



# Influencer Marketing

*Instagram Adverts by Influencers and Firms: Comparative Effects on  
Purchase Intention, Brand Attitude, and Word-of-Mouth*

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This thesis was written as a part of the Master of Science in Economics and Business Administration at NHH. Please note that neither the institution nor the examiners are responsible – through the approval of this thesis – for the theories and methods used, or results and conclusions drawn in this work.



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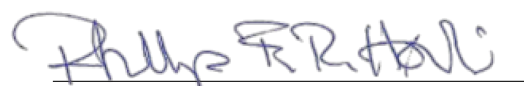
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# Abstract

Social media influencers affecting their follower bases on the popular picture-sharing platform, Instagram, is emerging as an effective communication strategy for brands. However, utilising firm advertisements on Instagram is also a prevalent alternative as it provides brands with precise audience targeting tools and full control of the message. Thus, today's marketers face a strategic decision problem when considering marketing efforts on Instagram; should one use influencer adverts or firm adverts? With scholars yet to uncover the more effective choice on essential consumer responses, we address this decision problem by conducting an experiment with online questionnaires in collaboration with two recognized Norwegian Instagram influencers. Our quantitative analysis provides significant evidence that influencer adverts are more effective than firm adverts on brand attitude, purchase intention, and word-of-mouth. These effects are attributed to the influencers' perceived source credibility, which is facilitated by trust and expertise being carefully crafted through interpersonal communication with followers over time. Also, high levels of credibility reduce the importance of the respondents' attitude toward the advert and sustain the result of influencer adverts outperforming firm adverts. Ultimately, our paper provides valuable insight into influencer marketing, highlighting the importance of credibility in selection and collaboration with influencers.

**Keywords** – Social media influencer, influencer marketing, Instagram marketing, social media marketing

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose and Structure . . . . .	2
<b>2</b>	<b>Background</b>	<b>3</b>
2.1	The Literature Review Process . . . . .	3
2.2	Underpinning Theories . . . . .	4
2.2.1	The Two-Step Flow Theory . . . . .	4
2.2.2	Endorsement Theories . . . . .	5
2.3	Conceptualizing the Social Media Influencer . . . . .	6
2.3.1	The Social Media Influencer and Related Terms . . . . .	7
2.4	Influencer Marketing . . . . .	10
2.5	Consumer Responses to Influencer Marketing . . . . .	11
2.5.1	Brand Attitude and Purchase Intention . . . . .	11
2.5.2	Word-of-Mouth . . . . .	12
2.5.3	Attitude Toward the Advert . . . . .	13
2.5.4	Source Credibility . . . . .	14
2.5.5	Self-regulatory System and Strategic Inclinations . . . . .	16
2.6	Instagram as an Advertising Platform . . . . .	16
2.6.1	Influencer and Firm Adverts on Instagram . . . . .	17
2.7	Conceptual Model . . . . .	19
2.8	Hypothesis Development . . . . .	20
<b>3</b>	<b>Research Methodology</b>	<b>23</b>
3.1	The Modified Experiment . . . . .	23
3.2	Sample and Data Collection . . . . .	25
3.3	Stimuli . . . . .	25
3.4	Questionnaire and Measurement . . . . .	27
3.5	Manipulation Check . . . . .	30
3.6	Ethical Issues . . . . .	31
3.7	Evaluation of the Research Design . . . . .	31
<b>4</b>	<b>Analysis</b>	<b>33</b>
4.1	Descriptive Statistics Analysis . . . . .	33
4.1.1	Initial Sample Characteristics . . . . .	33
4.1.2	Cleaning the Data . . . . .	34
4.1.3	Additional Descriptives . . . . .	34
4.1.4	Other Adjustments before the Analysis . . . . .	36
4.2	The SEM Analysis . . . . .	36
4.2.1	Measurement Model . . . . .	38
4.2.1.1	Measurement Model Fit for Influencer 1 . . . . .	38
4.2.1.2	Measurement Model Fit for Influencer 2 . . . . .	41
4.2.2	Structural Model Estimation . . . . .	42
4.2.2.1	Model Estimation for Influencer 1 . . . . .	43
4.2.2.2	Testing of Hypothesis 1 for Influencer 1 . . . . .	45
4.2.2.3	Testing of Hypothesis 2 for Influencer 1 . . . . .	45

4.2.2.4	Testing of Hypothesis 3 for Influencer 1 . . . . .	46
4.2.2.5	Model Estimation for Influencer 2 . . . . .	48
4.2.2.6	Testing of Hypothesis 1 for Influencer 2 . . . . .	50
4.2.2.7	Testing of Hypothesis 2 for Influencer 2 . . . . .	50
4.2.2.8	Testing of Hypothesis 3 for Influencer 2 . . . . .	51
4.2.3	Summary of the Analysis . . . . .	52
<b>5</b>	<b>Discussion</b>	<b>55</b>
5.1	Main Findings . . . . .	55
5.2	Theoretical Implications . . . . .	56
5.3	Practical Implications . . . . .	59
5.4	Limitations . . . . .	60
5.4.1	Reliability . . . . .	62
5.4.2	Construct Validity . . . . .	62
5.4.3	Internal Validity . . . . .	63
5.4.4	External Validity . . . . .	64
5.5	Further Research . . . . .	65
	<b>References</b>	<b>67</b>
	<b>Appendix</b>	<b>75</b>
A1	Stimuli . . . . .	75
A2	The Questionnaires . . . . .	77
A3	Descriptive Statistics . . . . .	84
A4	Measurement Items . . . . .	85
A5	Assessment of Normality . . . . .	86

## List of Figures

2.1	The Two-Step Flow Model: mass media to consumer via opinion leaders (Katz and Paul, 1955). . . . .	4
2.2	The conceptual model . . . . .	19
4.1	How often the respondents view content on Instagram from the two influencers	35
4.2	The number of brands and influencers followed by the respondents . . . .	35
4.3	Purchase frequency of products respondents have seen on Instagram . . .	36
4.4	The conceptual model with significant path coefficients for influencer 1 .	47
4.5	The conceptual model with significant path coefficients for influencer 2 .	52
A1.1	The influencer advert and firm advert for influencer 1 @lindastuhaug . .	75
A1.2	The influencer advert and firm advert for influencer 2 @mylittlekitchenthe	76
A5.1	Assessment of normality with univariate and multivariate normality tests for Influencer 1 . . . . .	86
A5.2	Assessment of normality with univariate and multivariate normality tests for Influencer 2 . . . . .	87

## List of Tables

2.1	Definition of relevant terms . . . . .	9
3.1	2x2 factorial design . . . . .	24
3.2	Survey questions with sources . . . . .	30
4.1	The number of respondents per influencer and per group before cleaning the data . . . . .	33
4.2	The number of respondents per influencer and per group after cleaning the data . . . . .	34
4.3	Measurement items used in the study . . . . .	39
4.4	Measures used in study for Influencer 1 . . . . .	40
4.5	The means, standard deviations, and correlations for Influencer 1 . . . . .	40
4.6	Measures used in study for Influencer 2 . . . . .	41
4.7	The means, standard deviations, and correlations for Influencer 2 . . . . .	42
4.8	The hypothesized path coefficients for influencer 1 . . . . .	43
4.9	The R-squared values of the variables for influencer 1. . . . .	44
4.10	The total effects of influencer ad dummy on the outcome variables for influencer 1. . . . .	45
4.11	The mediating effects of source credibility for influencer 1. . . . .	46
4.12	The mediating effects of attitude toward the advert that mediates the indirect effects of source credibility for influencer 1. . . . .	46
4.13	The hypothesized path coefficients for influencer 2. . . . .	48
4.14	The R-squared values of the variables for influencer 2 . . . . .	49
4.15	The total effects of influencer ad dummy on the outcome variables for influencer 2. . . . .	50
4.16	The mediating effects of source credibility for influencer 2. . . . .	50
4.17	The mediating effects of attitude toward the advert that mediates the indirect effects of source credibility for influencer 2. . . . .	51
4.18	Summary of hypothesis testing for influencer 1 . . . . .	53
4.19	Summary of hypothesis testing for influencer 2 . . . . .	54
A3.1	Age intervals used in both questionnaires . . . . .	84
A3.2	Age information initial data set . . . . .	84
A3.3	Age information after cleaning . . . . .	84
A4.1	Measurement items used in study (in Norwegian) . . . . .	85



# 1 Introduction

A brand considering endorsements in marketing a decade ago was limited to the alternatives of using traditional celebrities and a few dedicated bloggers. The past ten years have seen rapid change in the communication landscape and given rise to a new type of endorser, namely the social media influencer. These influencers affecting their following is emerging as an effective communication strategy for brands. The social media influencers act as opinion leaders and endorsers, engaging in self-presentation on social media platforms, creating an online image, and using this image to attract and engage their followers (Dhanesh and Duthler, 2019; Khamis et al., 2016; De Veirman et al., 2017)

Social media influencers thrive on the social network, Instagram. The platform has more than one billion active daily users (HubSpot, 2015). Instagram plays an essential role in marketing as it can facilitate collaboration between influencers and brands to humanize content, showcase products, and inspire the audience. Nearly four in five brands use the platform for influencer campaigns (Hub, 2019; Schomer, 2019). Even though joining forces with an influencer seems prevalent, Instagram provides a promising alternative in the form of targeted firm adverts. Thus, firms have mainly two options when advertising their products on Instagram; 1) use influencers that endorse their products and create related content to share with followers, or 2) use Instagram firm adverts where the firm itself is the sender.

The strategy of collaborating with an influencer is proven to yield significant cost-effectiveness, high engagement, accessibility, and authenticity (Schomer, 2019). The influencer marketing space is continuously widening, and many new influencer types are emerging in every conceivable niche interest, and with considerable difference in the size of their following. From using celebrities with massive audiences, one can now tap into smaller segments with influencer adverts.

As opposed to collaborating with an influencer, there are several analytics tools which make Instagram firm adverts precise in audience targeting, and thus a promising strategy. The apparatus can pinpoint geographic location, mapping demographics, interests, and even behaviour (Instagram Business, 2019). Then, Instagram integrates the personalized firm adverts into a seamless experience through photo and video formats, directing about

200 million people to firm websites every day (Instagram Business, 2019).

Admittedly, Instagram can provide key performance indicators based on observable variables that make up an apparent rationale for using either firm adverts or influencer adverts. Also, third-party marketing agencies - often biased by the nature of their operations - generate reports on the impact of influencer marketing. These actors specialize in either influencer collaborations or general online advertising. However, our extensive review found little academic literature arguing what the better choice is for marketers when considering the effects on various consumer responses. The focal point of research seems to be still directed towards celebrities and bloggers. The lack of academic literature thus serves as a topical starting point for our master thesis to investigate a central decision problem; should today's marketers use influencer adverts or firm adverts on Instagram?

## 1.1 Purpose and Structure

The purpose of the study is to document which is the more effective marketing strategy of influencer adverts and firm adverts on Instagram. The study employs a quantitative approach, conducting an experiment and utilizing two online questionnaires distributed through the Instagram accounts of two recognized Norwegian social media influencers<sup>1</sup>. Based on the purpose of the study and literature review, two research questions guide us:

**RQ1: Does influencer adverts have a greater positive effect compared to firm adverts on Instagram?**

**RQ2: Which factors can explain the difference in effect?**

The paper begins with the relevant findings from our literature review, introducing relevant terms, concepts, and identified underlying theories of influencer marketing. Based on a thorough review, a conceptual model and hypotheses are developed. Further, the methodology of the research is presented, and subsequently, the questionnaire data is analyzed utilizing structural equation modeling. The paper then provides a discussion of the main findings, theoretical and practical implications, and identified limitations. Finally, the paper concludes with suggestions for further research.

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<sup>1</sup>Please note that the terms of *social media influencer* and *influencer* are used interchangeably throughout the paper. The same applies to *advertisement*, and its abbreviations *advert* and *ad*.

## 2 Background

In this chapter, a selection of relevant terms and theories relevant to the research questions are defined and elaborated on. We first explain our literature review process and the identified underpinning theories. Subsequently, the social media influencer is conceptualized. Next, influencer marketing and its relevant consumer responses are introduced. Further, Instagram as an advertising platform and the distinctions between an influencer and firm advert on this social media platform are elaborated on. Finally, a conceptual model and its related hypotheses are proposed.

### 2.1 The Literature Review Process

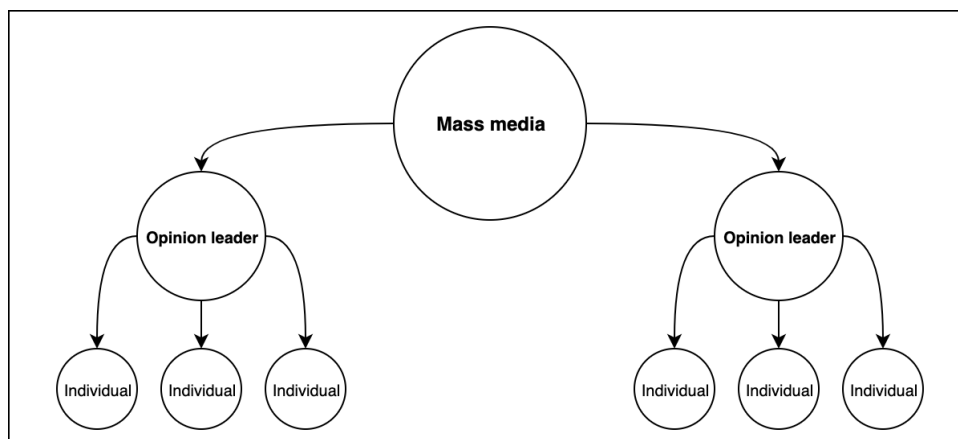
The abstract and citation database Scopus was employed in the literature review process. The keywords used in the search were *influencer marketing*, *influencer*, *social media influencer*, *social media marketing*, *blogging*, *Instagram*, *brand management*, *content marketing*, and *digital marketing*. The search was further narrowed to papers written in English and ranging from one to four ratings in the ABS academic journal guide. This search resulted in about 100 articles. As influencer marketing is an emerging field, it was found necessary to include articles from the entire ABS rating system to ensure an adequate amount of research. Based on the literature review and the papers' suggestions for future research, we came up with several suggestions for possible themes for this thesis. Eventually, we ended up wanting to research the effects of influencer marketing on various consumer responses as this is difficult to measure and a current decision problem for today's marketers. After categorizing the papers and deciding the topic, we did further searches on experimental studies and into the underlying theories of influencer marketing.

## 2.2 Underpinning Theories

Before going into detail on the social media influencer, we identified two relevant theories that can assist in understanding the essence of influencer marketing. The two-step flow theory and the endorsement theories contribute to explaining the important and dynamic communication role influencers play.

### 2.2.1 The Two-Step Flow Theory

According to the two-step flow theory developed by Katz and Paul (1955), rather than messages disseminated from mass media having a general and direct effect, they are filtered by opinion leaders as shown in figure 2.1. These opinion leaders decode the messages and mediate the information through group interactions. The opinion leader tries to engage in social communication and seek to influence the purchasing behaviour of consumers in specific product fields (Flynn et al., 1994, 1996). Moreover, they are by their followers considered honest and trustworthy (Turcotte et al., 2015). Digital influencers, like the offline opinion leaders of the original two-flow communication theory, can be considered opinion leaders that affect communities in the digital environments (Uzunoğlu and Kip, 2014). Their interpersonal communication is more potent in affecting attitudes of individuals than the direct messaging from mass media (Weimann, 1994), where message accessibility is high and potentially with viral effects through sharing and word-of-mouth.



**Figure 2.1:** The Two-Step Flow Model: mass media to consumer via opinion leaders (Katz and Paul, 1955).

### 2.2.2 Endorsement Theories

Endorsement theories are also identified as essential in explaining the effectiveness of an influencer. McCracken (1989) defined a celebrity endorser as "(...) any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement." As such, these theories are also referred to as *celebrity endorsement theories*, underlining the aspect of addressing individuals in the state of being well known. More accurate, a traditional celebrity can be referred to as a person known to the public for his achievements from various fields, such as in TV, sports, music, or movies (Friedman and Friedman, 1979).

Using celebrities for product endorsements has, for a long time, been a feature of marketing, and has demonstrated favourable attitudes toward the brand being endorsed (Till et al., 2008). However, it is well empirically established that in order for this kind of advertising to affect behavioural intentions, some level of commonality, fit or product-match-up between product and endorser is needed (Kamins, 1990; Misra and Beatty, 1990; Till and Busler, 2000). Thus, the research on celebrity endorsements is extensive and comprises of mainly four different approaches (Erdogan, 1999): 1) the source credibility model; 2) the source attractiveness model; 3) the congruence or match-up model and 4) the meaning transfer model. The following is concerned with shortly explaining each approach as the endorsement theories are extensive and run deep in each respective field.

Source credibility or credibility of the message communicator was by Hovland et al. (1953) found to consist of perceived expertise and trustworthiness. The source credibility model proposes that the credibility of a celebrity can influence both consumer attitudes and behaviour toward the endorsed product (Priester and Petty, 2003). Further, according to Mcquire (1969) as cited in Jain and Roy (2016), it is suggested that source attractiveness is a dimension of source credibility, merely finding that attractive celebrities affect consumer attitude more compared to less-attractive celebrities.

The third approach of endorsement theories, the match-up model, is well empirically established that in order for celebrity advertisement to have an effect on behavioural intentions, some level of commonality, fit or product-match-up between product and endorser is needed (Kamins, 1990; Misra and Beatty, 1990; Till and Busler, 2000). However,

there are also facets of the match-up model proposed that further detail how it is to be measured, such as physical attractiveness and expertise (Till and Busler, 2000).

Finally, the last mainstream of research on endorsement theories are drawn from McCracken (1989) and concerns the meaning transfer model. This model was proposed to address the shortcomings of the source credibility models, which did not adequately explain why some celebrity advertisement was effective for one product but not for others (Jain and Roy, 2016). On this basis, McCracken (1989) suggested a general objective of an advert: "(...) the ad must be designed to suggest the essential similarities between the celebrity and the product so that the consumer will be able to take the last step in the meaning transfer process." A three-stage meaning transfer process was proposed: 1) meanings about a celebrity comes about from campaigns, roles, traits or accomplishments; 2) the celebrity transfers the meanings to the product by virtue of the endorsement; 3) meanings are transferred from the product to the consumer through both purchase and consumption (McCracken, 1989). The research approaches are further applied to an influencer marketing perspective in section 2.5.

