they were on average approximately 87 words long. They usually confess to some personal aspect of themselves or their life. A long caption that is exclusively about trivial topics like advertisement or the weather does not fall into this category.

3.3.7. Nothing

The last theme that was inductively chosen was "nothing", which is a counter-category to all the others. These are posts where the influencer is not visible in the picture (hence not displaying nudity either) and that lack exotic elements, vulnerability and non-sponsored posts. If this is the case, the post will be coded as "1". Most pictures in this category are pictures of food, beverages, fashion accessories and interior design from the

collected data. The variable "nothing" should be seen as a variable which take into account the lack of other elements in the picture to see how this affects engagement.

3.4. Analysis of data and tests

The data was coded as panel data because the influencers have different amounts of followers. It would be misleading to perform an analysis and compare them directly to each other without taking the number of followers into consideration. To comply with the rules of panel data, a regression was run which contained the independent variable influencer as a fixed effect. A linear regression with fixed effect was conducted using longitudinal/panel data in Stata.

3.5. Reliability & Validity

3.5.1. Reliability

Reliability concerns the repeatability of the study results, by checking if the measures applied to concepts are consistent (Bell et al., 2019). According to Kassarjian (1977), reliability in the context of a content analysis depends on the ability to formulate definitions of categories that will be consistently coded the same. In other words, someone other than the authors should be able to read the category definition and make a similar coding assessment of the same data. The reliability is based on that someone who has no relation to the study reads the definitions of the categories and the method of coding them (section 3.3.1-3.3.7). If the results are more or less the same, the results can be said to be repeatable and consistent.

As a first stage of reassuring the reliability of the coding scheme, the authors coded the data individually. After comparing the results and realizing that they were already very similar, small adjustments were made in the coding descriptions. Then, three independent people were given instructions for the method and coding scheme and then told to code the data of 200 posts individually. As was guided by Kassarjian (1977), a reliability coefficient was calculated to get a measure of the reliability. Kassarjian (1977) states that any reliability coefficient that is beneath 0.8 is to be regarded with suspicion. He further states that a reliability coefficient that exceeds 0.9 is a central measure. The calculated reliability coefficient for the categories were 0.93 from all three people who coded the data3. Thus, the authors can conclude that the coding were made with a high reliability.

3.5.2. Validity

According to Bell et al. (2019), validity is concerned with the integrity of conclusions that are generated from a piece of research. They state that one aspect of it regards

³ On average, the three independent people coded 186 out of the 200 photos with the exact same variables as the authors (186/200 = 93 percent).

measurement or construct validity, which concerns with whether a measure capture the phenomenon it is trying to measure. One part of construct validity is trait validity. Peter (1981), explains that trait validity is best investigated when looking upon a category and how it is measured without using theory. Theory is primarily used afterwards to distinguish the viewed category from other categories. Peter (1981) states that trait validity investigations provide necessary information, but the information is not sufficient enough for accepting construct validity. In section 3.5.1, the categories were shown to be reliable and if they are shown to be reliable, the conditions are fulfilled that the procedure and elements is also valid. However, due to the chosen procedure and nature of the data collection that was conducted, estimating validity was not possible.

External validity is concerned with whether the results from a study can be generalized beyond the specific context of research (Bell et al. 2019). Since the study collected data from 8 different, yet similar, influencers, which provided statistically significant results (see section 4), these are likely to be generalizable to other female fashion influencers in Sweden as well. However, the results may not be generalizable to other social media platforms than Instagram, and not to other types of influencers such as health-oriented ones as there are potentially other factors then that impact engagement.

A source of error that could be questioned regarding the validity of the results is the amount of time the influencers were observed. The study observes data published during a few months of time, which could be seen as a short time period for collecting data. The time factor is a possible source of error, because there is a possibility that followers of female Swedish fashion influencers can change their engagement behavior, but it is unlikely that this change takes place from day to day or even month to month. Hence, in this report it is assumed that the followers' behavior regarding engagement has not changed significantly during the course of a few months.

4. Results

The results of the content analysis will be presented in the following section, in two parts. The descriptive results first, followed by the analysis and tests.

4.1. Characteristics of Data

The data collected consists of 25 observations from 8 influencers, in total 200 observations, in the period starting from the first of September 2018 ranging to the last observation the 11th of November 2018. Table 4.1 gives an overview of the characteristics of the data, namely the frequency of appearances of the different themes.

Variable	Observation	Mean	Std. Dev.	Min	Max
Vulnerability	10	5%	0.22	0	1
Selfie	160	80%	0.40	0	1
Nudity	26	13%	0.34	0	1
Exotic	40	26%	0.44	0	1
Sponsored	37	18,5%	0.39	0	1
Nothing	22	11%	0.31	0	1

Table 4.1: Overview of the frequency of categories

As can be seen in the table, the means adds up to more than 100 percent, since more than one variable can be occurring simultaneously in each observation. The table shows that from the 200 observations studied, 5 percent, which equals 10 posts, contained the element of vulnerability, with a standard deviation of 21.85 percent. As each theme was coded as a dummy variable of 1 (present in the observation) or 0 (non-present in the observation), the minimum value for all categories will be 0 and the maximum value will always be 1.

The theme coded as selfie was evident in 80 percent of the content, corresponding to 160 pictures with the influencer in it from the observed data. The standard deviation was 40,10 percent. Elements of nudity was only present in 13 percent, or 26 pictures across the influencers' accounts, with a standard deviation of 33.71 percent. 52 observations, or 26 percent, were coded as exotic, with the highest standard deviation of 43.97 percent. 18.5 percent of all posts were sponsored advertisement which equals 37 pictures. The standard deviation was 38.92 percent. Lastly, the nothing category, which refers to a picture that does not contain any of the other elements, were 11 percent or 22 pictures, with a standard deviation of 31.37 percent.

Table 4.2: Overview of the frequency of categories from each influencer

Influencer	Vulnerability	Selfie	Nudity	Exotic	Sponsored	Nothing
Angelica Blick	1	25	14	13	3	0
Bianca Ingrosso	3	17	3	6	4	4
Lisa Olsson	1	19	0	0	6	6
Lisa Tellbe	0	25	6	12	4	0
Matilda Djerf	1	17	1	3	2	6
Nicole Falciani	1	21	1	7	7	2
Victoria Törnegren	2	17	0	7	6	0
Wilma Holmqvist	1	19	1	4	5	4
Average	1,25	20	3,25	6,5	7,25	2,75

Table 4.2 provides an overview of the frequencies of themes across the different accounts. As we can see, the selfie category is the most common theme for all influencers, which is present in the data 17 - 25 times for each influencer. The table also shows that vulnerability is almost always present in one picture out of the 25 collected from each person with three outliers of 0, 2, and 3 times. The presence of nudity is relatively spread out, ranging from 0 all the way to 14 observations. Only one person did not post a single exotic picture, while the rest kept a relatively similar frequency. The sponsored posts are posted at a very even level with little variance, ranging from 2 - 7 pictures. Lastly, the nothing category was somewhat mixed, with three people not posting a single picture within that category, while two others posted 6 pictures each.

4.2. Tests & Regression

4.2.1. Variance Inflation Factors

To check for correlation between the independent variables Vulnerability, Selfie, Nudity, Exotic, Sponsored and Nothing, a test for multicollinearity was performed in Stata. This was a VIF-test, testing for Variance Inflation Factors. Table 4.3 gives a view on the VIF-values:

Variable	VIF	1/VIF
Vulnerability	1.03	0.97
Selfie	2.31	0.43
Nudity	1.41	0.71
Exotic	1.54	0.65
Sponsored	1.13	0.88
Nothing	2.45	0.41
Mean VIF	1.64	

Table 4.3: Variance Inflation Factors

As can be seen from the table, there are no VIF-values that exceeds 5, which would warrant a corrective measure to be taken, but rather low VIFs that indicates low correlation between the independent variables. See appendix 7.3 for correlation matrix.

4.2.2. Hausman Test for Comparing Fixed & Random Effects

Panel data contain observations of multiple elements over time for the same individuals. For a regression to be accurate and possible to make, panel data need to be sorted for random or fixed effects. The Hausman specification test is a test to compare fixed and random effects models under the null hypothesis that individual effects in the model do not correlate with regressors in the model (Park 2011). In this test, the authors test the following null hypothesis:

Ho: difference in coefficients not systematic.

This test was conducted by initiating it with the null hypothesis, that a random-effects specification is appropriate for individual-level effects in the model, as is guided by Stata Manual 13 (2013). To capture all constant individual-level effects, a fixed-effect model was fit. The results were stored. Similarly, a random-effect model was fit and the results stored. We then compared these estimates that was stored, with a Hausman test:

$$\chi^{2}(5) = (b - B)'[(V_b - V_B)^{(-1)}](b - B)$$

= 2.91e+12
Prob > chi2 = 0.0000

With the above specification, out initial hypothesis; that the individual-level effects are modeled with the random-effects model is rejected and thus the model should be fixed-effect.

4.3. Regression of Data

Table 4.4.1: Descriptive statistics (means) of likes across category and influencer

Mean, Likes	Vulnerability	Selfie	Nudity	Exotic	Sponsored	Nothing
Wilma Holmqvist	55316	26470.26	46581	25132.75	18788	17228.75
Lisa Tellbe	0	6492,8	6369.17	5891.58	4486,5	0
Victoria Törnqvist	29940.5	19609.41	0	30796	18935.17	0
Lisa Olsson	12927	8718.84	0	0	7113.17	3868.83
Matilda Djerf	25664	30233.29	33375	10765	18979	11848.67
Bianca Ingrosso	71367	50031.12	53061.33	43775.83	34788.25	27962.75
Angelica Blick	25016	24664.08	24485,36	24646.15	22781.67	0
Nicole Falciani	7724	5019.57	5891	4513	3698.43	2139.5

Standard Deviation,	Vulnerability	Selfie	Nudity	Exotic	Sponsored	Nothing
Likes	vuniciality	benne	ruany	LAOUC	Sponsored	Houming
Wilma Holmqvist	0	4850.22	0	6994.81	7414.99	5509.99
Lisa Tellbe	0	2709.64	1101.38	1295.91	1012.04	0
Victoria Törnqvist	0	12504.97	0	10517.79	1834.33	0
Lisa Olsson	0	4561.50	0	0	4180.33	1866.67
Matilda Djerf	0	9766.58	16816.41	5676.52	0	0
Bianca Ingrosso	11917.96	14507.24	5667.70	11522.87	14327.61	2704.73
Angelica Blick	0	7783.77	6051.60	5969.95	8429.26	0
Nicole Falciani	0	1718.34	0	1349.32	1220.02	768.63