## 2.3 Conceptualizing the Social Media Influencer

The social media influencer can be referred to as individuals that have built a sizeable social network of people following them (De Veirman et al., 2017). These fan bases are accumulated by offering compelling textual and visual narration of their personal lives or hobbies, being inspirational, relatable and instructive (Abidin, 2016b). Arguably, the essence of influencer marketing is this established influencer-follower relationship built over a longer period. This interpersonal interaction takes place on social media, being internet-based applications on a wide range of word-of-mouth forums such as blogs and social media networks (Kudeshia and Kumar, 2017). The five major motivations for sharing content are according to Huang et al. (2007) self-expression, life documenting, commenting, forum participation and information search. In addition, there might be a monetary incentive for today's social media influencers. According to a survey by iBlog as cited in Collamer (2015) 25 per cent of influencers responding reported full-time income being their prime motivation.

Influencers often operate in niche segments within different categories such as travel, food, beauty and fashion. A key common feature is that they are trusted by a loyal fan base and possess knowledge or personal experience about the topics and products they feature on their social media platforms (Mathew, 2018). The relationships between the influencer and its followers "(...) are built on carefully crafted foundations of credibility, which are important for influencers to grow their own media brand" (Abidin and Ots, 2016). The number of followers an influencer has on any given platform, can serve as an indication for popularity and reach. Thus, a more extensive follower base might leverage greater reach and word-of-mouth effects. Depending on the number of followers accumulated, they are by marketers divided into two main groups: micro- and macro-influencers. The definition of the actual reach for the two categories varies significantly between countries, as some argue a micro-influencer is anyone with less than 1,000 followers, while the majority has converged around a micro-influencer having a total reach between 5,000 to 100,000 followers (Solis, 2016). A macro-influencer with over 100,000 followers have the greatest reach, and according to a study by De Veirman et al. (2017) they were found to be more likeable as a result of being considered more popular. Furthermore, influencers often play a significant role in driving product engagement and brand loyalty due to their capability of communicating to smaller segments with niche interests (Solis, 2016).

### **2.3.1 The Social Media Influencer and Related Terms**

When conferring with Hearn and Schoenhoff (2016) and McCracken (1989), although the social media influencer is a relatively new concept, it only seems to represent a new mode of self-presentation continuing down the line of traditional celebrities and their varieties of endorsement. As such, it may be challenging to pinpoint the differences on a surface-level. The following part thus seeks to address the various terms of interest; opinion leader, celebrity endorser and blogger, and how they are related to the social media influencer. The three main characteristics we will utilise to distinguish the terms are: 1) the ability to influence; 2) content creation; and 3) community engagement.

Following a straightforward logic, the first layer and characteristic of social media influencers is their ability to influence other people. Even though the construct of opinion leadership has its roots back in the 1940s by Lazarsfeld et al. (1944), the opinion

leadership term can be applied to modern-day social media influencers. The influencers of today act as opinion leaders as they exert influence on the decision of others and are "(...) very likely to communicate with others by virtue of their involvement in the product category (...)" (Flynn et al., 1996). Thus, the opinion leadership characteristic applies to both social media influencers and celebrity endorsers. Regarding bloggers, they mainly communicate with their followers through blog posts about their specific interest or whole life, making it function as their diary. While a blogger can be perceived as an influencer as long as it has an influential blog that is effective for brand communication (Uzunoglu and Kip, 2014), a celebrity endorser is referred to as someone who enjoys public recognition and possibly using this to influence their admirers (McCracken, 1989). On the contrary, influencers and bloggers do not need to be commonly known to the public to be influential within their niche or follower base. Nevertheless, if a social media influencer becomes known to the majority at large, beyond the initial follower base, the term of celebrity arguably become an appropriate label.

The second characteristic in which can further nuance the subjects is to what degree the individual or collaborators are performing the content creation. Celebrity collaborators, such as brands, agencies and marketers, often script, produce and distribute the content for the celebrities (Geppert, 2019). Diversely, social media influencers generally tend to be the creator of the entire message, from start to finish. Influencer agencies often highlight the importance of giving an influencer the freedom to shape the brand message according to its profile or communication style in order to make commercial content as authentic as possible (United Influencers, 2019). The content creation is what lends the message credibility, something in which endorsements by celebrities seldom emulates, as reasoned by the analysis and advisory firm Geppert (2019). Additionally, while celebrities often gain fame from a particular achievement, social media influencers can possess knowledge or personal experience from a broad spectre of niche topics and products (Mathew, 2018).

The third identified characteristic is community interaction. In contrast to a celebrity endorser, a social media influencer is continuously running dialogue and creating word-of-mouth effects within its established follower base. This interpersonal interaction comes into play when an influencer is posting content and answering questions, and going into further detail on particular points of interest to individual community members. The



dynamics of celebrity endorsement tend to involve one-way-communication with a single message leveraged, such as a television broadcasting. (Geppert, 2019).

Finally, it is essential to stress the fact that the different concepts discussed are not by any means static. Just five years ago, the word "influencer" was not used in the way it is today, and one would not be considered an "influencer" without having a blog. In mid-2015 the interest of the word bloomed (Google Trends, 2019). For instance, as a result of recognizing the trend, a leading Norwegian marketing agency re-named their brand from United Bloggers to United Influencers (Thue, 2015). The adoption of the influencer word suggests a shift towards incorporating a broader spectre of individuals that engage in self-presentation on social media. To sum up, in this section, the differences between the terms opinion leader, celebrity endorser and blogger in relation to the social media influencer term are discussed and defined. A summary of the different terms is found in table 2.1.

**Table 2.1:** Definition of relevant terms

<b>Term</b>	<b>Definition</b>
<i>Opinion leader</i>	Opinion leaders are individuals that try to influence the purchasing behavior of other consumers in, specific product fields (Flynn et al., 1996). Thus, the social media influencer can be seen as the modern day's opinion leader.
<i>Celebrity Endorser</i>	A individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement (McCracken, 1989). In contrast, influencers do not need to be known to the public to be influential within their niche or follower base.
<i>Blogger</i>	A blogger mainly communicates with its followers through blog posts. "Blogger" is a more narrow and specific term compared to "influencer". In fact, the blogger can be an influencer as long as it has an influential blog that is effective for brand communication (Uzunoglu and Kip, 2014).
<i>Social Media Influencer</i>	Social media influencers engage in self-presentation on social media platforms, creating an online image, and use this image to attract and engage with its followers (Dhanesh and Duthler, 2019) (Khamis et al., 2016).

## 2.4 Influencer Marketing

To explain how the modern-day influencer profits from cooperating with brands, it is of interest to devote attention to influencer marketing. Influencer marketing involves collaboration between brands and influencers. Lim et al. (2017) define influencer marketing as "(...) the use of influencers to drive a brand's message to reach the target segment." Hence, firms pay influencers to create content, be the endorser of the content and share the content with their followers. As such, it can be viewed as a hybrid of both old and new marketing tools, taking the concept of celebrity endorsement and placing it into a modernised content-driven marketing strategy.

The influencer marketing industry has grown rapidly over the last few years, with Instagram currently being the most important channel, (Influencer Marketing Hub, 2019). Figures by Statista (2019b) show that from 2017 to 2019, the global Instagram influencer market value has increased from 0.8 to 1.7 billion dollars. In 2020 it is expected to continue the growth and potentially become a 2.3 billion dollar industry (Statista, 2019b). These figures are in accordance with the increased interest in influencer marketing. The number of Google searches for the term "influencer marketing" has increased with a total of 1,500 per cent, from 3,900 searches per month in 2015 to 61,000 searches in 2018 (Influencer Marketing Hub, 2019), manifesting its popularity.

The influencer industry has matured and become more professionalised. The blurry line between influencer recommendations and hidden advertisement have resulted in several countries developing guidelines specifically for social media advertising, such as guidelines developed by the Competition and Market Authority (CMA) in the UK and Forbrukertilsynet in Norway (Competition and Markets Authority, 2019; Forbrukertilsynet, 2017). They require sponsored content to be labelled "advert", to make followers aware of paid collaborations. Furthermore, numerous new influencer platforms and agencies have emerged in the market during 2018 (Influencer Marketing Hub, 2019), which has resulted in it becoming widespread for influencers to have a commercial agent handling requests from companies. Thus, this suggests it has become more common in the market for brands to find influencers and collaborations through these agencies or platforms connecting firms with the right influencer. According to the influencer marketing agency Mediakix (2019),

these collaborations are often contractual, and the influencer is handed a project brief specifying the main focus of the content, number of posts and the time of publishing. In addition to the influence effect, a clear benefit of influencer marketing is that it allows brands to reach their target group with brand content in a time where adblocking on internet browsers are widely utilised (Forbes Agency Council, 2018).

Uzunoglu and Kip (2014) found that the most critical selection criteria for brands when choosing an influencer to collaborate with are: brand and influencer fit; the number of followers and quality of content; and the influencer's tone of voice and reliability. Several studies highlight the importance of congruence between the influencer and the brand their endorser as a key criterion for advertising success (Lim et al., 2017; Fleck et al., 2012; Lee and Thorson, 2008). Moreover, the most regular objectives for influencer campaigns are awareness, followed by an increase in sales and building a library of user-generated content (Influencer Marketing Hub, 2019).

## 2.5 Consumer Responses to Influencer Marketing

The consecutive part seeks to present relevant consumer responses, drawn from the literature, in order to document the effect of influencer marketing. Latent variables, meaning variables not directly observable, are complex to measure (Schumacker and Lomax, 2010). Hence, visiting literature in establishing definitions is imperative (Saunders, 2016). Specifically, studies focusing on the effects on brand attitude, purchase intention, word-of-mouth, attitude toward the advert and source credibility are elaborated on in the following sections.

### 2.5.1 Brand Attitude and Purchase Intention

According to Schwarz (2006), an attitude is an "(...) overall evaluation that expresses how much we like or dislike an object, issue, person, or action." These associations are learned and tend to be relatively enduring. They also reflect the evaluation of something based on the set of associations linked to it (Hoyer, 2012). As such, they constitute the reason for why we have attitudes toward brands, product categories, adverts, and people. In attitude research, attitude toward a brand or brand attitude has received the

most attention (Hoyer, 2012). Brand attitudes can indicate the predisposition to respond favourably or unfavourably to a particular brand or product after an individual has been shown an advertising stimulus (Phelps and Hoy, 1996).

In this paper, purchase intention is defined as how likely it is that an individual will purchase a product (Phelps and Hoy, 1996). Regarding the brand attitude and purchase intention relationship, the literature has great empirical support which shows a significant brand attitude-purchase intention relationship (Lutz et al., 1983; Brown and Stayman, 1992; Phelps and Hoy, 1996). Brand attitude is thought to be one of the most important determinants of purchase intention, and a marker of behavioural intentions (Abzari et al., 2014; Wu and Wang, 2011). Several studies also indicate that influencers' content and recommendations have led to positive responses on both brand attitude and purchase intention (Hsu et al., 2013; Colliander and Marder, 2018; Djafarova and Rushworth, 2017).

### **2.5.2 Word-of-Mouth**

Perhaps one of the most defining characteristics of an influencer lies in the highly credible and authentic endorsements and word-of-mouth (WOM) that often are seamlessly woven into the shared narratives by the influencers on social networks (Abidin, 2016a; Themba and Mulala, 2013). According to Hennig-Thurau et al. (2004), WOM is defined as "(...) any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the internet." Social electronic WOM (eWOM) is a term that further emphasize the aspect of consumers giving or exploring informal product-related recommendations through social networking sites (Kudeshia and Kumar, 2017). Positive social eWOM becomes powerful as it extends the options of perceived credible and authentic consumption-related information, reducing the cognitive load, and ultimately improving sales (De Vries et al., 2012; Ye et al., 2011; Yayli, 2012). A message posted on social media by an influencer can get echoed by the followers through sharing and reposting the original message. This social exchange is, in part, what makes influencers powerful, as the sharing spark WOM within the social network and can potentially get more consumers involved to speak of a brand or product (Hoyer, 2012).

As regards to advertising effectiveness, it is well documented that WOM and other

interpersonal sources have a stronger effect on key consumer decisions compared to traditional advertising (Goldsmith and Clark, 2008). A study by Kudeshia and Kumar (2017) also found that user-generated positive WOM on social media significantly influence consumer's attitude and purchase intention. In this process, the shortcomings of traditional advertising techniques are bypassed, as there are little avoidance and resistance to the interpersonal indirect advertising (De Veirman et al., 2017; Weimann, 1994).

### 2.5.3 Attitude Toward the Advert

An essential construct in marketing and advertising literature is "attitude toward the ad" or "liking of the ad" (Aad). There is widespread consensus that Aad is an essential mediator of advertising response, on both brand attitude and purchase intention (MacKenzie and Lutz, 1989; Mitchell, 1986; Mitchell and Olson, 1981; Lutz et al., 1983). There is also precedence for a direct relationship between Aad and purchase intention. This relationship seemed to take effect when affective responses were evoked due to cognitive low involvement (Cacioppo and Petty, 1980). The same positive relationship was also found for familiar and unfamiliar products (Cox and Locander, 1987). However, a comprehensive review by Muehling and McCann (1993) found that when defining the Aad construct, authors of attitude research tend to be divided. Thus, there is no clear universal definition. Muehling and McCann (1993) suggest two main views: an unidimensional and one multidimensional. The unidimensional view of Aad relies on the definition by Lutz et al. (1983), suggesting that Aad is: "(...) a predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion." Alike, Phelps and Hoy (1996) notes that Aad is defined as "(...) a viewer's general liking or disliking of an advertisement". These views are consistent with the notion of Aad being a global and effective construct (Muehling and McCann, 1993). On the other hand, the multidimensional view has the overarching notion that there is both an affective, emotional and cognitive component of Aad (Muehling and McCann, 1993). Following the reasoning of Shimp (1981), he proposed the cognitive dimension of entailing the conscious responses to execution elements, such as source characteristics and use of humour. This approach of definition could be argued to position this dimension in a high involvement and central processing for the individuals (Hoyer, 2012).

A construct such as an attitude toward the advertiser (Aadv) also have significant effects (Brown and Stayman, 1992), and is hence illuminated. Lutz et al. (1983) says that the mechanism by which Aadv affect Aad is straightforward; the feelings about the advertiser govern the feelings about the ad itself. As such, consumers carry their Aadv into an ad exposure situation, and the perception of the advertiser becomes one of the underlying sources of Aad. A study conducted by Lim et al. (2017) found that consumers with a favourable attitude towards a social media influencer would generally have a positive intention to purchase the products endorsed by the influencer. This study also found consumer attitude to be the most important factor influencing purchase intention compared to source credibility, source attractiveness, product match-up and meaning-transfer (Lim et al., 2017).

#### **2.5.4 Source Credibility**

The reader is invited to recall that source credibility make up one of the four streams of research in endorsement theories (Erdogan, 1999). It is well known that source credibility has a persuasive effect and influence the effectiveness of endorsement (Sternthal et al., 1978; Hovland and Weiss, 1951). The term is commonly used to describe how a receiver's acceptance of a message is influenced by positive characteristics of the communicator (Ohanian, 1990). The acknowledged research by Hovland et al. (1953) concluded that perceived source credibility consists of two dimensions: trustworthiness and expertise. Hovland et al. (1953) define expertise as "(...) the extent to which a communicator is perceived to be a source of valid assertions" and trustworthiness as "(...) the degree of confidence in the communicator's intent to communicate the assertions he considers most valid." It has been frequently demonstrated that people with trust and expertise induce greater positive attitude toward the position they advocate than people with less credibility (Sternthal et al., 1978). Worth noting is that Mcquire (1969), as cited in Jain and Roy (2016) and Ohanian (1990) also incorporated attractiveness as the third dimension of source credibility. This notion came about due to research suggesting that physically attractive communicators often were liked more and had a positive impact on product evaluations and opinion change (Ohanian, 1990). Following the arguing of Goldsmith et al. (2000), this tricomponent is sensible when an information source is a

person. However, when the source mainly is a firm or a sender with the absence of human presence, attractiveness naturally becomes a less applicable descriptor.

Consumers' general perception of credibility is likely to influence how they perceive a particular ad's credibility (Fishbein et al., 1975; Goldsmith et al., 2000; Lutz et al., 1983), similar to how the mechanism of attitude to source affects the attitude toward the advertiser. As Lutz et al. (1983) expressed it, the logical consistency have it that consumers are likely to perceive a direct relationship between the credibility of the advertiser and the credibility of the advert coming from the same source. Endorser credibility having a positive relationship with Aad was demonstrated by Lafferty and Goldsmith (1999). However, Goldsmith et al. (2000) found the credibility of the endorser to *only* work through Aad on other advertising effectiveness variables. Likewise, a recent study reported the credibility of social media influencers to have an insignificant relationship with attitude and purchase intention (Lim et al., 2017). Notably, the latter study justified this outcome with the influencers having inadequate expertise knowledge about the endorsed product. This conception was also addressed by Evans (2013) as cited in Lim et al. (2017), stating that endorsers who went beyond their respective fields of expertise could indirectly hurt the consumers' perceived image of the source, and hence ultimately cause negative purchase intention.

The established relationships between influencers and their followers are based on trust and credibility and are what make brands want to collaborate with influencers, as they can deliver more authentic storytelling of the brand (Dhanesh and Duthler, 2019). The social media influencer is found to be regarded as a more trustworthy, credible and knowledgeable compared to a traditional celebrity endorsement (Lim et al., 2017; Jin et al., 2019). This finding is also supported by Metzfer et al. (2003), as cited in Lim et al. (2017), reporting that sufficiently high levels of trustworthiness and expertise would lead to higher acceptance of messages disseminating from the endorsers. However, these findings of the influencer's credibility are in contrast to the findings of Goldsmith et al. (2000) looking at endorsers in general. Thus, this indifference towards the message indicates that the Aad is not a crucial mediating step in affecting behavioural intentions when credibility is high - something in which social media influencers at large are thought to possess. This notion is also particularly present in low-effort situations when credible sources can serve as

peripheral cues for making simplified judgements (Hoyer, 2012). Subsequently, consumers exposed to the influencer post also show a more positive attitude toward the brand and feel a stronger social presence with the influencer than those exposed to the celebrity endorser (Jin et al., 2019). Likewise, a similar message with an influencer as the endorser can be perceived as more credible and authentic than one having the brand itself as the endorser (De Veirman et al., 2017).

### **2.5.5 Self-regulatory System and Strategic Inclinations**

Lastly, to conclude the part about consumer responses to influencer marketing, some attention is given to self-regulatory focus and strategic inclinations in decision-making. A self-regulatory system refers to the much researched hedonic motivational principle by which consumers approach pleasure and avoid pain (Crowe and Higgins, 1997; Higgins, 1998). Higgins et al. (1994) introduced a system of two alternative strategies of accomplishing discrepancy reduction: "(...) approach actual self-states that match the desired end-state or avoid actual self-states that mismatch the desired end-state." These two strategies, derived from a general principle of regulatory focus, has yielded the terms of promotion and prevention focus, respectively (Crowe and Higgins, 1997). For instance, a marketing advert with promotion focus is concerned with advancement and growth, and hence elaborate on the positive product or brand attributes. In contrast, an advert with prevention focus is concerned with safety, responsibility and non-loss, in line with the logic of Crowe and Higgins (1997).

## **2.6 Instagram as an Advertising Platform**

When addressing the social media influencer, it is imperative to have an understanding of Instagram, as many companies tend to look to this platform when considering the strategic marketing efforts and campaigns utilising influencers (Schomer, 2019). Instagram is a popular picture-sharing social media platform with over 1 billion active users monthly and the fastest growing social media in 2019 (Influencer Marketing Hub, 2019). The social network allows users to share their photos on their profile, follow other user accounts and in their Instagram feed look at the most recent content published by the people they



are following. Moreover, Instagram stories launched in 2016 inspired by the social media network Snapchat. This function allows the users to post photos and videos that their followers can see for 24 hours (Instagram Press, 2016). Figures from Instagram Press (2017) show that the average user under 25 years old spends more than 32 minutes per day on the app, while the average user over 25 years uses the app around 24 minutes. Thus, the numbers suggest that Instagram is an important social platform in the users' daily lives.

Brands have also entered Instagram, and internal figures indicate that the application has over 25 million business profiles (Instagram Business, 2019). As over 50 per cent of Instagram users globally are under 34 years old (Statista, 2019a), Instagram is an attractive channel for reaching younger target groups. Instagram makes it easier to interact with consumers and with its visual and aesthetic appearance, it focuses on inspiring content. 60 per cent report they discover new products on Instagram (Instagram Business, 2019). Also, numbers show that Instagram is currently the most important channel for influencer marketing and 79 per cent of all influencer campaigns include content on Instagram (Influencer Marketing Hub, 2019). Thus, Instagram is currently the leading platform for social media advertising, and in the following section, we look into the advertising options on this platform.

### **2.6.1 Influencer and Firm Adverts on Instagram**

Recollect that brands mainly have two options when advertising their products on Instagram. The first option is to pay an influencer to promote their products on the influencer's profile (hereby "influencer advert"). As a second option, firms can pay Instagram directly to make their own content more visible both in the feed and story of their target group. Figures from Instagram Business (2019) show that over two million advertisers have used Instagram in this way to advertise. In this type of adverts (hereby "firm adverts") the firm itself is the sender of the content.

A key difference between influencer adverts and firm adverts on Instagram is that influencers mainly post organic content to their followers. An Instagram post being organic content means that it only appears in the Instagram feed of those following the specific influencer. In contrast, firm adverts bought from Instagram show the content to a

specific target group, such as women between 18-25 years old in Norway. Thus, it means that the post appears in the Instagram feed of the specified target group as paid content together with the content they have chosen to follow themselves.

On the one hand, Instagram firm adverts are efficient in targeting specific groups based on demographics, geographic location, interests and behaviour (Instagram Business, 2019). Further, it might be time-efficient for firms to publish their own adverts as it gives them full control of the message and image, and more flexibility of when to publish it. For instance, personalised adverts are a capability that allows firms to develop relevant content based on search history and website log. Based on consumer behaviour, an algorithm can figure out the optimal time for when to display the firm advert (Tran, 2017). On the other hand, influencer adverts offer an established community of people following the influencer, where the influencer creates the content and potentially makes the advert more authentic. However, the firm should be aware of potential image transfer from the influencer's brand image to its own brand (Keller, 1993), and therefore collaborating with the right influencer is essential for a successful influencer campaign for the brand.

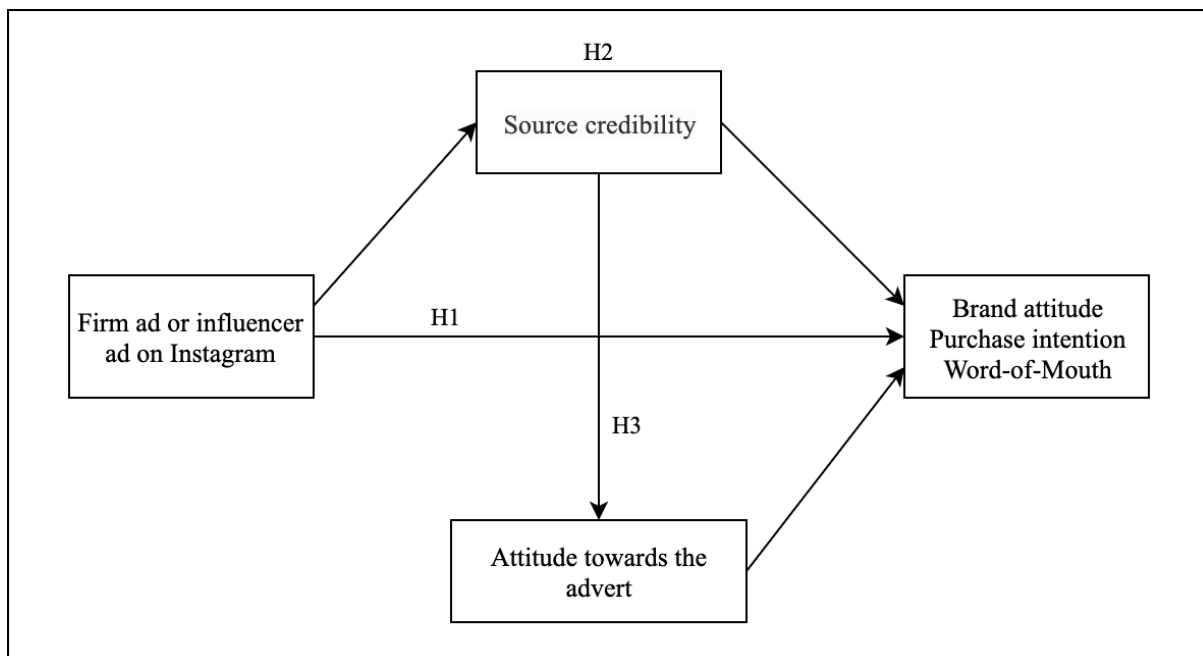
As mentioned earlier in section 2.3, one of the major benefits of influencer marketing is the authenticity and established a relationship with the followers. Therefore, in order for an influencer advert to appear authentic, it must fit the specific influencer's profile and image (Jin and Muqaddam, 2019). For instance, Jin and Muqaddam (2019) find that consumers react negatively to posts where the influencer does not appear in the photo with the product they endorse if they usually post photos of themselves. These product-only posts might indicate a clear financial motive and be considered intrusive by the followers (Jin and Muqaddam, 2019). Hence, the importance of influencer adverts appearing natural and in line with their profile. Regarding firm adverts, Jin and Muqaddam (2019) found no difference in corporate credibility and brand attitude regardless of human presence. This finding could be due to the product-only posts not being considered intrusive as one would expect the brand to post product-centred photos on its own Instagram profile

Nevertheless, investigating numerous food and interior profiles on Instagram, it seems clear that it is common for profiles within these niches to have a limited human presence. The focus is mainly on posting images of baked goods and stylish living rooms. In contrast, a lifestyle influencer often tends to appear in much of its content. Therefore, in order to

make adverts by food and interior influencers appear authentic on their profiles, it might be a better fit to post pictures of the product without human presence.

## 2.7 Conceptual Model

Based on the research questions of the thesis and the literature review presented, a conceptual model and its related hypotheses are developed in the following section. The conceptual model is proposed in figure 2.2 below. The research questions of the thesis are: RQ1) Does influencer adverts have a greater positive effect compared to firm adverts on Instagram? RQ2) Which factors can explain the difference in effect?



**Figure 2.2:** The conceptual model

The conceptual model is a two-step mediator model. The model consists of independent-, dependent-, and mediating variables. The independent variables are determined by no arrows of causal sequence pointing to them (Schumacker and Lomax, 2010). In our study, the firm ad and influencer ad are the independent variables. The latent variables we want to study are brand attitude, purchase intention and WOM. These are the dependent variables in the conceptual model, indicated by the variables receiving arrows. The arrow going straight from the independent to the dependent variables suggest direct relationships and direct effects. The final element is the mediating variables of source credibility

and attitude towards the advert. They may contribute to explain if the effect from the independent variable is transmitted through the mediating variables to the dependent variables. This latter path composes the indirect relationships of the conceptual model. The theoretical support for each path and introduction of the hypotheses is provided separately in the following section.

## 2.8 Hypothesis Development

The conceptual model proposes a direct relationship between each type of advert to dependent variables of brand attitude, WOM and purchase intention. Firstly, several studies have documented the effect of influencer marketing. Goldsmith and Clark (2008) found that WOM, which is a key characteristic of influencer marketing, have a stronger effect on consumer decisions compared to traditional advertising. With WOM and eWOM being overlapping concepts, a mere focus on WOM is decided due to its more general appliance. In accordance with De Veirman et al. (2017), using influencers as intermediaries can lower the avoidance and resistance in contrast to traditional advertising. Moreover, the two-step flow theory and opinion leadership claim that interpersonal communication is more powerful in affecting attitudes of individuals compared to mass media (Weimann, 1994). Evidence by Lim et al. (2017) also suggest that consumers with a favourable attitude towards a social media influencer would generally have a positive intention to purchase the products endorsed by the influencer. This finding is supported in research conducted by Hsu et al. (2013), Colliander and Marder (2018) and Djafarova and Rushworth (2017) suggesting that influencers' content and recommendations have led to positive responses on brand attitude and purchase intention. With brand attitude thought to be one of the most important determinants of purchase intention (Abzari et al., 2014; Wu and Wang, 2011), a rationale of influencers significantly affecting brand attitude is more than plausible. The argumentation mentioned above work as a foundation of the following hypothesis:

**H1: The influencer advert has a greater positive effect than the firm advert on: a) brand attitude, b) purchase intention, c) word-of-mouth**

Subsequently, the reason for focusing on source credibility, and not ad credibility, follow

the logical consistency of consumers being likely to perceive a direct relationship between the attitude toward the ad and how credible any given advertiser is and the credibility of the ads emanating from the source (Lutz et al., 1983). The proposed route of source credibility not circumventing Aad is also based on Metzfer et al. (2003) as cited in Lim et al. (2017) and Hoyer (2012), indicating that a sender with sufficiently high credibility leads to higher acceptance of messages and favourable simplified judgement making. Hence, some level of indifference towards the message indicates that the Aad is not a crucial mediating step in affecting behavioural intentions.

Following De Veirman et al. (2017) and Jin et al. (2019), social media influencers are perceived as more credible and authentic compared to having the brand itself or a traditional celebrity as the endorser (see section 2.5.4). This finding can be explained by the influencer-follower relationship built on trust over time and the consumer choosing to follow the influencer's content, which makes the influencer more capable of delivering authentic storytelling of a brand (Dhanesh and Duthler, 2019). In contrast, a firm advert appears in the Instagram feed of the target group without an active choice of receiving the content. On the one hand, the firm might be seen as an expert on the product and thereby be perceived as a credible source. On the other hand, the firm adverts can be seen as non-neutral selling arguments for buying their own product, while the influencer can be seen as a more authentic source of information. Thereby, the content from a social media influencer can influence consumer's attitudes, opinions, beliefs and behaviours as it is perceived as a credible source (Wang et al., 2017). Based on the reasoning above, the second hypothesis of the conceptual model is:

**H2: The positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is mediated by source credibility.**

The second mediator of the conceptual model is the attitude toward the ad working sequentially through the mediator of source credibility. This arrangement is based on the reasoning by Lutz et al. (1983) about the generalization of effect and perception: the effect of feelings about any given advertiser governing the feelings towards an ad from the same advertiser. This notion is also reported by Lafferty and Goldsmith (1999) and Goldsmith et al. (2000) demonstrating a positive relationship between endorser credibility and Aad. Note that Goldsmith et al. (2000) suggest that this is the only route to generate

significance for credibility. Hence, the credibility of the advertiser constitutes one of the important underlying perceptual dimensions, and Aad must be mediated by source credibility. No relationship from the independent variables to Aad is therefore proposed. Lastly, there is widespread consensus that Aad is an important mediator of advertising response, on both brand attitude and purchase intention (MacKenzie and Lutz, 1989; Mitchell, 1986; Mitchell and Olson, 1981; Lutz et al., 1983). Consequently, the line of arguments make up the third hypothesis of the conceptual model:

**H3: The positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is sequentially mediated by source credibility and attitude toward the ad.**

## 3 Research Methodology

In this section, the methodology employed is presented and discussed. Our plan outlining the research design, how to answer the research questions of the thesis, is presented. The plan includes the research strategy in the form of an experiment, sample and data collection, stimuli, questionnaire and measurement, and manipulation check, in addition to ethical issues and an evaluation of the research design.

As this thesis aims to investigate whether the influencer adverts have a greater positive effect compared to firm adverts on Instagram, a causal research design is used. This design, also known as explanatory research design, is characterised by investigating causal relationships between variables, hence a cause-and-effect relationship. The thesis has a deductive research approach which implies using existing theory to develop hypotheses, which are tested by analysing the data collected. Thus, primary data at a meso level - an organisational level between micro and macro - is collected and analysed to answer the research questions. Moreover, a quantitative research method is utilised. More specifically, it is a mono method quantitative study as the thesis use one technique, an experiment in the form of questionnaires, for data collection. The quantitative method differentiates from the qualitative method by generating or using numeric data, while the latter use non-numeric data such as words or images. (Saunders, 2016).

### 3.1 The Modified Experiment

The research strategy of the thesis is to conduct a modified experiment utilising questionnaires. In contrast to the classical experiment, the modified version in this paper has a post-test-only-design as a pre-test might influence the respondents' answers. Further, the purpose of conducting the experiment is to look at the likelihood of a change in the independent variables (influencer ad and firm ad) causing a change in the dependent variables (brand attitude, purchase intention and WOM). The experiment aims at reducing the number of possible explanations for the difference between the treatment groups to two possibilities: 1) the effect of some combination of the experimental factors, and 2) chance (Haslam et al., 2004). The influencer and firm advert make up the treatment

groups. Based on the research questions and hypotheses of the thesis, it was decided that it would not be appropriate to include a control group in the experiment. The reason being that including a control group would add certain value to the research design but would not contribute to answering the specific research questions of this thesis. Therefore, it was decided to solely focus on the firm advert and influencer advert in the experiment, in order to investigate whether influencer adverts have a greater positive effect compared to firm adverts.

In the experiment, two food influencers advertised for the same product in two separate questionnaires distributed through each influencer’s Instagram account. Influencer 1 is Linda Stuhaug, with the Instagram profile @lindastuhaug. She is a female influencer aged 25, who publishes food and baking recipes *without* added sugars, and can be considered a macro influencer with 111,000 followers on Instagram (De Veirman et al., 2017). Influencer 2 is Thea Bolstad, with Instagram profile @mylittlekitchenhea. She is a female influencer aged 23, who shares food and baking recipes *with* sugar. This profile can be considered a micro-influencer as it has 16,200 followers (Solis, 2016). The Instagram platform was chosen due to its current popularity for influencer marketing (Influencer Marketing Hub, 2019), and the possibility to make sure that only followers of the influencers responded. The experiment had a 2x2 factorial design with four conditions (groups with different exposures) as shown in table 3.1 below. The approach of the experiment was a between-subject design as each participant was only exposed to one condition. Regarding the time horizon, the paper employed a cross-sectional study, lasting for one week from Tuesday 8th of October, which Saunders (2016) establish as a valid method when conducting data collection through a questionnaire.

	<b>Firm advert</b>	<b>Influencer advert</b>
<b>Influencer 1</b>	group 1	group 2
<b>Influencer 2</b>	group 3	group 4

**Table 3.1:** 2x2 factorial design



## 3.2 Sample and Data Collection

Data were collected by having the two influencers distribute a link to an online, self-administered questionnaire through their respective Instagram accounts. More specifically, the links were posted on the influencers' Instagram stories which means the questionnaires were available to their followers for 24 hours. The target group is the Instagram followers of each influencer, hence the strategy of letting the influencers distribute the surveys makes up an effective approach in making sure the respondents follow the specific influencer. Moreover, as Instagram is mainly a mobile application, it was expected that the majority of the respondents would complete the questionnaires on mobile devices. With Instagram being the distribution channel for the surveys, the study aimed at strengthening the external validity by having the respondents completing the survey in the same contextual situation as they would normally be in when using the platform.

Before participating, the respondents were made sure that their anonymity was secured, something in which can increase the credibility of the survey (Saunders, 2016). Further, the followers were informed of an adequate monetary incentive to participate. Once the survey was distributed, self-selection sampling made up the sampling frame. Participants were then randomly assigned to the two conditions (see figure 3.1), in order to avoid systematic difference between the groups (Saunders, 2016).

There is little knowledge of the response rate of surveys distributed through Instagram. Saunders (2016) state that the typical internet survey has a response rate of about ten per cent. With the influencers having 111,000 and 16,200 followers, only a small percentage of the total follower base was needed in order to collect a sufficient number of respondents. Determining the sample size and estimates for sampling errors is, as stated by Fowler Jr (2002, 2014), challenging when the sampling method deviates from simple random sampling. The sample size is further discussed in the analysis (see chapter 4).

## 3.3 Stimuli

As the experiment aims to test the difference between firm adverts and influencer adverts on Instagram, the stimuli were made to imitate realistic Instagram posts. The two

influencers are both operating within the category of food and baking. However, they have a slightly different communication style, and they write in two different official writing standards of Norwegian. Many of the followers have followed the influencers over a long period and may quickly spot inconsistencies and deviations in language and style, which could pose a significant threat to external validity. Therefore, to respect the follower-follower relationship, a thorough scan of previous material posted by the influencers was conducted to track down patterns in writing and photo styles. As to the photo styles, their similar style made it possible to use identical images for the adverts. The captions of the adverts were also made similar, the only difference being the two different official writing standards of Norwegian. When deciding the number of likes, the average number for each influencer was used on both stimuli. Having an equal number of likes on both adverts aims at eliminating potential differences between the firm and influencer adverts due to the number of likes. Furthermore, the influencer adverts were labelled "Reklame" (advertisement) following the requirements by Forbrukertilsynet (2017).