Table 4.4.1: Descriptive statistics (standard deviation) of likes across category and influencer

Table 4.4.3: Descriptive statistics (means) of comments across category and influencer

Mean, Comments	Vulnerability	Selfie	Nudity	Exotic	Sponsored	Nothing
Wilma Holmqvist	378	78.53	130	49,5	33	25.75
Lisa Tellbe	0	227.5	27.83	151.75	0	0
Victoria Törnqvist	155	152.30	0	194.43	160,33	0
Lisa Olsson	244	114.16	0	0	99.83	32,5
Matilda Djerf	2577	503.41	617	73.67	554.5	74.67
Bianca Ingrosso	468	203.65	176	124.67	268.25	52.5
Angelica Blick	173	237.16	226.43	227.62	299.67	0
Nicole Falciani	1	21	1	7	7	2

Table 4.4.4: Descriptive statistics (standard deviation) of comments across category and influencer

Standard Deviation,						
Comments	Vulnerability	Selfie	Nudity	Exotic	Sponsored	Nothing
Wilma Holmqvist	0	14.53	0	37.17	20.22	17.86
Lisa Tellbe	0	24.78	17.44	14.21	10.69	0
Victoria Törnqvist	0	85.88	0	94.98	13.45	0
Lisa Olsson	0	74.76	0	0	72.14	24.49
Matilda Djerf	0	30.07	697.91	46.49	0	0
Bianca Ingrosso	92.77	140.59	20.52	61.48	155.83	6.14
Angelica Blick	0	96.20	78.16	81.50	127.30	0
Nicole Falciani	0	18.56	0	7.93	13.32	0

4.3.1. Influence on Number of Likes

To comply with the rules of panel data, a regression analysis was conducted which contained the independent variable influencer as a fixed effect. Using longitudinal/panel data in Stata, a linear regression was made with fixed effects. The dependent variables did not need to be transformed.

Variable	Coefficient	Std. Err.	t	P> t]	[95% Conf.	. Interval]
Vulnerability	14377.44	2630.69	5.47	0.00	9187	19567
Selfie	7097.59	2261.47	3.14	0.00	2636	11559
Nudity	1942.52	2194.93	0.89	0.38	-2388	6273
Exotic	272.60	1630.86	0.17	0.87	-2945	3490
Sponsored	-3505.69	1552.47	-2.26	0.03	-6568	-443
Nothing	-4038.24	2944.99	-1.37	0.17	-9848	1772
_cons	13759.22	2369.46	5.82	0.00	9121	18470

Table 4.5: Test of Independent Variables Influence on Likes

The results in table 4.5 show that the independent variables vulnerability, selfie and sponsored can be said to hold statistical significance in this model, on a 95 percent confidence interval (p=0.05). When a confidence interval of 95 percent is applied, the variables of nudity, exotic and nothing has no statistical significance in explaining our model. Table 4.5 also displays a t-test, which tests the hypothesis that each coefficient is different from 0. To reject this, the t-value must be higher than 1.96 (for a 95 percent confidence) or lower than -1.96. If so, one can say that the variable has a significant influence on the dependent variable, which is the case for the vulnerability (t=5.47), selfie (t=3.14) and sponsored (t=-2.26) independent variables.

The two-tail p-values test the hypothesis that each coefficient is different from 0. To reject this, the p-values must be lower than 0.05 (i.e. on the 95 percent confidence interval). If this is the case, one can say that a variable has a statistically significant influence on the dependent variable. With this test, on a 95 percent confidence interval, the three variables that can be said to hold statistically significant influence on the dependent variable likes is vulnerability, selfie and sponsored.

When an influencer expresses aspects of vulnerability in a post, it significantly influences followers' engagement. In fact, this category has the strongest effect on likes out of all the independent variables. Given that the coefficient is positive, themes of vulnerability increases engagement in terms of likes. Further, a post containing the element of a selfie significantly affect follower engagement. Since the coefficient is positive, posting a selfie increases the number of likes. Lastly, the third statistically significant variable on a 95 percent confidence interval were sponsored content. Sponsored posts was the only statistically significant variable that contributed negatively to the number of likes, since the coefficient is negative.

4.3.2. Influence on Number of Comments

A regression analysis was conducted which contained the independent variable influencer as a fixed effect. Using longitudinal/panel data in Stata, a linear regression was made with fixed effects.

Variable	Coefficient	Std. Err.	t	P > t	[95% Conf. Interval]		
Vulnerability	367.19	58.63	6.26	0.00	251.53	482.85	
Selfie	68.04	50.40	1.35	0.18	-31.39	167.46	
Nudity	23.44	48.92	0.48	0.63	-73.06	119.95	
Exotic	-35.37	36.35	-0.97	0.33	-107.07	36.34	
Sponsored	21.25	34.60	0.61	0.54	-47.00	89.51	
Nothing	-73.49	65.63	-1.12	0.26	-202.96	55.99	
_cons	84.86	52.81	1.61	0.11	-19.32	189.03	

Table 4.6: Test of Independent Variables Influence on Comments

The results are displayed in Table 4.6. On a confidence interval of 95 percent (p=0.05), the independent variable vulnerability was the only variable that was statistically significant to impact the number of comments.

On confidence interval of 95 percent, the variables selfie, nudity, exotic, sponsored and nothing was not proven statistically significant. Table 4.6 also displays a t-test, which tests the hypothesis that each coefficient is different from 0. To reject this, the t-value must be higher than 1.96 or lower than -1.96. Then, one can say that the independent variable has a significant influence on the dependent variable. In this case, the vulnerability category (t=6.26) significantly increases engagement in terms of the number of comments.

The two-tail p-values test the hypothesis that each coefficient is different from 0. To reject this, the p-values must be lower than 0.05 (which is on the 95 percent confidence interval). If this is the case, one can say that a variable has a statistically significant influence on the dependent variable. With this test, on a 95 percent confidence interval, the variable that is statistically significant is vulnerability (P>|t| =0.00).

5. Discussion & Conclusion

The purpose of this thesis is to explore some factors that constitute an influencer brand by examining what type of content on Instagram drives engagement for female, Swedish, fashion influencers. A content analysis was conducted to study the influence of themes that was derived inductively through the data collection, followed by a quantitative analysis in Stata of the data. To explain and contextualize the results of the thesis, the literature review described in section 2.1-2.6 will now be applied to compare the findings with previous research and theory. Consequently, conclusions and implications can be drawn which provide relevance for future research on influencers, social media studies or similar areas.

What influences engagement on Instagram?

In short, the study shows that elements of vulnerability and selfies significantly increases follower engagement in terms of likes, while sponsored posts significantly decreases the number of likes. Being vulnerable also increases the number of comments, indicating that this factor is the most important one out of the elements analyzed to predict follower engagement. Worth noting is that vulnerability was the least frequently occurring theme, which could indicate that the rarity is what increases engagement. If it had occurred more often, one cannot guarantee that the engagement would still be as high.

5.1. Discussion

This research studied influencers, defined as individuals with great reach and perceived authority over a large audience (Brown and Fiorella, 2013), and their content posted on Instagram. As theorized by Lindemann in Clifton & Simmons (2003), the significance of intangible assets has dramatically increased in relation to overall corporate value, which is evident in the case of influencers which are entirely constituted by their personal brands without any tangible assets. Interestingly, there are two factors who significantly increases engagement, selfies (likes) and showing vulnerability (likes and comments), and one theme that significantly decreases likes - sponsored posts. Combining this with the findings in table 4.1 gives us an understanding to why influencers tend to post so many pictures of themselves (80 percent of all pictures posted).

5.2. Engagement

5.2.1. When in Doubt – Just Post a Selfie

The results of the study suggest that when posting a picture of yourself, number of likes tend to increase. These findings are aligned with what Bakhshi et al. (2014) concluded; photos with faces increases engagement. They found that posting a selfie, on average, is 38 percent more likely to receive a like and 32 percent more likely to receive a comment.

However, in this study selfies do not significantly impact comments. This suggests that given this data collection of female, Swedish fashion influencers, posting pictures of themselves do not promote discussion (Bakhshi et al., 2014), and since comments requires more cognitive effort and time than pressing "like", less followers are apparently willing to do so on a selfie-post.

Other empirical material, such as Souza et al. (2015), further supports that selfies generates more likes on average than other content. They also provide an explanation to why 80 percent of the data contains elements of self-portraits, by revealing that photos of human faces have increased by 900 times between 2012 and 2014 (Souza et al., 2015). Therefore, one could argue that posting selfies is a part of a strong, cultural norm on social media that influencers has adopted. One can also wonder in terms of the chicken or the egg; are influencers posting many selfies because they are a part of the social media norm, or has it become a norm because influencers are posting them so frequently? Could this high frequency of self-portraits be one of the factors that can explain their success online? Results are in line with Hu et al. (2014), that found that the most common photo category posted were selfies, in their case 24.2 percent and in this study 80 percent. This discrepancy could possibly be explained by Souza et al. (2015), who concludes that on average, young women most frequently appear in selfies globally. Since this research only collected data from this age and gender group, it is expected that the mean would be higher.

5.2.2. #Sponsored: A Tradeoff

Sponsored content has emerged from the rapid evolution of social media marketing as a new way of advertising. Previous research, such as Boerman et al. (2017) has shown that disclosing paid endorsement can cause disbelief and disappointment towards the influencer, which can have a negative impact on the engagement and thus the influencer brand. The findings in this thesis are in line with Boerman et al. (2017) by showing that followers are less likely to like a post which has been marked as a paid sponsorship. An influencer is a person and a (personal) brand, and to generate a revenue they need a source of income, which is often paid sponsorship. Simultaneously, there are strict regulations stating that every influencer must explicitly disclose what content is sponsored (Konsumentverket, 2018). This creates a difficult tradeoff for the influencer, who must choose between posting paid content that generates revenue but decreases engagement and that can ultimately damage the brand (in terms less engagement and less followers long-term). An unexpected effect from this could be an increased risk of not explicitly stating what is sponsored content, as the incentives for lying are amplified by the social media advertisement regulations and follower engagement. This phenomenon of deliberately withholding information about the commercial state posts has recently become more common in Sweden (Karlén, 2017).