The two treatment groups in each survey received approximately identical adverts displaying the same product. However, one advert was the influencer endorsing the product, and the other was a firm advertising the product. The product on display was, with permission from the brand *Bare Bra*, a package of their new granola named *Protein Supergranola*. This new breakfast food was chosen as influencers are often found advertising for new releases, and thereby one might expect a low degree of existing biased opinions about the product. Also, the granola product is believed to serve the purpose of being a relatively gender-neutral identified product. Further, the stimuli contained the granola package in combination with a smoothie bowl with the granola as a topping, and no influencers present. This approach enabled us to a large degree control the look of the stimuli and made it easier to attempt to isolate effects across the influencers. All picture stimuli were edited into an Instagram format using Adobe Photoshop. Both stimuli had a promotion focus, as in accordance with Crowe and Higgins (1997) elaborate on the positive product or brand attributes of a product (see section 2.5.5). This approach seemed most appropriate, considering the existing content of both influencers. It should be noted that none of the stimuli was published publicly, but only shown to the participants within the two questionnaires. The influencer advert and firm advert for influencer 1 and 2 can be seen in figure A1.1 and A1.2 in the Appendix A1.

## 3.4 Questionnaire and Measurement

In this section, the design choices of the final questionnaires are elaborated on. Firstly, the Handbook of Marketing Scales by Bruner (2009) has provided the comprehensive compilation of measures which this paper has utilised. In general, research methodologies are often concerned with attempting to gain information about latent factors, unobserved variables, through observable variables and items such as provided by Bruner (2009) (Schreiber et al., 2006). Furthermore, using a database of pre-tested variables is in accordance with best practice when constructing questionnaires (Brancato et al., 2006). The survey included the constructs of brand attitude, purchase intention, WOM, source credibility, attitude toward the advert, question about Instagram usage and demographics. It should be noted that some of the items are slightly modified to fit the purpose of the study, and maintain consistency throughout the survey (Paul and Cozby, 2012).

The measures of the dependent variables were all previously measured utilising Likert scales. A Likert scale is a common tool used by researchers to measure respondents' attitudes and opinions (Likert, 1932). The reliability of the following measures was by Bruner (2009) described in terms of internal consistency with Cronbach's alpha. A value above .7 is considered acceptable, yet above .8 is preferable (Cortina, 1993).

The three items aiming at measuring the construct of brand attitude were adapted from a study by Sengupta and Johar (2002) and Singh et al. (2000). The scale used by Sengupta and Johar (2002) is composed of two, seven-point Likert type statements that seek to measure the opinion of a certain brand or product. They reported a Cronbach's alpha of .93 for the reliability of the scale. The one-item Likert scale adapted from Singh et al. (2000) reported a reliability of .94. Regarding purchase intention, the two items used are based on Chandran and Morwitz (2005)' seven-point statements measuring an individual's probability of buying a particular product. Concerning reliability, the reported Cronbach's alpha for the scale was .89. Moreover, the measuring of WOM was drawn from a study conducted by Maxham III and Netemeyer (2002). The seven-point Likert type statement was used to measure the likelihood of suggesting to others that they buy from a particular company in the future. A single-item scale design was employed, and Cronbach's alphas of .92 and .90 were reported (Maxham III and Netemeyer, 2002).

Next, the pre-tested measures for the mediating variables were retrieved. The measurement of attitude toward the advert consists of various bipolar adjectives aiming at measuring the affective component of a consumer's attitude about a given advertisement. The notion of focusing separately on the affective aspect, as opposed to including the cognitive and general evaluative aspects of attitudes, is supported by Muehling and McCann (1993). The measurement of attitude toward the advert, in this case encapsulating the affective aspect, is based on studies conducted by McQuarrie and Mick (1992, 1999, 2003), reporting a steady high Cronbach's alpha of .92, .90 and .91 respectively, using the same items. Regarding the bipolar scale, it is preferable to maintain the same format as the Likert scales (e.g. same number of answer options). An additional item mapping attitude toward the advert is *interest*, and it is based on measures conducted by Zhang (1996) and Petroschius and Crocker (1989) reporting .92 and .75-.87 Cronbach's alpha respectively. Note that this reliability was reported using a seven and a nine-point Likert scale. Lastly, the item scale of credibility draws upon the extensive research of Ohanian (1990) focusing on the facet of trustworthiness. In the study from 1990, the Cronbach's alphas were reported to be .895 and .896 in the case of two celebrity endorser test ads.

Furthermore, several questions aimed at measuring Instagram usage were included: how often respondents view content from the specific influencers; how many influencers and brands they follow on Instagram; and how often they buy something they have seen on Instagram. These were introduced at the end of the survey to not prime respondents when answering questions about one of the Instagram adverts. Following Sommer and Sommer (1997), the factual and demographic questions were introduced as the final questions of the survey.

In accordance with Brancato et al. (2006), the pre-tested questions were translated to Norwegian as the respondents' native language is preferred in order to ensure a satisfactory measurement validity. Regarding the translation of the questions, they were first translated by a bilingual from English to Norwegian and thereafter translated back again to English by another, independent bilingual source to check for translation misunderstandings. The final questions translated to Norwegian can be found in table A2 in the Appendix.

The questionnaires of this study were generated using Qualtrics software, version October 2019 (Qualtrics, Provo, UT, 2019). Further, the questionnaire took three to five minutes

to answer. Before distributing the survey, a pre-test was conducted. The pre-test consisted of several Norwegian natives to ensure the questions were perceived clear, had ease of comprehension and were user-friendly on mobile devices (Brancato et al., 2006). The feedback involved many respondents reporting easy accessibility and satisfactory length of the survey. However, some respondents had difficulties orienting themselves in the questionnaire as the seven-point Likert scales exceeded the mobile screen. Therefore, it was decided to use five-point instead of seven-point Likert scales as it was deemed more accommodating to the format of mobile devices, and thereby it might improve completion rates, consistency and representativeness of data (Sommer and Sommer, 1997; Paul and Cozby, 2012). However, the disadvantage of reducing from a seven to five-point scale is that the results might not be as nuanced. Qualtrics, Provo, UT (2019) provided a survey design score that was utilised as a guiding tool when constructing and optimising the survey.

The survey only used closed questions, and the respondents had to answer all questions in order to complete the survey. Furthermore, it was not possible to return to previous questions once the respondents had moved on to the next page, in order to avoid contamination of the results. Moreover, it was decided to use matrices on the Likert scale questions in order to reduce the perceived length of the survey by reducing the number of pages the respondents had to turn to complete it. Even though using matrix questions might reduce comprehension (Dillman et al., 2014), reducing the length was prioritised as the attention span, and effort level on mobile devices arguably is low.

On the five-point Likert scales, there were five possible response categories to choose for the respondents. For instance, questions involving agreement as the type of rating had the following options: 1) strongly disagree, 2) disagree, 3) neutral, 4) agree, and 5) strongly agree. Throughout the survey, the response categories on the Likert scales were kept in the same order to avoid confusion (Dillman et al., 2014). We also re-framed the questions not to be biased towards an agreement, such as including "To what extent do you agree or disagree with the following statements: (...)". Nevertheless, the questions uncovering source credibility and attitude toward the advert used bipolar scales in accordance with the pre-tested measures described earlier in this section. These displayed two extremes, also with five scale points, for example, 1) unappealing, and 5) appealing, where the

respondents were asked to select a point between the two extremes (Qualtrics, 2019). The screenshots from the final questionnaire developed in Qualtrics are in section A2 in the Appendix. An overview of the sources for the different questions is in figure 3.2 below.

Concept	Questions	Source
Brand attitude	Q4,Q12	Senguptaand Johar, 2002 and Singh et al., 2000
Attitude toward the ad	Q5,Q13	McQuarrie and Mick, 1992, 1999, 2003
Purchase intention	Q7,Q8,Q15,Q16	Chandran and Morwitz, 2005
Source credibility	Q6,Q13	Ohanian, 1990
Word-of-mouth	Q7,Q15	Maxham III and Netemeyer, 2002

**Table 3.2:** Survey questions with sources

### 3.5 Manipulation Check

In order to determine whether the independent variable manipulation had the intended effect on the respondents in the experiment, a manipulation check was conducted (Paul and Cozby, 2012). The sender of the Instagram adverts was the factor that was manipulated in the experiment. Therefore, the manipulation check in both of the surveys asked the respondents to indicate who endorsed the product in the Instagram advert shown to them (see Q9 and Q17 in section A2 in the Appendix). Hence, this could also be seen as an attention or memory check, as it discovered the participants' attention when looking at the specific advert.

This memory check was beneficial as it identified those who did not correctly identify the sender of the advert and thereby, one could remove them from the analysis. Thus, it can increase the internal validity of the results. Following Paul and Cozby (2012), the question to check the memory was presented after the respondents were exposed to the stimulus and answering the questions related to it. In this way, even though the memory check might have revealed the purpose of the study, it would not have influenced the respondents' answers to the questions about the dependent variables.

## 3.6 Ethical Issues

Potential ethical concerns regarding the research design are essential to consider in order to minimise them (Saunders, 2016). Firstly, with the majority of the sampling happening through Instagram on mobile devices, people might be in a low-effort situation (Hoyer, 2012). As such, it was important to ensure informed consent from those taking part. Part of this was to ensure the confidentiality of the data and maintenance of anonymity. A guidance tool provided by Norwegian Social Science Data Senter's (NSD) indeed confirmed that no personal data is processed in the project (Norwegian Centre for Research Data, 2019b). A strive for objectivity and research on the neutral ground was applied throughout. However, we acknowledge that one of the authors being influencer 2 might have influenced the objectivity.

## 3.7 Evaluation of the Research Design

There were practical constraints and limitations that affected the research design. In lack of resources and time, we only collaborated with two food influencers that voluntarily participated in the experiment. It was somewhat challenging finding influencers that were willing to participate as the study did not have a budget to pay the influencers to distribute the survey. Ideally, the research would also have engaged influencers from different categories to investigate if results would be similar between different niches of social media influencers. Notably, the approach of this paper to focus on one category may cause the results to have lower generalisability to other product categories. However, conducting the experiment on two influencers within the same category arguably strengthens the research design. Two, as opposed to one data set, can enhance the reliability of the findings (Saunders, 2016).

Even though having Instagram as a distribution platform of the surveys and making the influencers share the participation link was deemed appropriate, it may have biased the attitude toward both adverts. Thus, people may have goodwill to answer the questions positively due to the established relationship between the influencer and its followers.

There is limited knowledge of the response rate, and potential pitfalls of surveys distributed

through Instagram in academic literature. Discovering this new approach of data collection, therefore, posed a certain risk. For instance, one biasing feature was the effect of availability and limitations in the enlistment of cooperation, all in which a convenience sampling could induce (Fowler Jr, 2014). Thus, people either being too busy, having prior knowledge or lack the intrinsic motivation to participate could bias the sample. With Instagram being a mobile device app, many users may have used it with limited effort, and following Hoyer (2012), hence not devoted emotional resources to process the central idea behind the communication. Distributing a survey into this situation could thus have been problematic. However, the benefits are believed to far outweigh the downsides by having substantial reach within the target group (e.g. potentially having many respondents) and a promising ecological validity.



## 4 Analysis

In this section, we present the descriptive statistics, the structural equation modelling analysis and testing of the hypotheses. The analysis was run separately for each data set collected from influencer 1 and 2.

### 4.1 Descriptive Statistics Analysis

#### 4.1.1 Initial Sample Characteristics

Influencer 1 achieved 857 respondents within a 24-hours-Instagram story. The response rate of those that opened the story was 10.2 per cent, while the response rate of the total number of followers was 1.3 per cent. These respondents were randomly assigned to the two groups; 438 respondents being exposed to the influencer advert and 419 to the firm advert. The vast majority of the respondents were female at 98.99 per cent with the mean age group being 25-34 years old.

Influencer 2 obtained 210 respondents from posting the link on a 24-hour Instagram story at three different time points during one week in order to obtain a sufficient sample size. The response rate of those that opened the story was estimated to 23.7 per cent, while it was 2.3 per cent of the total follower base. The two groups consisted of 107 respondents exposed to the influencer advert and 103 to the firm advert. The vast majority of the respondents were female at 96.77 per cent with the mean age group being 25-34 years old.

The initial samples gathered for both influencers are shown in table 4.1 below. See the Appendix table A3.2 for min/max mean of age for both data sets.

**Table 4.1:** The number of respondents per influencer and per group before cleaning the data

	<b>Influencer ad</b>	<b>Firm ad</b>	<b>Total Initial Sample</b>
<b>Influencer 1</b>	438	419	857
<b>Influencer 2</b>	107	103	210

### 4.1.2 Cleaning the Data

The data is cleaned to identify and remove irrelevant parts of the data. The cleaning is executed in six steps by the following criteria: 1) remove incomplete answers, 2) remove people who did not follow the influencers on Instagram, 3) remove people that have never seen any posts on the influencers' Instagram, 4) exclude people who failed the memory check, 5) exclude all males as there were too few of them, and 6) exclude respondents under the age of 16 (based on a recommendation from Norwegian Centre for Research Data (2019a)).

Notably, regarding step 4 of the cleaning process above, a significant number of respondents were removed due to failed memory check (Q9 and Q17 in the Appendix A2). For influencer 1, 45 per cent reported the influencer instead of the firm being the sender of the advert. Likewise, 48 per cent reported the same results for influencer 2. However, the memory check of those exposed to the influencer advert reveals that only 4,5 per cent and 4 per cent for influencer 1 and influencer 2 failed respectively. The result of the memory check is discussed further in 5.4 Limitations.

After refining the data, the new data sets have the following descriptive statistics shown in table 4.2 below. See the Appendix table A3.3 for min/max mean of age for both data sets after cleaning. These data sets are used for the model estimation in later sections.

**Table 4.2:** The number of respondents per influencer and per group after cleaning the data

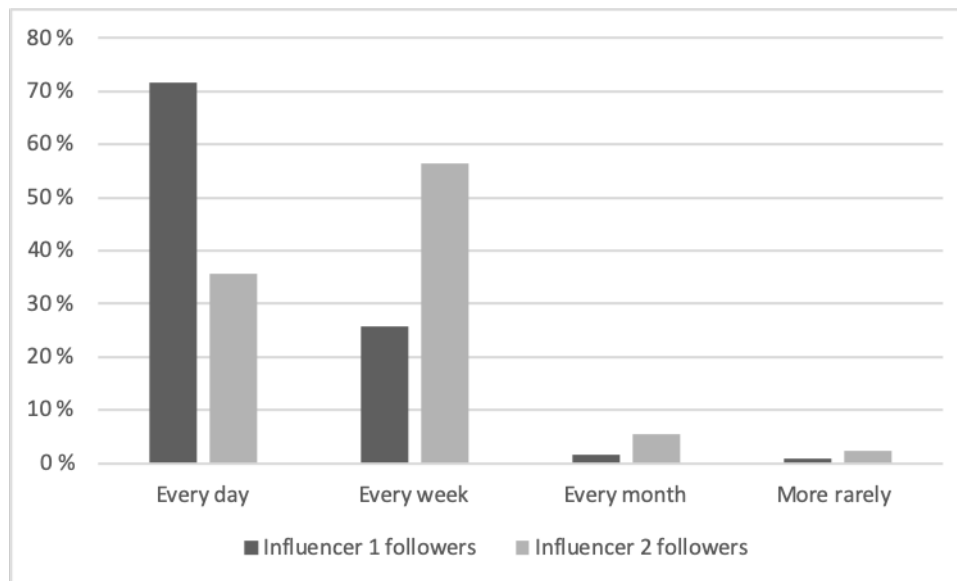
	<b>Influencer ad</b>	<b>Firm ad</b>	<b>Total Sample after cleaning</b>
<b>Influencer 1</b>	379	201	580
<b>Influencer 2</b>	81	45	126

### 4.1.3 Additional Descriptives

Descriptives documenting the respondents' Instagram usage are included to provide further insight on user behaviour of the samples. The following three tables show descriptives after data cleaning.

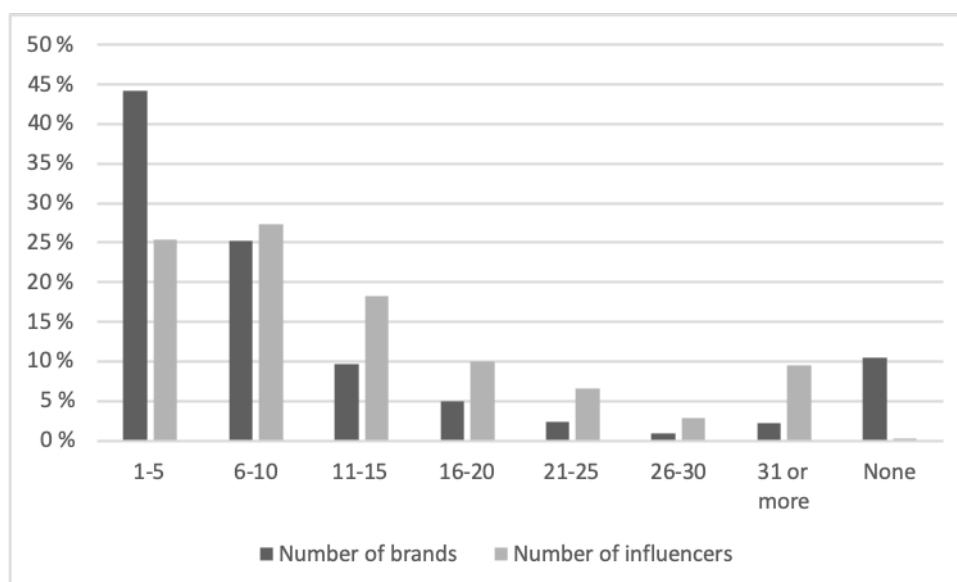
Figure 4.1 shows in per cent how often respondents view content from each of the two influencers. Note that influencer 1 has a higher upload frequency of posts on Instagram,

something in which can explain why her posts is more often viewed daily by her followers (71 per cent) compared to influencer 2 (35 per cent).



**Figure 4.1:** How often the respondents view content on Instagram from the two influencers

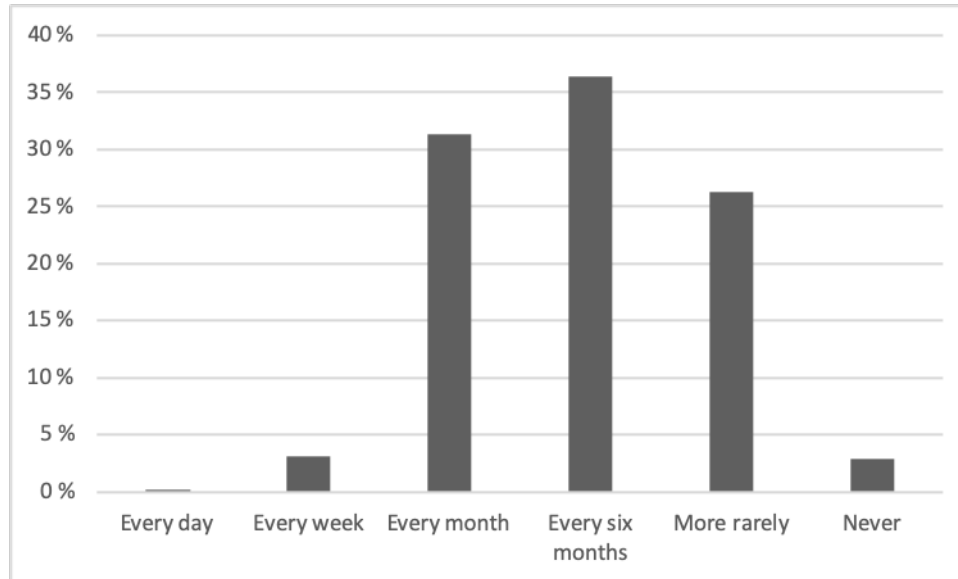
Figure 4.2 displays in per cent how many influencers and brands respondents follow on Instagram. The figures combine the respondents of both influencers, and show that the respondents tend to follow a greater number of influencers compared to brands on Instagram.