However, results cannot conclude that sponsored content decreases engagement in terms of comments. One possible explanation for this is that some of the commercial posts

included a competition with a chance to win products, in which followers could participate by commenting on the photo.

5.2.3. Be Sincere in a Shallow World

An influencer is a brand and a person. Aaker (1997) argued that one key element in brand personality is sincerity. In an industry which is usually seen as shallow considering the number of selfies and paid endorsements posted, the results in this study still strongly suggests that the element that increases engagement the most is displaying vulnerability. In a follower-influencer relationship, being honest and sincere is crucial which is much in line with theory such as Labrecque et al. (2011) and Kaplan and Haenlein (2009), who both argue that authenticity or self-disclosure is a critical step in developing relationships, also online. Woods (2016) suggested that followers tend to trust influencers online as much as their friends, which implies that by expressing self-disclosure, followers might perceive that they are getting a closer relationship with the influencer. Consequently, their likelihood of engaging with them increases.

With regards to engagement in terms of comments, elements of vulnerability were the only factor who could significantly predict an impact. Commenting on a post requires more cognitive thinking and time (Bakhshi et al., 2014) and could therefore be seen as a higher form of engagement than likes, which suggests that influencers have a lot to gain by being more sincere. Cunningham and Craig (2017) argues that social media is firmly governed by a norm that puts the highest value on authenticity. The fact that vulnerability was infrequently occurring while concurrently increasing both comments and likes proposes that the influencers can strengthen their personal brand by mixing their usual, shallow content with more personal pictures4.

All in all, it seems that presenting your "true self" is what users appreciate the most. This indicates that Khedhers (2010) definition of building a personal brand as the "process of establishing a unique personal identity... to fulfill personal and professional objectives" is relevant and applicable and goes hand-in-hand with being authentic towards your followers.

5.2.4. What Not to Do

While many factors were proven to significantly impact engagement, others did not. This thesis could not prove if and how elements of nudity, exotic themes and the absence of other themes influence likes or comments. Still, it is important to keep these factors in the report for several reasons. First, because it makes the methodology more transparent and thereby also easier to replicate - the results have not been tampered with. Second, because it allows for future research.

⁴ An alternative interpretation could be that the infrequency of vulnerability is part of what drives the engagement. If it had occurred more often, perhaps the variable would no longer increase engagement as much.

The theory on how people react to nudity in advertisement was contradictory; on the one hand, it can draw more attention and appeal (Dudley, 1999; Mascheroni et al., 2015), while on the other it can also be considered controversial and discouraged by the consumers (Åkestam, 2017). The results cannot conclude anything on how elements of nudity affect engagement, which perhaps is an indication that both theories are more or less true.

Contradictory to Jang et al. (2015) and Boley et al. (2018), this research cannot conclude that posts with elements involving nature or travel receives more likes. However, both Boley et al. (2018) and Liu and Suh (2017) argue that these types of photos have become much more common recently, which is relatively consistent with the fact that 26 percent of all photos collected displayed clear, exotic elements (table 4.1).

Lastly, no conclusions could be drawn about how the absence of all other categories impact engagement. Perhaps not surprising, since the category is too broad to be built on theory, many types of pictures were in this category. Therefore, future research would benefit from breaking this down into several subcategories such as pictures of food, design, buildings, et cetera.

5.3. Conclusion

Instagram is a global networking platform that has enabled the emerge of personal branding (Shepherd, 2005). This has facilitated the development of a new industry, influencers, which is a female-dominated sector with a predicted global market size of 2,86 billion USD in 2019 (Statista, 2019). Success is measured in engagement, through likes and comments, but since this industry is relatively new, little research has been conducted to try to understand what fundamental elements drives engagement.

This thesis conducted a content analysis with the purpose of exploring and trying to understand how some factors of influencer content impact engagement. Data was selected from some of the most influential female fashion influencers in Sweden, where 200 posts where coded both from the picture and caption. Results show that three categories clearly impact the number of likes; posting sponsored content decreases likes while selfies and showing vulnerability increases it. Interestingly, the vulnerability effect is strong enough to significantly increase the number of comments too, which suggests that the influencers have a lot to benefit from revealing more about themselves to their audience.

This thesis should be seen as a basic framework and first step in trying to map out and understand the mechanisms of influencers and their followers. Built upon the work of Smith et al. (2012), Bakhshi et al. (2014), Hu et al. (2014), Jaakonmäki et al. (2017) and Liu and Suh (2017), some important insights have been provided in the research area of influencer brands. Surprisingly, in an industry dominated by shallowness, showing self-disclosure and sincerity is what the followers seem to like the most.

5.4. Implications

5.4.1. Practical Implications

This study has identified important implications for what influencers choose to post and what they should be posting more of to increase their follower engagement. The authors found a strong relationship between vulnerability and engagement, which indicates that they have a lot to gain from being more sincere online. Further, and not surprisingly, posting pictures of yourself (selfies) generally increases likes as well.

The second important implication concerns influencer marketing, as results show that sponsored posts significantly decreases follower engagement. This affects both influencers and organizations who want to work with social media marketing. How can the many benefits be captured without negatively impacting the brand value for influencers and companies? If influencer marketing is going to be successful long-term for both parties, they probably need to change strategy to attract the followers more. One important insight is provided by the theory and results on vulnerability, that suggests that being perceived as "too inauthentic" is discouraged and criticized by the followers (Labrecque et al., 2011). If advertisers can find ways to make the advertisement seem more sincere, aligned with the influencer brand and relevant for the followers, perhaps engagement would not be as poorly impacted.