**Figure 4.2:** The number of brands and influencers followed by the respondents

Figure 4.3 illustrates in per cent how often respondents buy something they have seen

on Instagram (InstaShopping). The figures combine the respondents of both influencers. Notably, the frequency of the respondents' InstaShopping is mainly every month (31 per cent) or every six months (36 per cent).



**Figure 4.3:** Purchase frequency of products respondents have seen on Instagram

#### 4.1.4 Other Adjustments before the Analysis

Regarding the measurement items, we determined to combine the first questions of the matrix Q7/Q15 and the Q8/Q16 question in the Appendix A2 for both groups as both questions investigate purchase intention. The final measurement items mapping brand attitude, WOM, attitude toward the ad, source credibility, purchase intention can be found in table A4.1 in the Appendix.

## 4.2 The SEM Analysis

In analysing the data, the statistical multivariate technique or framework of structural equation modelling (SEM). This technique was employed as the data sets have multi-item measures of latent constructs which are not observable, in addition to mediating or indirect effects (Schumacker and Lomax, 2010). SEM is a widely recognised technique in empirical studies offering great potential for theory development and construct validation (Maydeu-Olivares, 2017). The usage of SEM is also in line with Fornell and Larcker

(1981) arguing that SEM is an appropriate statistical testing method and indispensable for theory evaluation in marketing applications due to the many challenges with the operationalisation of single measures and unavoidable measurement errors.

SEM is a combination of a recommended two-step process consisting of a measurement model with factor analysis and a structural model estimation through linear regression analysis (Anderson and Gerbing, 1988; Schreiber et al., 2006; Schumacker and Lomax, 2010). Following the logic of Anderson and Gerbing (1988), the initial step of the factor analysis in this paper is confirmatory in that the parameters in operation are established in existing literature, and thus a priori. Hence, the measurement model is a confirmatory factor analysis (CFA). Utilising a CFA is also in line with the potential of SEM being seen most fully when items of each latent variable are first thoroughly tested through CFA to investigate the conceptual soundness of latent variables used in the final model structure (Schreiber et al., 2006).

To ensure accurate inference, important key assumptions associated with the SEM methodology must be satisfied, such as adequate large sample size and multivariate normality (Schumacker and Lomax, 2010). In checking the data for the latter assumption, an R package for assessing multivariate normality called MVN (version 5.8) (Korkmaz et al., 2014) was utilised. If the data has a multivariate distribution, it implies that each of the variables has a univariate normal distribution (Korkmaz et al., 2014). Based on the calculated Mardia (1970) univariate and multivariate skewness, kurtosis coefficients and corresponding statistical significance, neither of the data sets are normally distributed (see table A5.1 and A5.2 in the Appendix). In dealing with this non-normality complication, the MLR - maximum likelihood parameter - estimator was employed.

When models become more complex, SEM requires larger sample sizes to maintain statistical power, stable parameter estimates and standard errors (Schumacker and Lomax, 2010). Hence, the best practice for an actual minimum satisfactory sample size varies greatly. An examination of published SEM research by Schumacker and Lomax (2010) found that reported sufficient ratio between subjects per variable varied between 5 and 20. This ratio accumulated a total varying between 250 and 500 subjects across the examined papers. Given the moderate complexity of the model at hand, multiple indicators for each latent variable, and the two samples with 580 and 126 subjects, these can arguably make

up satisfactory sample sizes.

The CFA and SEM were run in R(version 3.5.1), a programming language and software for statistical computing and graphics (Team, 2013). The lavaan package - latent variable analysis - in R provided the means for examining the  $\chi^2$  goodness-of-fit statistics (Rosseel, 2012), in addition to a selection of supplementing fit indexes as suggested by Hu and Bentler (1999). Moreover, a robust standard error and Chi-squared test statistic were derived from an MLR - maximum likelihood parameter - estimator due to its suitability of obtaining goodness of fit statistic under non-normality (Asparouhov and Muthén, 2005; Maydeu-Olivares, 2017). The MLR was utilised on both data sets.

### 4.2.1 Measurement Model

In order to investigate the measurement model, a CFA was employed. This technique examines if the nature of the constructs (except for WOM due to its single-item operationalisation) are consistent with our understanding and if they correspond with the items used in the survey (Schreiber et al., 2006).

#### 4.2.1.1 Measurement Model Fit for Influencer 1

The CFA computed in R (see table 4.4) revealed the adequate global fit measures: Comparative fit index (CFI) = .975, Tucker-Lewis index (TLI) = .969, which both are above .95, and the standard root mean square residual (SRMR) = .033, which is less than .08 (Hu and Bentler, 1999). Yet, with the inferential goodness-of-fit value Chi-square  $\chi^2$  (71) = 189.659,  $p < .001$ . and  $\chi^2/df = 2.671$ , poor fit is indicated with  $\chi^2$  being insignificant and  $\chi^2/df > 2$  not implying good fit, as it should be below 2 (Schreiber et al., 2006). However, one must note that this Chi-square test is greatly sensitive to sample sizes of  $> 200$ , and non-normal distributions, often causing models to be significant (Loehlin, 1992). Thus, this paper relies on the alternative recommended model fit indices presented. In opposition to the Chi-square test, the root mean square error of approximation (RMSEA) = .064, which normally should be less than .08 (Hu and Bentler, 1999). Thus, a good model specification is indicated.

**Table 4.3:** Measurement items used in the study

<b>Variable</b>
<b>Brand attitude</b> (1=fully agree, 5= fully disagree)
To what extent to you agree or disagree with the following statements?
brandAtt1: I think the product is a very good granola
brandAtt2: I am fond of the product.
brandAtt3: My opinion of the product is very favorable
<b>Attitude toward the ad (Aad)</b> (1=fully agree, 5= fully disagree)
On a scale from 1 to 5, how would you evaluate the advert?
attTowardAd1: Interesting / not interesting
attTowardAd2: Likeable / unlikable
attTowardAd3: Appealing / unappealing
attTowardAd4: Enjoyable / not enjoyable
<b>Source credibility</b> (1=fully agree, 5= fully disagree)
On a scale from 1 to 5, how would you evaluate the advert?
sourceCred1: Insincere / sincere
sourceCred2: Dishonest / honest
sourceCred3: Not dependable / dependable
sourceCred4: Not trustworthy / trustworthy
sourceCred5: Unreliable / reliable
<b>Purchase intention</b> (1=fully agree, 5= fully disagree)
purIntent1: How likely or unlikely are you to buy this product the next time you need this type of product?
highly unlikely / highly likely
purIntent4: How certain or uncertain is it that you will purchase this product?
highly uncertain / highly certain

Table 4.3 above displays an overview of the measurement items in English (see table A4.1 in the Appendix for Norwegian). The standardized factor loadings, in addition to AVE and CR associated with our studied constructs, are shown in table 4.4 below. It shows that all of the standardized factor loadings associated with the constructs are higher than .6 and hence significant at a .05 significance level. Following Fornell and Larcker (1981), when determining whether the measures have satisfactory psychometric properties, one can assess construct reliability (CR), the average variance extracted (AVE) and discriminant validity. Both  $CR < .6$  and  $AVE > .5$  indicate good construct reliability and adequate convergent validity. Further, the AVE of the latent constructs are larger than the squared correlation between all constructs in pairs, something in which can indicate satisfactory discriminant validity in line with the requirements of the construct validity approach by Fornell and Larcker (1981).

**Table 4.4:** Measures used in study for Influencer 1

Variable	St. Factor Loading	Error Variance	CR	AVE
<b>Brand Attitude</b>			<b>0.91</b>	<b>0.78</b>
brandAtt1	0.896	0.197		
brandAtt2	0.920	0.153		
brandAtt3	0.828	0.314		
<b>Attitude Towards the Ad</b>			<b>0.87</b>	<b>0.64</b>
attTowardAd1	0.801	0.358		
attTowardAd2	0.885	0.216		
attTowardAd3	0.858	0.263		
attTowardAd4	0.628	0.606		
<b>Source Credibility</b>			<b>0.97</b>	<b>0.85</b>
sourceCred1	0.871	0.241		
sourceCred2	0.912	0.169		
sourceCred3	0.932	0.130		
sourceCred4	0.941	0.115		
sourceCred5	0.944	0.109		
<b>Purchase Intention</b>			<b>0.75</b>	<b>0.60</b>
purIntent1	0.752	0.435		
purIntent4	0.802	0.357		

A matrix with correlations between each pair of latent constructs, empirical means and standard deviations (sd) is made readily available in table 4.5. It is important to note that the implied null hypothesis of SEM is that the observed sample obtained from empirical data and SEM estimated covariance matrices are equal (Schumacker and Lomax, 2010), and that the goal is to minimize the difference between the matrices (Schreiber et al., 2006). All the correlation scores are strongly significant at 1 per cent ( $p < .01$ ).

**Table 4.5:** The means, standard deviations, and correlations for Influencer 1

Construct	M	SD	1	2	3	4
Brand attitude	3.723	0.871	1.000			
Attitude towards the ad	3.788	1.059	0.319***	1.000		
Source credibility	4.082	0.897	0.331***	0.597***	1.000	
Purchase intention	3.337	1.153	0.557***	0.487***	0.461***	1.000
Word-of-mouth	3.228	1.048				

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$



### 4.2.1.2 Measurement Model Fit for Influencer 2

The CFA computed in R (see table 4.6) revealed the adequate global fit measures: CFI = .967; TLI = .958, which both are over .95 , and SRMR = .049, which is less than .08 (Hu and Bentler, 1999).  $\chi^2$  (71) = 111.189,  $p < .001$ . and  $\chi^2/df = 1.566$ , poor fit is indicated with  $\chi^2$  being insignificant, yet in this data set  $\chi^2/df < 2$  implies a good fit due to smaller sample compared to influencer 1 (Schreiber et al., 2006). RMSEA = .072, which normally should be less than .08 (Hu and Bentler, 1999), thus indicating a good model specification.

The table 4.6 below shows standardized factor loadings, in addition to AVE and CR, associated with our studied constructs. It shows that all of the standardized factor loadings associated with the constructs are higher than .6 and hence significant. Moreover, both  $CR < .6$  and  $AVE > .5$  indicate good construct reliability and adequate convergent validity. Further, the AVE of the latent constructs are larger than the squared correlation between all constructs in pairs, indicating satisfactory discriminant validity. (Fornell and Larcker, 1981).

**Table 4.6:** Measures used in study for Influencer 2

Variable	St. Factor Loading	Error Variance	CR	AVE
<b>Brand Attitude</b>			<b>0.90</b>	<b>0.75</b>
brandAtt1	0.860	0.261		
brandAtt2	0.909	0.173		
brandAtt3	0.819	0.330		
<b>Attitude Towards the Ad</b>			<b>0.88</b>	<b>0.64</b>
attTowardAd1	0.689	0.525		
attTowardAd2	0.933	0.129		
attTowardAd3	0.880	0.225		
attTowardAd4	0.676	0.543		
<b>Source Credibility</b>			<b>0.96</b>	<b>0.82</b>
sourceCred1	0.848	0.281		
sourceCred2	0.874	0.237		
sourceCred3	0.940	0.117		
sourceCred4	0.914	0.165		
sourceCred5	0.948	0.102		
<b>Purchase Intention</b>			<b>0.80</b>	<b>0.68</b>
purIntent1	0.930	0.135		
purIntent4	0.697	0.514		

Correlations between latent constructs, empirical means and standard deviations (sd) of latent constructs are shown in the table 4.7. All the correlation scores are strongly

significant at 1 percent ( $p < .01$ ).

**Table 4.7:** The means, standard deviations, and correlations for Influencer 2

Constructs	M	SD	1	2	3	4
Brand attitude	3.529	0.839	1.000			
Attitude toward the ad	3.476	1.147	0.336**	1.000		
Source credibility	3.944	0.833	0.470***	0.597***	1.000	
Purchase intention	3.14	1.184	0.636***	0.439***	0.596***	1.000
WOM	2.928	1.031				

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

In summary, the measurement properties prove to be adequate for both influencer 1 and influencer 2, hence it is deemed appropriate to proceed to theory testing.

## 4.2.2 Structural Model Estimation

In the previous section, we conducted a CFA. This analysis resulted in a good-fitting measurement model, which allows the analysis to include further structural model estimation. The SEM is used to test the causal relationship between the latent variables (i.e. brand attitude, purchase intention, WOM, source credibility and attitude towards the ad) and the control variables (Jöreskog and Sörbom, 1993). The control variables included were age and InstaShopping (i.e. how often you buy things you have seen on Instagram), as they were deemed the most interesting for the analysis. Notably, the control variables are included as continuous variables for two reasons; 1) there is a certain order in the answer option (e.g. from every day to never), and 2) to avoid creating too many dummies that provide no additional benefits for interpretation of the results.

In order to test the proposed hypotheses, the SEM is run using the *lavaan* package (version 0.6-3) in R (version 3.5.1) (Rosseel, 2012). Moreover, the MLR-estimator and the bootstrapping method were used to deal with non-normality of the data and to test the indirect effects of source credibility and attitude toward the advert, in line with best practise by Schumacker and Lomax (2010). The re-sampling method, bootstrapping, is used as replication and cross-validation with additional sample data is not achievable in this thesis (Schumacker and Lomax, 2010).

### 4.2.2.1 Model Estimation for Influencer 1

Adequate global fit measures were obtained from influencer 1 as CFI = 0.968 and TLI = .958 are both above .95, and SRMR = .035 which is less than .08 (Hu and Bentler, 1999). The Chi-square test shows  $\chi^2 (114) = 351.53$ ,  $p < .001$ , which is significant and indicates poor fit, and  $\chi^2/df = 3.084$  which is not an acceptable good fit (Schreiber et al., 2006). However, as noted earlier this is common due to sensitivity to sample sizes of  $> 200$  which often causes models to be significant (Loehlin, 1992). Moreover, RMSEA = .06 which is below the recommended value of .08 (Hu and Bentler, 1999).

Further, the hypothesised path coefficients or standardised effect sizes are estimated and shown in table 4.8 below. A dummy variable was created, where 1=influencer advert and 0=firm advert. The dummies allow representing both groups in the same table.

**Table 4.8:** The hypothesized path coefficients for influencer 1

DV	IV	B	SE	t.value	p.value
Source Credibility	Influencer Dummy	0.240	0.064	3.744	0.000***
Source Credibility	InstaShopping	-0.136	0.037	-3.715	0.000***
Source Credibility	age	-0.114	0.032	-3.567	0.000***
Att. tw the ad	Source Credibility	0.653	0.063	10.436	0.000***
Att. tw the ad	InstaShopping	-0.062	0.038	-1.652	0.099*
Att. tw the ad	age	-0.071	0.033	-2.166	0.030**
Brand Attitude	Source Credibility	0.211	0.064	3.315	0.001***
Brand Attitude	Att. tw the ad	0.161	0.055	2.935	0.003***
Brand Attitude	InstaShopping	-0.017	0.039	-0.441	0.659
Brand Attitude	age	0.000	0.029	-0.012	0.991
Purchase Intention	Source Credibility	0.283	0.090	3.133	0.002***
Purchase Intention	Att. tw the ad	0.348	0.075	4.624	0.000***
Purchase Intention	InstaShopping	-0.240	0.046	-5.159	0.000***
Purchase Intention	age	0.049	0.038	1.306	0.192
WOM	Source Credibility	0.307	0.089	3.459	0.001***
WOM	Att. tw the ad	0.266	0.076	3.515	0.000***
WOM	InstaShopping	-0.177	0.050	-3.520	0.000***
WOM	age	0.046	0.039	1.169	0.242

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

In table 4.8 above, the standardised effect size beta ( $\beta$ ) indicates the connection strength and explanatory relationships between the observed variables. A standard-score is employed, with the underlying rationale being that all variables are converted to the same

scale of measurement, making it possible to compare the relative magnitude of the effects of the explanatory variables in the sample (Schumacker and Lomax, 2010; Lleras, 2005).

Firstly, the effect of the influencer dummy on source credibility is positive and significant ( $\beta = .24$ ,  $p < .01$ ), implying that the influencer advert has a greater source credibility compared to the firm advert. The beta coefficient of the mediating effect on the main outcomes indicate that source credibility has the greatest positive, significant effect on Aad ( $\beta = .653$ ,  $p < .01$ ), followed by WOM ( $\beta = .307$ ,  $p < .01$ ), purchase intention ( $\beta = .283$ ,  $p < .01$ ) and least effect on brand attitude ( $\beta = .211$ ,  $p < .01$ ). Furthermore, the Aad have the greatest positive, significant effect on purchase intention ( $\beta = .348$ ,  $p < .01$ ), followed by WOM ( $\beta = .266$ ,  $p < .01$ ) and the least effect on brand attitude ( $\beta = .161$ ,  $p < .01$ ).

The beta of the control variables indicate that on source credibility, less Instashopping ( $\beta = -.136$ ,  $p < .01$ ) and higher age ( $\beta = -.114$ ,  $p < .01$ ) both have a negative, significant effect indicating that females that shop more rarely what they see on Instagram and older females tend to have a lower score on source credibility than younger females that shop more often. Age has a negative, significant effect on Aad ( $\beta = -.071$ ,  $p < .05$ ), meaning that older women tend to have a lower score on the questions about their attitude towards the advert. Furthermore, Instashopping has a negative, significant effect on both purchase intention ( $\beta = -.240$ ,  $p < .01$ ) and WOM ( $\beta = -.177$ ,  $p < .01$ ), implying that female customers are less likely to purchase and recommend the products when they do not often buy things they have seen on Instagram.

Moreover, the R-squared value of the variables or explained variance indicates the amount of variance explained in the dependent variable by the set of the independent variable (Schumacker and Lomax, 2010). The R-squared values of the variables for influencer 1 are shown in the in table 4.9 below.