5.4.2. Theoretical Implications

Although there was some previous research in this area (see section 2.1), to the authors' knowledge, this was the first study conducted which investigated the influencer-follower relationship on Instagram in Sweden using a content analysis. Further, the themes were inductively coded, meaning they were derived from data rather than theory, thereby suggesting a framework for future research. Results show that selfies increase engagement which validates the findings of previous researchers (e.g. Bakhshi et al., 2014; Souza et al., 2015).

5.5. Critique & Limitations

This research has two main limitations. First, due to time constraints, 200 posts were collected and coded from 8 influencers. A larger data collection would have provided more robust and accurate results. With more posts to study, more influencers or more data on the influencers, a larger analysis might have allowed the authors to make stronger conclusions from the results. This can be done either through collecting more data from each person, or by adding more influencers to analyze. The second critique concerns the method of data collection. Due to the nature of the industry, an inductive approach of content analysis was necessary. However, for a richer framework and more robust results, more elements could have been added, coded and analyzed.

Even though limitations were made to restrict subjectivity, it is still important to consider that a content analysis is built on analyzing observations which creates a risk of subjectivity. The design of the coding was limited to appearance (1) or no appearance (0) of a category, instead of placing the existence of the category on a scale to limit the subjectivity when coding. Although this limitation was made, some subjectivity could still occur since the coding was defined by the authors themselves and could potentially be interpreted in different ways.

Another limitation to the thesis is the fact that the method does not take into account the time passed between two posts. A longer time passing between two posts could possibly lead to increased engagement on the next post. Another thing the essay may be lacking is a measurement of how the sequence of pictures may affect the engagement of posts. For example, a long sequence of selfies posted could perhaps seem repetitive and lead to a decreased engagement.

Another way to generate more robust and nuanced results would have been to analyze the nature of comments and code this dependent variable in terms of positive or negative to see how the independent variables impact the type of comments on a post. Lastly, an inductive content analysis is far from the most common research method used. Although it was the most fitting method given this purpose and research question, there are many other ways to collect data, like interviews or surveys, that could have provided similar results.

5.6. Future Research

The independent variables of the study were inductively generated. Therefore, future research could continue building on this framework to search for other relevant themes that impact engagement in different ways. Further, the results from the linear regression clearly indicates that vulnerability has an unexpectedly large impact on engagement in terms of both likes and comments. Future research could take this result in consideration and examine why elements of vulnerability impact follower engagement the way it does, the underlying mechanisms and how influencers can use this more to strengthen their personal brand.

Results show that likes were negatively affected by sponsored posts, which creates a challenge both for influencers and the organizations using influencer branding. Future research could explore why followers are so discouraged by paid endorsements, and how marketers can come up with better ways to advertise using influencers without negatively influencing engagement. Another similar area of research is subliminal advertising, i.e. when influencers market a product without disclosing the commercial nature of it (Karlén, 2017), and see how that impacts engagement relative to paid endorsements. Why has this phenomenon become more common lately (Karlén, 2017) even though it is illegal (Konsumentverket, 2018)?

Lastly, future research could broaden the base data and see how generalizable the results are for other countries, types of influencers, different genders or platforms. It could also be interesting to compare the difference in engagement between different types of content, such as pictures, videos, stories or text-only.

6. References

- Aaker, J.L., (1997) Dimensions of Brand Personality. Journal of Marketing Research, vol. 34, no. 3, pp. 347-356.
- Bakhshi, S., Shamma, D.A., and Gilbert, E. (2014) *Faces Engage Us: Photos with Faces Attract More Likes and Comments on Instagram.* CHI '14 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, pp. 965-974.
- Bell, E. Bryman, A. and Harley, B. (2019) *Business Research Methods*. 5th edition. Oxford University Press, New York.
- Boerman, S., Willemsen, L.M., and Van Der Aa, E.P. (2017) "This Post Is Sponsored" Effects of Sponsorship Disclosure on Persuasion Knowledge and Electronic Word of Mouth in the Context of Facebook. Journal of Interactive Marketing, vol. 38 (2017) pp. 82–92.
- Boley, B.B., Jordan, E.J., Kline, C., Knollenberg, W. (2014). *Social return and intent to travel*. Tourism Management, vol. 64, pp. 119-128.
- Brown, D. and Fiorella, S. (2013) *Influence Marketing: How to Create, Manage, and Measure Brand Influencers in Social Media Marketing*. Que Publishing.
- Cambridge Academic Content Dictionary. (2019). Meaning of Vulnerability in English.
- Chang, C.Y. (2014) Visualizing Brand Personality and Personal Branding: Case Analysis on Starbucks and Nike's Brand Value Co-Creation on Instagram. MA (Master of Arts) Thesis, University of Iowa, 2014.
- Cunningham, S., and Craig, D. (2017) *Being 'really real' on YouTube: authenticity, community and brand culture in social media entertainment*. Media International Australia 2017, vol. 164 (1), pp. 71–81.
- Dudley, S.C. (1999) *Consumer Attitudes Towards Nudity in Advertising*. Journal of Marketing Theory and Practice, vol. 7, No. 4, pp. 89-96.
- Hoeffler, S, Keller, K.L. (2003) *The Marketing Advantages of Strong Brands*. Journal of Brand Management, vol. 10, no. 6, pp. 421-455.
- Hu, Y., Manikonda, L., and Kambhampati, S. (2014) What We Instagram: A First Analysis of Instagram Photo Content and User Types. Proceedings of the 8th International Conference on Weblogs and Social Media, ICWSM (2014) pp. 595-598. The AAAI Press.
- Instagram (2019) *Community Guidelines*, under *Help Center Privacy and Safety Center*. Available at: https://help.instagram.com/477434105621119. [Accessed 27 March 2019].
- Instagram (2019) Feed, under Help center Using Instagram. Available at:
- https://help.instagram.com/1986234648360433 [Accessed 27 March 2019].
- Institutet för Reklam och Mediestatistik (2018) *Investeringarna i influencer marketing växer kraftigt*. [Press Release]. 16 December 2018. Available at: https://www.irm-media.se/media/2095/irm-press-release-influencer-marketing-2018.pdf [Accessed: 2019-02-21].

- International Organization for Standardization. (2019). Brand evaluation Principles and fundamentals. IOS 20671:2019
- Jaakonmäki, R., Müller, O., and vom Brocke, J. (2017) *The Impact of Content, Context, and Creator on User Engagement in Social Media Marketing*. Proceedings of the Annual Hawaii International Conference on System Sciences, 2017, vol 50, pp. 1152-1160.
- Jang, J.Y., Han, K., and Lee, D. (2015) No Reciprocity in "Liking" Photos: Analyzing Like Activities in Instagram. College of Information Sciences and Technology. Proceedings of the 26th ACM Conference on Hypertext & Social Media, pp. 273-282.
- Kaplan, A. and Haenlein, M. (2009) Users of the world, unite! The challenges and opportunities of Social Media. Business Horizons (2010), vol 53, pp. 59-68.
- Kapitan, S. and Silvera, D.H. (2015) From digital media influencers to celebrity endorsers: attributions drive endorser effectiveness. Marketing Letters (2016) vol 27, no. 3, pp. 553-567.
- Karlén, M. (2017) Rekord i smygreklam 16 influencers underkänns. Dagens Industri, 17 December 2017. Available at: https://digital.di.se/artikel/rekord-i-smygreklam-16influencers-underkanns. [Accessed 15 March 2019].
- Kassarjian, H. (1977) *Content Analysis in Consumer Research*. Journal of consumer research, vol. 4, no. 1, pp. 8-18.
- Khedher, M. (2014) *Personal Branding Phenomenon*. International Journal of Information, Business and Management, vol. 6, no. 2, pp. 29-40.
- Konsumentverket (2018) *Marknadsföring i sociala medier och bloggar*. Konsumentverket, 7 May 2018. Available at: https://www.konsumentverket.se/forforetag/marknadsforing/marknadsforing-i-sociala-medier-och-bloggar/ [Accessed 17 March 2019].
- Labrecque, L.I., Markos, E. and Milne, G.R. (2011) Online Personal Branding: Processes, Challenges, and Implications. Journal of Interactive Marketing, vol 25 (2011), pp. 37–50.
- Lindemann, J. (2003) *Brand Valuation*. In Clifton, R. and Simmons, J. (2003) Brands and Branding. The Economist, Profile Books Ltd., London.
- Liu, R., and Suh, A. (2017) Self-Branding on Social Media: An Analysis of Style Bloggers on Instagram. 4th Information Systems International Conference 2017 (ISICO 2017) 6-8 November 2017, Bali. Procedia Computer Science, vol. 124, pp. 12-20.
- Mascheroni, G., Vincent, J., and Jimenez, E. (2015) "Girls are addicted to likes so they post semi-naked selfies": Peer mediation, normativity and the construction of identity online. Cyberpsychology: Journal of Psychosocial Research on Cyberspace, vol. 9, no. 1, article 5.

Mediakix (2019) Global Instagram influencer market size from 2017 to 2019 (in billion U.S. dollars). Mediakix March (2019). Available at: http://mediakix.com/2017/03/instagram-influencer-marketing-industry-size-howbig/?fbclid=IwAR1HPhBQwA3dQqvPk92Yp6xS2ISzXK0tUKkpjzCxk8T9atZWuQ gIsA-RHlc#gs.bdq3zb [Accessed: 27 March 2019].