**Table 4.9:** The R-squared values of the variables for influencer 1.

<b>Variables</b>	<b>Explained.Variances</b>
WOM	0.193
Brand Attitude	0.133
Attitude towards the ad	0.368
Source Credibility	0.070
Purchase Intention	0.329

As seen in table 4.9, the R-squared values are not particularly high for any of the variables in this analysis. However, this could be explained by the model not having many variables to explain the behaviour. Additionally, the purpose of the research is to explain, not predict behaviour. Therefore, the model explaining the main outcomes, including purchase intention by 32.9 per cent, WOM by 19.3 per cent and brand attitude by 13.3 per cent is considered acceptable. Also, it should be noted that the variance in attitude towards the ad is the most explained at 36.8 per cent and source credibility the least explained at 7 per cent.

#### 4.2.2.2 Testing of Hypothesis 1 for Influencer 1

According to H1, the influencer advert has a greater positive effect than the firm advert on: a) brand attitude, b) purchase intention, and c) word-of-mouth. The total effects of influencer ad dummy on the outcome variables are shown below in table 4.10.

**Table 4.10:** The total effects of influencer ad dummy on the outcome variables for influencer 1.

Total.Effect	B	SE	t.value	p.value
on Brand Attitude	0.068	0.026	2.638	0.008***
on Purchase intention	0.106	0.044	2.421	0.015**
on WOM	0.103	0.039	2.621	0.009***

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

The total effect of the influencer advert is according to the standardized beta the greatest on purchase intention ( $\beta = .106$ ,  $p < .05$ ), followed by WOM ( $\beta = .103$ ,  $p < .01$ ) and then brand attitude ( $\beta = .068$ ,  $p < .01$ ). As the effects are all positive and significant at 5 percent significance level, the H0 is rejected and hence the H1 is supported.

#### 4.2.2.3 Testing of Hypothesis 2 for Influencer 1

With H2, the positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is mediated by source credibility. The mediating effects of source credibility are tested and shown in the table 4.11 below:

**Table 4.11:** The mediating effects of source credibility for influencer 1.

<b>Total.Effect</b>	<b>B</b>	<b>SE</b>	<b>t.value</b>	<b>p.value</b>
on Brand Attitude	0.051	0.020	2.514	0.012**
on Purchase intention	0.068	0.029	2.348	0.019**
on WOM	0.074	0.029	2.510	0.012**

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

The beta coefficient show that the mediating effect of source credibility is the strongest on WOM ( $\beta = .074$ ,  $p < .05$ ), followed by purchase intention ( $\beta = .068$ ,  $p < .05$ ) and then brand attitude ( $\beta = .051$ ,  $p < .05$ ). As the effects are all positive and significant at 5 percent significance level, the H0 is rejected and hence the H2 is supported.

#### 4.2.2.4 Testing of Hypothesis 3 for Influencer 1

According to H3, the positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is mediated by attitude toward the ad (Aad), which is indirectly mediated through the effect of source credibility.

The mediating effects of Aad mediated indirectly through source credibility, is tested and shown in the table 4.12 below.

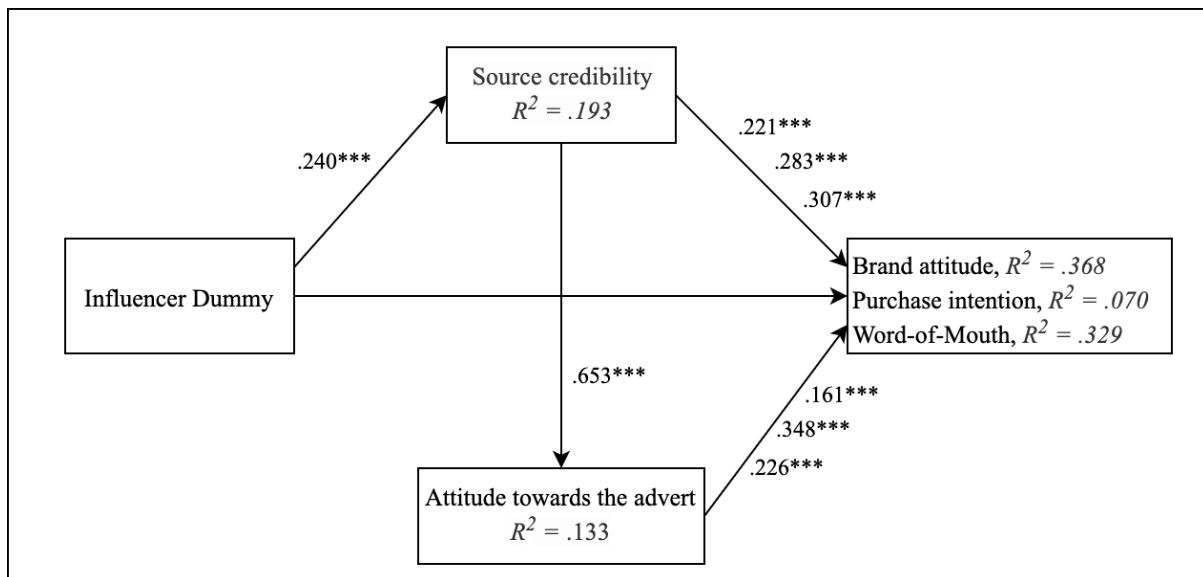
**Table 4.12:** The mediating effects of attitude toward the advert that mediates the indirect effects of source credibility for influencer 1.

<b>Total.Effect</b>	<b>B</b>	<b>SE</b>	<b>t.value</b>	<b>p.value</b>
on Brand Attitude	0.076	0.023	3.252	0.001***
on Purchase intention	0.122	0.038	3.244	0.001***
on WOM	0.115	0.035	3.259	0.001***

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

The beta suggests that the mediating effect of Aad, mediated indirectly through source credibility, is strongest on purchase intention ( $\beta = .122$ ,  $p < .01$ ). This is closely followed by WOM ( $\beta = .115$ ,  $p < .01$ ) and finally brand attitude ( $\beta = .076$ ,  $p < .01$ ). As the effects are all positive and significant at a 5 per cent significance level, the H0 is rejected; hence, the H3 is accepted.

To sum up, the conceptual model with the effects of the influencer 1 data set can be seen in figure 4.4 below. The arrows indicate a causal sequence and the path coefficients indicate the direct relationship between the two variables connected by each arrow (Paul and Cozby, 2012). The path coefficient of attitude towards the ad .226 belongs to WOM, the next .348 to purchase intention and then .161 to brand attitude. The same applies to the coefficients of source credibility on the dependent variables with .221 belonging to brand attitude and so forth. All path coefficients between each variable are significant at 1 per cent significance level. Furthermore, the total effect of all three hypothesis are significant at 5 per cent significance level. Nevertheless, it should be noted that H1 does not get a direct effect as the effect goes via source credibility in H2 and further through attitude towards the ad in H3.



Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

**Figure 4.4:** The conceptual model with significant path coefficients for influencer 1

#### 4.2.2.5 Model Estimation for Influencer 2

Adequate global fit measures were obtained from influencer 2 as CFI = .96 and TLI = .947 are both above .95, and SRMR = .052 which is less than .08 (Hu and Bentler, 1999). The Chi-square test shows  $\chi^2 (114) = 177.9$ ,  $p < .001$ , which is insignificant and indicates poor fit, whilst  $\chi^2/df = 1.561$  indicates acceptable model fit as it is below 2 (Schreiber et al., 2006). In contrast to model estimation for influencer 1, the smaller sample size of influencer 2 caused this model to be significant with a  $\chi^2/df$  computation. Furthermore, RMSEA = .052 which is below the recommended value of .08 (Hu and Bentler, 1999). The hypothesized path coefficients or standardised effect sizes are estimated and shown in table 4.13 below:

**Table 4.13:** The hypothesized path coefficients for influencer 2.

DV	IV	B	SE	t.value	p.value
Source Credibility	Influencer Dummy	0.269	0.116	2.331	0.020**
Source Credibility	InstaShopping	-0.230	0.070	-3.290	0.001***
Source Credibility	age	-0.151	0.050	-3.027	0.002***
Att. tw the ad	Source Credibility	0.302	0.145	2.086	0.037**
Att. tw the ad	InstaShopping	-0.133	0.095	-1.395	0.163**
Att. tw the ad	age	-0.161	0.092	-1.742	0.082*
Brand Attitude	Source Credibility	0.305	0.086	3.545	0.000***
Brand Attitude	Att. tw the ad	0.102	0.087	1.168	0.243
Brand Attitude	InstaShopping	-0.168	0.068	-2.463	0.014**
Brand Attitude	age	-0.109	0.049	-2.220	0.026**
Purchase Intention	Source Credibility	0.675	0.157	4.292	0.000***
Purchase Intention	Att. tw the ad	0.292	0.143	2.044	0.041**
Purchase Intention	InstaShopping	-0.234	0.093	-2.517	0.012**
Purchase Intention	age	-0.041	0.082	-0.503	0.615
WOM	Source Credibility	0.721	0.152	4.744	0.000***
WOM	Att. tw the ad	0.088	0.137	0.640	0.522
WOM	InstaShopping	-0.124	0.091	-1.367	0.172
WOM	age	-0.055	0.083	-0.660	0.509

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

Similarly to the findings for influencer 1, the beta coefficient ( $\beta$ ) of the influencer dummy on source credibility is positive and significant. Furthermore, the same negative effects for age and Instashopping on source credibility are found significant for influencer 2. Also, the negative effect of Instashopping on purchase intention is significant.

Differently from the findings from influencer 1, the beta of the mediating effects on the



main outcomes indicate that source credibility has the greatest positive, significant effect on WOM ( $\beta = .721$ ,  $p < .01$ ), followed by purchase intention ( $\beta = .675$ ,  $p < .01$ ), brand attitude ( $\beta = .305$ ,  $p < .01$ ) and Aad ( $\beta = .302$ ,  $p < .05$ ). Moreover, the Aad for influencer 2 also have a positive, significant effect on purchase intention ( $\beta = .292$ ,  $p < .05$ ), whilst in contrast to the findings for influencer 1 there is no significant effect from Aad on WOM and brand attitude.

Furthermore in contrast, the data set for influencer 2 find that age ( $\beta = -.109$ ,  $p < .05$ ) and Instashopping ( $\beta = -.168$ ,  $p < .05$ ) has a negative, significant effect on brand attitude. These findings signify that older females and females that shop more rarely what they see on Instagram tend to have a lower score on brand attitude. Furthermore, the R-squared values of the variables for influencer 2 are shown in the in table 4.14 below.

**Table 4.14:** The R-squared values of the variables for influencer 2

<b>Variables</b>	<b>Explained. Variances</b>
WOM	0.310
Brand Attitude	0.308
Attitude towards the ad	0.203
Source Credibility	0.171
Purchase Intention	0.401

As seen in the table 4.14 above, the R-squared values for influencer 2 are greater than for influencer 1, but still not particularly high for any of the variables. As mentioned, this could be due to a limited number of variables explaining the behaviour. The model for influencer 2 accounts for over 30 per cent of the variance of the three main outcomes, purchase intention, WOM and brand attitude, which is considered acceptable. In addition, the variance in attitude towards the ad is explained at 20.3 per cent, and source credibility explained at 17.1 per cent.

#### 4.2.2.6 Testing of Hypothesis 1 for Influencer 2

The total effects of the influencer dummy on the outcome variables are tested and shown in table 4.15 below:

**Table 4.15:** The total effects of influencer ad dummy on the outcome variables for influencer 2.

<b>Total.Effect</b>	<b>B</b>	<b>SE</b>	<b>t.value</b>	<b>p.value</b>
on Brand Attitude	0.104	0.053	1.981	0.048**
on Purchase intention	0.245	0.109	2.249	0.024**
on WOM	0.213	0.100	2.140	0.032**

Significance level: \*p<.1, \*\*p<.05, \*\*\*p<.01

The total effect of the influencer advert for influencer 2 is also according to the standardized effect size ( $\beta$ ) positive and the greatest on purchase intention ( $\beta = .245$ ,  $p < 0.5$ ), followed by WOM ( $\beta = .213$ ,  $p < .05$ ) and then brand attitude ( $\beta = .104$ ,  $p < .05$ ). As the effects are all positive and significant at 5 percent significance level, the H0 is rejected and hence the H1 is supported.

#### 4.2.2.7 Testing of Hypothesis 2 for Influencer 2

The mediating effects of source credibility are tested and shown in the table 4.16 below:

**Table 4.16:** The mediating effects of source credibility for influencer 2.

<b>Total.Effect</b>	<b>B</b>	<b>SE</b>	<b>t.value</b>	<b>p.value</b>
on Brand Attitude	0.082	0.042	1.945	0.052*
on Purchase intention	0.182	0.091	1.995	0.046**
on WOM	0.194	0.095	2.052	0.040**

Significance level: \*p<.1, \*\*p<.05, \*\*\*p<.01

The beta indicate that the mediating effect of source credibility for influencer 2 is also the strongest on WOM ( $\beta = .194$ ,  $p < .05$ ), followed by purchase intention ( $\beta = .182$ ,  $p < .05$ ) and then brand attitude ( $\beta = .082$ ,  $p < .1$ ). As the effects of purchase intention and WOM are positive and significance at 5 percent significant level and the effect of brand attitude is positive and significant at 10 percent significance level, the H0 is rejected and hence the H2 is supported.

#### 4.2.2.8 Testing of Hypothesis 3 for Influencer 2

The mediating effects of attitude towards the advert, mediated indirectly through source credibility, are tested and shown in the table 4.17 below:

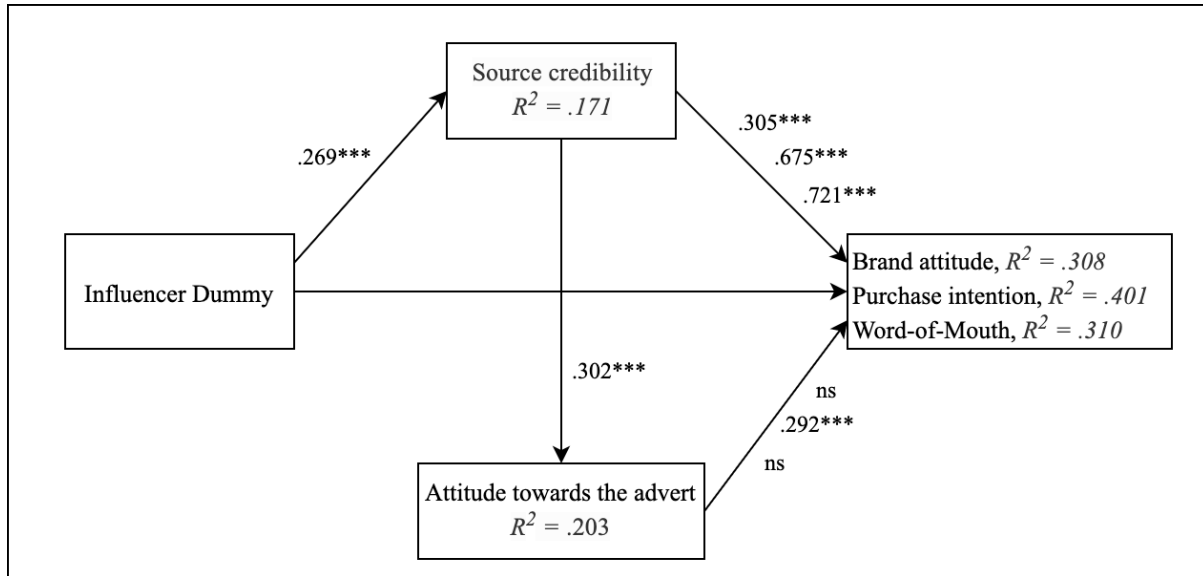
**Table 4.17:** The mediating effects of attitude toward the advert that mediates the indirect effects of source credibility for influencer 2.

<b>Total.Effect</b>	<b>B</b>	<b>SE</b>	<b>t.value</b>	<b>p.value</b>
on Brand Attitude	0.090	0.045	1.993	0.046**
on Purchase intention	0.206	0.097	2.124	0.034**
on WOM	0.201	0.096	2.099	0.036**

Significance level: \*p<.1, \*\*p<.05, \*\*\*p<.01

The beta implies that the mediating effect of Aad, mediated indirectly through source credibility, is also strongest on purchase intention ( $\beta = .206$ ,  $p < .05$ ). This is closely followed by WOM ( $\beta = .201$ ,  $p < .05$ ), and finally brand attitude ( $\beta = .090$ ,  $p < .05$ ). As the effects are all positive and significant at 5 per cent significance level, the H0 is rejected, and hence the H3 is supported.

In summary, the conceptual model with the effects of the influencer 2 data set can be seen in figure 4.5 below. The path coefficient of source credibility .305 belongs to brand attitude, the following .675 to purchase intention and then .721 to WOM. All the path coefficients between each variable are significant at 1 per cent significance level, except the isolated effect path from Aad on WOM and brand attitude, which are not significant (ns). Thus, Aad for influencer 2 is only found to have a significant relationship to purchase intention. Nevertheless, the total effects of the three hypothesis are significant at 5 per cent significance level, except the mediating effect of source credibility on brand attitude for influencer 2, which is supported at a 10 per cent significance level. It should be underlined that H1 does not get a direct effect as the effect goes via source credibility in H2 and further through attitude towards the ad in H3.



Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

**Figure 4.5:** The conceptual model with significant path coefficients for influencer 2

### 4.2.3 Summary of the Analysis

To sum up, the SEM analysis of both influencers' data sets shows that all of the hypotheses are supported at a 5 per cent significance level, except the mediating effect of source credibility on brand attitude for influencer 2, which is supported at a 10 per cent significance level. It should also be noted that the standardized effect size ( $\beta$ ) for the different variables in the three hypotheses have a similar pattern for both influencers. Both data sets find the source credibility of the influencer advert to be more significant in effect than a firm advert. Furthermore, the same negative significant effects of age and Instashopping on source credibility are found for both influencers. However, which dependent variables source credibility has the greatest mediating effect on varies in the two data sets. In addition, influencer 2 finds a significant negative relationship between Instashopping and brand attitude, while in the data set of influencer 1, this relationship is insignificant. A summary of the hypothesis testing is shown below in table 4.18 and table 4.19.

**Table 4.18:** Summary of hypothesis testing for influencer 1

<b>Influencer 1</b>			
<b>Hypothesis</b>	<b>P-value</b>	<b>Result</b>	<b>Explanation</b>
H1: The influencer advert has a greater positive effect than the firm advert on: a) brand attitude b) purchase intention c) word-of-mouth	0.008*** 0.015** 0.009***	Accepted	The p-values are all less than .05. This indicates that the influencer ad has significantly greater positive effect on than the firm advert on all consumer responses.
H2: The positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is mediated by source credibility.	0.012** 0.019** 0.012**	Accepted	The p-values are all less than .05. This indicates that the positive effect of the influencer ad is significantly mediated by source credibility.
H3: The positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is sequentially mediated by source credibility and attitude toward the ad.	0.001*** 0.001*** 0.001***	Accepted	The p-values are all less than .01. This indicates that the positive effect of the influencer ad is significantly sequentially mediated by source credibility and attitude toward the ad.

Significance level: \*p<.1, \*\*p<.05, \*\*\*p<.01

**Table 4.19:** Summary of hypothesis testing for influencer 2

<b>Influencer 2</b>			
<b>Hypothesis</b>	<b>P-value</b>	<b>Result</b>	<b>Explanation</b>
H1: The influencer advert has a greater positive effect than the firm advert on: a) brand attitude b) purchase intention c) word-of-mouth	0.048** 0.024** 0.032**	Accepted	The p-values are all less than .05. This indicates that the influencer ad has significantly greater positive effect on than the firm advert on all consumer responses.
H2: The positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is mediated by source credibility.	0.052* 0.046** 0.040**	Accepted	The p-values are all less than .05, except from brand attitude, which is significant at a .1 level. This indicates that the positive effect of the influencer ad is significantly mediated by source credibility at a .1 and .05 level.
H3: The positive effect of the influencer ad on brand attitude, purchase intention and word-of-mouth is sequentially mediated by source credibility and attitude toward the ad.	0.046** 0.034** 0.036**	Accepted	The p-values are all less than .05. This indicates that the positive effect of the influencer ad is significantly sequentially mediated by source credibility and attitude toward the ad.

Significance level: \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

## 5 Discussion

This chapter discusses the implications of the results presented in the previous chapter. We first present our main findings. Secondly, theoretical and practical implications are elaborated on. Finally, possible limitations are discussed and our suggestions for further research is presented.

### 5.1 Main Findings

The purpose of the study is to investigate the effects of influencer adverts compared to firm adverts on Instagram on key consumer responses. Before discussing the main results, we would like to restate our research questions: RQ1) Does influencer adverts have a greater positive effect compared to firm adverts on Instagram? RQ2) Which factors can explain the difference in effect?

The findings are based on two samples consisting of women with the mean age group being 25-34. The two data sets comparing responses to firm adverts to adverts from one macro and one micro food influencer reached the same conclusions on all three hypotheses, only with minor differences in significance level. We argue that the confirmation of all three hypotheses for both influencers significantly strengthens the findings of this study.

It was tested whether the influencer adverts had greater positive effects compared to the firm advert on Instagram on the consumer responses of brand attitude, purchase intention, and word-of-mouth (H1). We found this relationship to be partially supported, as it is only indirectly. There is no direct relationship due to the strong mediation effect by both source credibility (H2) and sequentially through source credibility and attitude towards the ad (H3). Nevertheless, the acceptance of H1 shows that influencer adverts have a greater effect compared to firm adverts on Instagram (RQ1).

Subsequently, the investigation revealed that the positive effect of the influencer ad on the consumer responses is significantly mediated by source credibility (H2). Thereby, this finding shows that influencer ads are perceived as more credible than firm ads, and one can establish a direct relationship between source credibility and consumer responses.

Source credibility affecting the dependent variables is directly nuanced by the control variables, age, and purchase frequency of products respondents have spotted on Instagram. These control variables provided useful insight on behaviour and stipulated a clear pattern in both samples. We find that females with lower purchase frequency and older females tend to have lower trust in the influencers than younger females and those who shop more often. Besides, the data indicates that respondents are more likely to purchase and recommend products when often buying products they have seen on Instagram.

Next, a positive relationship hypothesis between source credibility and the consumer responses was valid when mediated through attitude toward the ad (H3). Thus, this result suggests a logical consistency of consumers perceiving a direct relationship between the credibility of the source and the attitude towards the advert from the same source. The control variable, age, also indicates this pattern in both surveys. Younger females tend to both have more trust in the influencer and like the advert more than older age groups. Hence, the attitude toward the ad is initially based on source credibility. Considering the results of H2 and H3, source credibility is the critical factor, and attitude towards the ad is an essential factor in whether influencer adverts are effective. Thus, in line with RQ2, we infer that both the mediating effect of source credibility and attitude towards the advert can contribute to explaining why influencer adverts are more effective than firm adverts.

## 5.2 Theoretical Implications

This study contributes to the field of social media marketing and influencer marketing. It adds value in shedding light on a distinct type of endorser that has been gaining attention in marketing lately, namely the social media influencer. The paper continues to delve into the hypothesis and compares the result of the analysis with existing relevant literature.

Firstly, the two-flow communication theory by Katz and Paul (1955) was applied to strengthen the understanding of the effectiveness of social media influencers. Our findings aptly comply with this underpinning theory of messages from mass media is filtered through opinion leaders. In particular, we confirm that indirect interpersonal communication from influencers is more potent in affecting attitudes of individuals than the direct messaging



from firms (Weimann, 1994).

Secondly, our results can expand on the established endorsement theories (Hearn and Schoenhoff, 2016; McCracken, 1989) by highlighting the social media influencer to be a new type of self-presentation. Erdogan (1999) proposed one of the four dimensions of endorsement theories being source attractiveness, as researched by Mcquire (1969), cited in Jain and Roy (2016). This dimension is sound, considering the traditional celebrity, which predominantly relies on human presence in their marketing efforts. However, with many influencers having a limited human presence in their shared content, such as the food influencers in our study, source attractiveness becomes less applicable by nature. Our finding of high levels of source credibility challenges the traditional endorsement research, which does not adequately address content creation and interpersonal relationships. Influencers are creating personal content and dialogue with their followers, which constitutes the influencers' high message credibility.

Subsequently, from the literature review, we noted that several studies show that the influencers' content and recommendations have led to positive responses on brand recognition, brand attitude, and purchase intention (Hsu et al., 2013; Colliander and Marder, 2018; Djafarova and Rushworth, 2017). Our findings align with this existing research, as influencer adverts have greater positive effects compared to the firm advert on Instagram on the consumer responses of brand attitude, purchase intention and word-of-mouth (H1). The findings also supports one of the strong points of influencer marketing; WOM. The creation of positive WOM and other interpersonal sources have a stronger effect on consumer decisions compared to traditional marketing (Goldsmith and Clark, 2008). However, while the latter research was concerned with comparing different mediums (digital and non-digital), our research had one digital social platform, and one close to identical message with two different senders: influencer and firm. As such, this isolation of effects and fair comparison might further indicate the effects of influencers as opinion leader creating more positive WOM - intentions to recommend - than firm ads.

Furthermore, the acceptance of H2 is one of the more marked observations to emerge from our data as the finding establish a direct relationship between source credibility and the consumer responses. This finding is in contrast to research on endorser credibility by Goldsmith et al. (2000). Recall that in this particular study, the credibility of the

endorser only had a significant effect when mediated through attitude toward the ad. As such, the acceptance of H2 in this paper can indicate an alignment with Lim et al. (2017) and Jin et al. (2019) in that social media influencers are found to be more trustworthy and credible compared to a traditional celebrity endorsement. It also supports the work of De Veirman et al. (2017) that a similar message with an influencer as the endorser is perceived as more credible than one having the brand itself as the endorser. The direct route source credibility takes to the consumer responses can imply high levels of credibility, in accordance with Metzfer et al. (2003) as cited in Lim et al. (2017). On these grounds, we infer the message itself being of less relevance, and not a crucial mediating step in affecting behavioural intentions. Notably, this finding is based on the proper fit between the brand and influencer, an assumption in line with Jin and Muqaddam (2019) and the product match-up hypothesis of the endorsement theories (Kamins, 1990; Misra and Beatty, 1990; Till and Busler, 2000).

Moreover, the acceptance of H3 was anticipated due to extensive research conducted on this specific effect path by, for instance, Fishbein et al. (1975), Goldsmith et al. (2000) and Lutz et al. (1983). Hence, the result of this study suggesting a logical consistency of consumers perceiving a direct relationship between source credibility and the attitude towards the advert from the same source is supported by existing marketing literature.

Lastly, this study has explored a new way of conducting data collection, namely the distribution of surveys through influencers' Instagram accounts. It proved to be an appropriate tool in gathering the data for this study. Making the influencer post the survey link ensures that the vast majority of the respondents are followers of the particular influencer, hence the sample frame. Results show that about 97 per cent of the respondents from both surveys followed the their influencer. Regarding the response rates, 1.3-2.3 per cent of the total follower base responded to the surveys. However, as earlier reported in the descriptive analysis, of the followers who viewed the story, the response rate was 10.2 and 23.7 per cent for influencer 1 and 2, respectively. Hence, the trend line of the two distributions' response rates exceeds what to typically expect from standard internet survey (about 10 per cent) (Saunders, 2016).

## 5.3 Practical Implications

We now discuss the practical implications from the perspective of firms, marketers, influencer agencies and social media influencers. First and foremost, an influencer's effect on brand attitude, purchase intention and WOM is hard to measure without experimenting similarly to this thesis. Therefore, these findings provide valuable insights to firms, marketers, agencies and influencers in order to understand the impact of influencer marketing beyond the number of followers reached, clicks on a website and engagement (comments and likes).

Regarding firms and marketers, the findings can contribute to developing marketing strategies for promotion on Instagram and strategies for collaborating with social media influencers. More specifically, assisting in the decision problem of whether to use firm adverts or influencer adverts on the social media platform. Also, the findings contribute to clarifying what criteria firms should use when choosing the influencers to do product endorsements for their brand in order to facilitate for effective campaigns in terms of brand attitude, purchase intention and WOM. This study finds source credibility to be essential in order for effective influencer campaigns as this is the variable mediating the significant effect of influencer advert compared to a firm advert. Therefore, marketers should carefully select the influencers to collaborate with and not base the decision solely on reach and number of followers. An influencer's trustworthiness and level of expertise within the relevant field should be critical criteria. The criteria apply equally crucial for both the micro- and macro-influencer participating in this thesis. In order for the campaign to come off as authentic as possible for the followers, one recommendation is to let the influencers compose and formulate the message themselves. Thus, if the content does not appear authentic to the influencer's followers, the advert might not be perceived as trustworthy and thereby decrease the source credibility. Furthermore, as existing research shows that the brand's fit with an influencer is a critical factor in successful advertising (Misra and Beatty, 1990; Kamins, 1990), it was ensured a good match between the product and the influencers used in this study. A good match is also a key factor to consider for marketers when selecting influencers, especially as the fit might affect the source credibility.

With influencer agencies and social media influencers, the findings contribute to understanding further how to become and continue to be an effective influencer attractive as a collaborator for firms. As source credibility is the essential factor for an influencer in order to have a more significant effect than firm ads on Instagram, influencers and their agents should be critical when selecting which brands to collaborate with. It should be noted that the influencer's foundation of source credibility is carefully built over an extended period, based on the content previously shared and the follower-follower relationship (Abidin and Ots, 2016). Recall that influencers endorsing products beyond their fields of expertise could hurt their followers' perceived image of them, ultimately causing a reduction in source credibility (Evans (2013) as cited in Lim et al. (2017)). In order to preserve source credibility, one should make sure it is a good fit between the brand and influencer profile in addition to being allowed to create the content themselves with the freedom to do it as similar as possible to their regular non-paid content. Moreover, influencer agencies could benefit from focusing on and ensuring all campaigns give creative freedom to their influences in order to enhance focus on authentic content generation. Authentic content can assist their influencers in becoming or maintaining a credible source to their followers.

Overall, the main practical implication for both marketers and influencers is source credibility being a crucial factor to successful influencer marketing in terms of positively influencing brand attitude, purchase intention and WOM. Therefore, marketers should focus on collaborating with influencers that possess trustworthiness, expertise in their field, and a good fit with the brand. Further, social media influencers should focus on establishing a trusting relationship with their followers and maintaining it through only collaborating with brands that fit with their influencer brand, and they can genuinely recommend to their followers.

## 5.4 Limitations

We address the most significant limitations relevant to our study. Being conscious of and recognising limitations could potentially help refine future research efforts for practitioners and stakeholders. The main focus is on reliability and construct validity, in addition to internal and external validity. Firstly, possible limitations regarding the statistical measure

R-squared, memory check and the use of structural equation modelling are elaborated on. The following discussion concerns possible limitations for both data sets.

Regarding the relatively low R-squared (table 4.9 and 4.14), several other latent variables could be used in this thesis in order to explain the effect of the influencer advert. Due to time constraints, the study had to limit itself to five variables in order to explain the effect of influencer marketing, and this might explain the relatively low R-squared. For instance, attitude toward the advertiser instead of the advert could be an essential factor or including product match-up as a variable. Furthermore, this study included source credibility of the sender of the advert, while one could have included other variables such as credibility of medium or content. Concerning the control variables, factors such as length of following relationship, motivation for following and identification with the influencer was not included in this study, but could potentially be essential variables to consider.

Concerning the memory check, 45 per cent of the respondents failed the memory check after being exposed to the firm advert, while only 4.5 per cent failed after seeing the influencer advert (see 4.1.2 for cleaning of data). We argue this might be due to the nature of the Instagram platform as people are distracted by many factors, and it is reasonable to expect that many respondents fail to pay enough attention during the survey. Arguably, one explanation for the different results of attention between the two adverts might be that the respondents were biased towards the influencer as they entered the survey from the influencer's Instagram story. Thus, some respondents might have guessed the sender to be the influencer without being certain. These findings also make it reasonable to question whether the respondents put less attention towards the firm advert compared to the influencer advert.

Lastly, it should be noted that the modelling choice, SEM, is a large sample method (Nachtigall et al., 2003). Even though the sample size of influencer 2 was deemed to constitute an adequate amount of subjects, the sample size should preferably be larger to provide even more stable estimates. A possible manifestation of this is the difference in p-value to the hypothesis of influencer 1 and 2 (section 4.18).

### 5.4.1 Reliability

Reliability refers to the consistency of a measure (Paul and Cozby, 2012). In this study, the construct reliability (CR) that measures the internal consistency in scale items is  $CR < .6$  for both data sets, which indicate good construct reliability (Fornell and Larcker, 1981). Moreover, the findings of the data set for both the macro- and micro-influencer reaching the same conclusions on all three hypotheses, only with minor differences in significance level, arguably strengthens the reliability of the findings.

### 5.4.2 Construct Validity

Construct validity refers to the extent to which the measurement questions measure the presence of the constructs they intended to measure, which we evaluate by considering the validity measures: face, convergent, and discriminant validity (Saunders, 2016).

Firstly, face validity is a subjective measure of whether the questions in the survey measure what they are intended to measure (Saunders, 2016). As the majority of the survey questions were pre-tested and successfully used in previous studies, the face validity of this study is considered to be relatively high. Nevertheless, as face validity is a subjective measure, it is not sufficient in order to conclude that a measure is valid (Paul and Cozby, 2012).

Secondly, convergent validity is the correlation between two different scales that are used to measure the same construct (Saunders, 2016). The  $AVE > .5$  for all constructs indicate adequate convergent validity. In contrast, discriminant validity is the absence of correlation between different scales used to measure constructs that are theoretically distinct from each other (Saunders, 2016). As previously mentioned in section 4.2.1, the AVE of the latent constructs is larger than the squared correlation between all constructs in pairs, which can indicate satisfactory discriminant validity in line with the requirements of the construct validity approach by Fornell and Larcker (1981).

### 5.4.3 Internal Validity

The internal validity refers to the degree of confidence that only the independent variable can be the cause of the causal relationship tested (Paul and Cozby, 2012). Even though the sample sizes were deemed adequate, the minor differences in significance level might be a result of the difference in the number of respondents in the two data sets. Ideally, one would have obtained a greater number of respondents for influencer 2; however, the difference is a natural result of one having over 111,000 followers and the other 16,200 followers.

The internal validity could also be influenced by participation selection, for instance, if those responding have specific similar characteristics such as being motivated by wanting to win the prize. We recognise the potential presence of a mortality effect, an effect of respondents leaving the survey before finalising it (Saunders, 2016). This can occur if those not interested in the product or not liking granola, in general, leave the survey, and hence skew the results. Furthermore, removing those that failed the memory check might have resulted in the remaining sample consisting of more people with high central processing than would be representative for the influencers' followers. Hence, respondents who failed the memory check might have similar characteristics of low effort when answering the survey.

The distribution of the survey through the influencers' Instagram accounts may limit internal validity. Their followers might believe the survey is from the influencer and therefore be biased in answering the questions about the adverts. Being aware of this potential issue, the focus was to establish a neutral ground before answering the questions, which was done by only having the text and not photos of the influencer in the Instagram story linking to the survey. Besides, the survey used an NHH design which intended to make respondents not focusing on the influencer profile they entered the link from. Moreover, as the survey did not have a pre-test, the threat of participants going into testing mode is not considered an issue (Saunders, 2016).

Another challenge is whether the two influencers share the same followers; thereby, some followers might have taken the same survey twice. Retake of the survey could be a threat to internal validity as the manipulation would not work as intended if respondents

have taken the same survey before (Saunders, 2016). However, the two influencers have different missions and target groups. Thus, we regard the chance of duplicated responses as minimal. Finally, as the stimuli for both questionnaires were made as similar as possible by the authors, there might have been individual characteristics lacking that followers could have noticed.

#### 5.4.4 External Validity

External validity is to what degree we can conclude other individuals and situations outside the study (Saunders, 2016), and there are several things to note. Throughout the stimuli design, there has been a constant focus on creating a realistic stimulus that would be distributed through and undertaken on 1) mobile devices, and 2) Instagram to the followers at their time and convenience. The ecological validity is, therefore believed to be satisfactory. In our study, any other distribution form would arguably impair the external validity, given the purpose of looking specifically on Instagram. In that sense, anyone trying to replicate the results may see a barrier in not having access to influencers distributing the questionnaires.

Notably, this study has been investigating two influencers endorsing the same product and within the same product category. Because the sample size mostly consists of women aged 18-34, there is a sampling bias to consider. The findings may hence not be transferable to other product categories and age groups. Only having one product in the study also limits the generalisability. Advertising our product with promotional focus is conceivable low risk as opposed to advertising products with more ambivalent attitudes by their nature, such as caviar, brown cheese and mackerel in tomato. Additionally, many of the respondents may not have established attitudes to the relatively new granola product, allowing the influencer to more straightforward affect opinion. Nonetheless, influencers are often incorporated in campaigns of new-releases; hence, the product choice is considered reasonable. The same applies to influencers appearing in person on their posts, which not was the case in this study.

Finally, we argue that the findings apply to the real world, and can be used in similar situations and platforms. However, Instagram is a continually developing social medium that regularly introduces new features and functionalities - currently certainly popular for



influencers (Influencer Marketing Hub, 2019). For instance, being able to publish stories is relatively new functionality, and innovations are sure to gain a foothold in the forthcoming years. Thus, we underline that the research conducted is of immediate relevance, and owns its relation to current event, attitudes and beliefs.