- Nandagiri, V. and Philip, L. (2018) *The impact of influencers from Instagram and YouTube on their followers*. International Journal of Multidisciplinary Research and Modern Education, vol. 4, no. 1, pp. 61-65.
- Park, H.M. (2011). Practical Guides to Panel Data Modelling: A step-by-step Analysis Using Stata. Tutorial Working Paper. Public Management and Policy Analysis Program, Graduate School of International Relations, International University of Japan (2011), pp. 1-52.
- Peters, T. (1997). *The Brand Called You*. Fast Company Magazine, 31 August 1997. Available at: https://www.fastcompany.com/28905/brand-called-you. [Accessed: 21 March 2019].
- Peter, P.J., (1981). Construct Validity: A Review of Basic Issues and Marketing Practices. Journal of Marketing Research, vol.18, no. 2, pp. 133-145.
- Slater-Robins, M. (2015) *Instagram's CEO admitted the reason it censors some photos of female nipples from the app is to keep Apple happy*. Business Insider, 30 September 2015. Available at:
- https://www.businessinsider.com/why-instagram-bans-freethenipple-2015-9?r=US&IR=T&IR=T [Accessed 20 March 2019).
- Smith, A.N., Fisher, E., and Yongjian, C. (2012) *How Does Brand-related Usergenerated Content Differ across YouTube, Facebook, and Twitter?* Journal of Interactive Marketing 26 (2012) pp. 102–113.
- Souza, F., de Las Casas, D., Flores, V., Youn, S., Cha, M., Quercia, D., et al. (2015)
 Dawn of the Selfie Era: *The Whos, Wheres, and Hows of Selfies on Instagram.*Proceedings of the 2015 ACM on conference on online social networks, pp. 221-231.

Stata (2013) Hausman specification test. StataCorp. Stata 13 Base Reference Manual. College Station, TX: Stata Press. Available at: https://www.stata.com/manuals13/rhausman.pdf [Accessed: 25 April 2019]

Statista (2019) *Instagram - Statistics & Facts*. Statista. Available at: https://www-statista-com.ez.hhs.se/topics/1882/instagram/ [Accessed 27 March 2019]

Statista (2019) Number of monthly active Instagram users from January 2013 to June 2018 (in millions). Statista. Available at:

https://www.statista.com/statistics/253577/number-of-monthly-active-instagramusers/ [Accessed 21 April 2019]

Statista (2019) Usage of social media sites in Sweden in 2017, by gender. Statista. Available at: https://www-statista-com.ez.hhs.se/statistics/862119/usage-of-socialmedia-sites-by-gender-sweden/ [Accessed 27 March 2019]

- Woods, S. (2016) *#Sponsored: The Emergence of Influencer Marketing*. University of Tennessee Honors Thesis Projects, pp. 1-26.
- Åkestam, N. (2017) Understanding Advertising Stereotypes: Social and brand-related effects of stereotyped versus non-stereotyped portrayals in advertising. Dissertation for the Degree of Doctor of Philosophy, Ph.D., in Business Administration Stockholm School of Economics, 2017.

7. Appendix

7.1. Coding of Categories: Examples

Following, eleven pictures from the data was selected as examples to show how each theme should be coded.

Visual Representation of Selfie



The picture to the left has been coded under the category selfie due to it clearly showing Matilda's face and body, which indicates that it is her in the picture. The right picture has not been coded under selfie because the person is only visible from below her neck and above the knees, without showing any face, skin or way to identify that it is in fact Lisa Olsson.

Visual Representation of Nudity



The left picture was coded on the category nudity due to Angelica Blick showing significant parts of her body and only wearing a bikini. The picture of Matilda Djerf, on the right, was not coded as nudity because she is not showing significant parts of her body or underwear.

Visual Representation of Exotic



On the left, the background clearly displays exotic elements of a blue sea and mountains, and can almost be considered as the main attraction in the picture. It is also tagged in "Greece" with the caption "Gonna show you the world". The right picture, although tagged in "United Kingdom", should not be considered as the scenery is not a central part of the photo nor exotic/tropical.

Visual Representation of Sponsored



Lisa Olsson is clearly disclosing the commercial nature of the post by adding "Betalt samarbete med arketofficial" (translation: "Paid sponsorship with arketofficial") at the top and "Happy to team up with @arketofficial..." in the caption. One the right, the post contains products and Matilda Djerf writes "@bohemegoods appreciation post...". Although it is not impossible that she got the products as part of a paid collaboration, it will not be coded as such since it is not disclosed.

Visual Representation of Vulnerability



The left picture contains Victoria Törnegren's baby and her partner in bed with a caption where she congratulates him on Father's Day and displays deep affection for him. This makes it self-disclosing and coded under vulnerability. The right picture is Wilma Holmqvist captioning that she loves coca cola in glass bottle and even though she displays her love for coca cola, this is not sufficiently self-disclosing.

Visual Representation of Nothing



This picture was coded as nothing, since it had no elements of selfie, nudity, vulnerability, exotic nor sponsored in it. It is simply a picture of a bag and some coffee, with a "breakfast time" caption.

7.2. Coding Scheme

	Date	Description	Selfie	Nudity	Exotic	Sponsored	Vulnerability	Nothing	Likes	Comments
Post 1										
Post 2										
Post 3										
Post 4										
Post 5										
Post 6										
Post 7										
Post 8										
Post 9										
Post 10										
Post 11										
Post 12										
Post 13										
Post 14										
Post 15										
Post 16										
Post 17										
Post 18										
Post 19										
Post 20										
Post 21										
Post 22										
Post 23										
Post 24										
Post 25										

7.3. Correlation matrix

	Vulnerability	Selfie	Nudity	Exotic	Sponsored	Nothing
Vulnerability	1.00					
Selfie	-0.00	1.00				
Nudity	-0.02	0.19	1.00			
Exotic	-0.03	0.01	0.48	1.00		
Sponsored	-0.05	0.01	-0.14	-0.16	1.00	
Nothing	-0.08	-0.70	-0.13	-0.21	-0.17	1.00

Correlation matrix between the independent variables.