The overall conclusion on validity is that statistical inference can be justified, as the conclusions drawn about the relationships in the data are considered reasonable. Thus, the findings are found likely to correspond accurately to a real life setting.

## 5.5 Further Research

Our thorough literature review revealed limited research conducted on the relative effect of influencer marketing compared to alternative social media marketing. Our suggestions for future research are fourfold: 1) examine other influencer categories; 2) other samples; 3) further study credibility; and 4) investigate possible combinations of both types of Instagram ads.

Our first suggestion is for future studies examine the effects on consumer responses in different categories and niches such as lifestyle, gaming and fitness. It would be relevant to look at picture stimuli with human presence, and consider the effects of source attractiveness when comparing influencer and firm adverts. Also, using different social media networks such as Youtube and Snapchat is essential in order to reveal differences between the mediums. Furthermore, conducting the experiment advertising for a service and not a tangible product may yield different results on consumer responses. Secondly, investigating influencer marketing with a more gender-balanced sample might result in divergent outcomes looking into effects across genders.

Thirdly, future research should refine the conceptual model and consider more alternative constructs of credibility, such as medium-, content-, and ad credibility (both expertise and trustworthiness). This suggestion is based on our findings of source credibility being a critical mediating variable, which differs some from traditional research on celebrities. It is also relevant to consider other control variables such as the length of the following relationship, motivations for following, and identification with the influencer.

Finally, we also suggest that further research could seek to optimise the usage of both

influencer and firm adverts on Instagram and whether a combination of the two types of adverts is beneficial in a longitudinal study. This research is reflecting current attitudes, and these may change depending on time, platform and trends. As the trends quickly shift and social media platforms develop further, future research could take this into account and make sure to include new factors, trends and up to date data.

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# Appendix

## A1 Stimuli

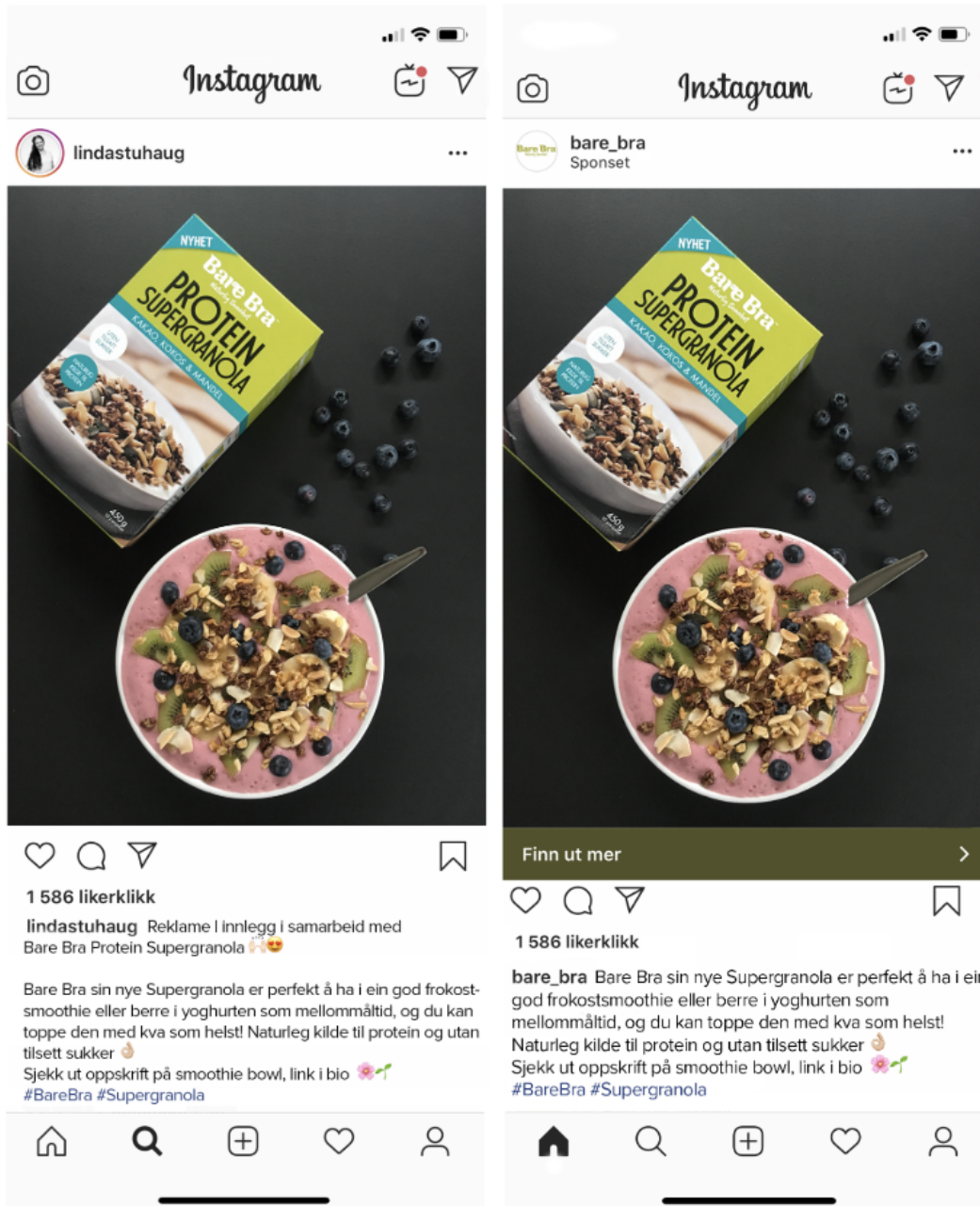


Figure A1.1: The influencer advert and firm advert for influencer 1 @lindastuhaug

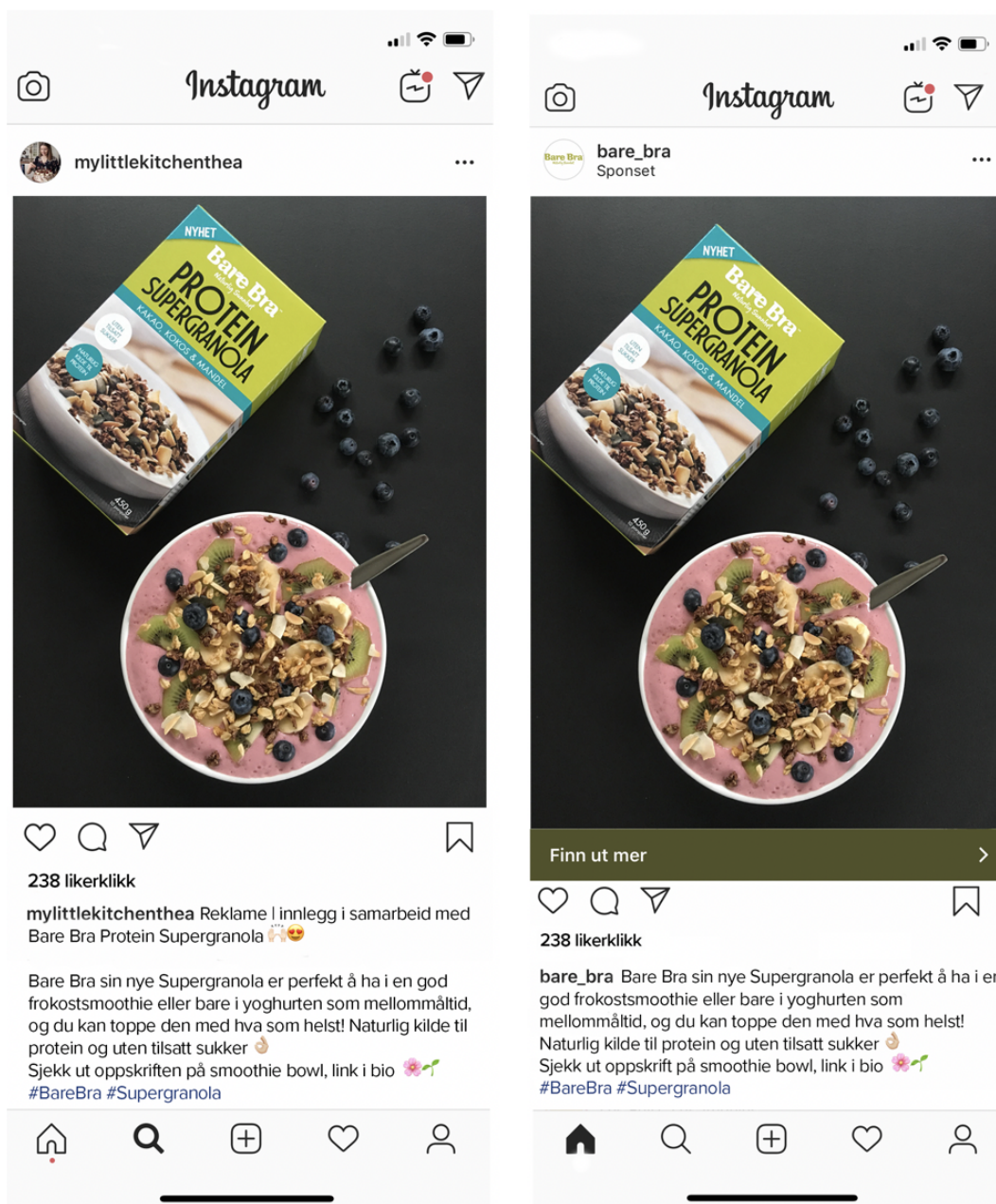


Figure A1.2: The influencer advert and firm advert for influencer 2 @mylittlekitchenthea

## A2 The Questionnaires

The questionnaires for the two influencers are identical except replacing the name of the influencer in Q9, Q17, Q23 and Q24. The respondents were randomly assigned to either the influencer advert stimulus and questions or the firm advert stimulus and questions. Note that Q18-22, Q25 and Q26 are absent from the overview below as they were asked to gather data for another research project by our supervisor Magne Supphellen and not to be part of this thesis.

### Introduction for both groups

▼ Intro Block Options ▼

Q1 Heil

 Denne undersøkelsen gjennomføres som en del av vår masteroppgave ved Norges Handelshøyskole og tar kun 3-5 minutter å gjennomføre. Vi setter stor pris på ditt bidrag og trekker en vinner av goodiebag og gavekort til en verdi av 1100kr på slutten av undersøkelsen.

Alle svar er helt anonyme og vil bli behandlet konfidensielt. Det er frivillig å delta, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli slettet.

Trykk "neste" for å begynne og samtykke til å delta i dette forskningsprosjektet.

Spørsmål om prosjektet? Send e-post til [s154971@student.nhh.no](mailto:s154971@student.nhh.no)

Med vennlig hilsen,  
Thea Bolstad og Phillip Høili  
Masterstudenter ved Norges Handelshøyskole

### Influencer Advert Questions

▼ @Lindastuhaug Block Options ▼

Q2 På neste side vil du se et innlegg fra Instagram. Les dette innlegget. Deretter vil det være noen spørsmål knyttet til innlegget.




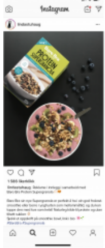
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Page Break

Stimulus:

Q3





## Brand Attitude:









Q4 Hvor enig eller uenig er du i følgende påstander:

	Helt uenig	Uenig	Nøytral	Enig	Helt enig
  Jeg synes Bare Bra Protein Supergranola er et svært bra produkt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
  Bare Bra Protein Supergranola er et produkt jeg har sans for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
  Jeg har en svært positiv oppfatning av Bare Bra Protein Supergranola	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Page Break -

## Attitude Towards the Advert:











Q5 På en skala fra 1-5, hvordan vil du vurdere reklamen?

	1	2	3	4	5	
  ikke interessant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	interessant
  ikke lett å like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	lett å like
  ikke tiltalende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	tiltalende
  ikke underholdende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	underholdende

- Page Break -

## Source Credibility:





Q6 På en skala fra 1-5, hvordan vil du vurdere reklamen?

	1	2	3	4	5	
  uoppriktig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	oppriktig
  uærlig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	ærlig
  ikke til å stole på	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	til å stole på
  utroverdig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	troverdig
  upålitelig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	pålitelig

- Page Break -

## Purchase Intention and Word of Mouth:

Q7 Hvor sannsynlig eller usannsynlig er det at du:

	Svært usannsynlig	Usannsynlig	Nøytral	Sannsynlig	Svært sannsynlig
  kjøper dette produktet neste gang du trenger denne typen produkt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
  anbefaler dette produktet til vennene dine?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8 Hvor sikker eller usikker er du på at du kommer til å kjøpe dette produktet neste gang du trenger denne typen produkt?

  Svært usikker

Usikker

Nøytral


Sikker


Svært sikker

----- Page Break -----

Manipulation check/memory check:

Q9 Hvem var det som omtalte produktet i reklamen?

  Bare Bra merkevaren

  Linda Stuhaug

Vet ikke

## Firm Advert Questions

▼ @BareBra Block Options ▾

Q10 På neste side vil du se et innlegg fra Instagram. Les dette innlegget. Deretter vil det være noen spørsmål knyttet til innlegget.



----- Page Break -----

Stimulus:

Q11





## Brand Attitude:

Q12 Hvor enig eller uenig er du i følgende påstander:

	Svært uenig	Uenig	Nøytral	Enig	Svært enig
Jeg synes Bare Bra Protein Supergranola er et svært bra produkt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bare Bra Protein Supergranola er et produkt jeg har sans for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har en svært positiv oppfatning av Bare Bra Protein Supergranola	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

## Attitude Towards the Advert:

Q13 På en skala fra 1-5, hvordan vil du vurdere reklamen?

	1	2	3	4	5	
ikke interessant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	interessant
ikke lett å like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	lett å like
ikke tiltalende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	tiltalende
ikke underholdende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	underholdende

Page Break

## Source Credibility:

Q14 På en skala fra 1-5, hvordan vil du vurdere reklamen?

	1	2	3	4	5	
uoppriktig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	oppriktig
uærlig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	ærlig
ikke til å stole på	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	til å stole på
utroverdig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	troverdig
upålitelig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	pålitelig

Page Break

## Purchase Intention and Word of Mouth:

Q15 Hvor sannsynlig eller usannsynlig er det at du:

	Svært usannsynlig	Usannsynlig	Nøytral	Sannsynlig	Svært sannsynlig
kjøper dette produktet neste gang du trenger denne typen produkt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
anbefaler dette produktet til vennene dine?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q16 Hvor sikker eller usikker er du på at du kommer til å kjøpe dette produktet neste gang du trenger denne typen produkt?

Svært usikker

Usikker

Nøytral

Sikker

Svært sikker

Page Break

Manipulation check/memory check:

Q17 Hvem var det som omtalte produktet i reklamen?

Bare Bra merkevaren

Linda Stuhaug

Vet ikke

## Background Questions for both Groups

Avslutning Block Options ▾

Q23 Følger du @lindastuhaug på Instagram?

Ja

Nei

Vet ikke

Page Break

Q24 Hvor ofte ser du på poster fra @lindastuhaug på Instagram?

Hver dag

Hver uke

Hver måned

Sjeldnere

Aldri

Q27 Hvor mange influencere følger du på Instagram?

1-5

6-10

11-15

16-20

21-25

26-30

31 eller mer

ingen

Q28

Hvor mange merkevarer følger du på Instagram?

- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- 31 eller mer
- ingen

Q29

Hvor ofte kjøper du noe du har sett på Instagram?

- Hver dag
- Hver uke
- Hver måned
- Hvert halvår
- Sjeldnere
- Aldri

- Page Break -

## Demography Questions for both Groups

Q30

Kjønn:

- Kvinne
- Mann

Q31

Alder:

- Under 16
- 16-17
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

- Page Break -

## The End of Survey and Debriefing

NHH



Du har nå fullført undersøkelsen.  
Reklamen som ble vist er en fiktiv reklame. Formålet med undersøkelsen er å kartlegge effekter av reklamer på Instagram.  
Hvis du har noen spørsmål, eller av en eller annen grunn ønsker å trekke besvarelsen, kontakt [s154971@student.nhh.no](mailto:s154971@student.nhh.no).  
Vi er veldig takknemlige for din deltagelse. Fortsatt fin dag!

Lvert av Qualtrics

## A3 Descriptive Statistics

**Table A3.1:** Age intervals used in both questionnaires

#	Age intervals
1	Under 16
2	16-17
3	18-24
4	25-34
5	35-44
6	45-54
7	55-64
8	65+

**Table A3.2:** Age information initial data set

	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
<b>Influencer 1</b>	1.000	3.000	4.000	4.096	5.000	8.000
<b>Influencer 2</b>	1.000	3.000	4.000	4.097	5.000	8.000

**Table A3.3:** Age information after cleaning

	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
<b>Influencer 1</b>	2.000	3.000	4.000	4.093	5.000	8.000
<b>Influencer 2</b>	2.000	3.000	4.000	4.183	5.000	8.000

## A4 Measurement Items

**Table A4.1:** Measurement items used in study (in Norwegian)

<b>Brand attitude</b>	
brandAtt1.	Jeg synes Bare Bra Protein Supergranola er et svært bra produkt
brandAtt2.	Bare Bra Protein Supergranola er et produkt jeg har sans for
brandAtt3.	Jeg har en svært positiv oppfatning av Bare Bra Protein Supergranola
<b>Attitude toward the ad</b>	
attTowardAd1.	ikke interessant:interessant
attTowardAd2.	ikke lett å like:lett å like
attTowardAd3.	ikke tiltalende:tiltalende
attTowardAd4.	ikke underholdende:underholdende
<b>Source credibility</b>	
sourceCred1.	uoppriktig:oppriktig
sourceCred2.	uærlig:ærlig
sourceCred3.	ikke til å stole på:til å stole på
sourceCred4.	utroverdig:troverdig
sourceCred5.	upålitelig:pålitelig
<b>Purchase intention</b>	
purIntent1.	Hvor sannsynlig eller usannsynlig er det at du kjøper dette produktet neste gang du trenger denne typen produkt?
purIntent4.	Hvor sikker eller usikker er du på at du kommer til å kjøpe dette produktet neste gang du trenger denne typen produkt?
<b>Word-of-mouth</b>	
WOM	Hvor sannsynlig eller usannsynlig er det at du anbefaler dette produktet til vennene dine?

## A5 Assessment of Normality

### \$multivariateNormality

	Test	Statistic	p value	Result
1	Mardia Skewness	4531.73050775775	0	NO
2	Mardia Kurtosis	70.8848808884058	0	NO
3	MVN	<NA>	<NA>	NO

### \$univariateNormality

	Test	Variable	Statistic	p value	Normality
1	Shapiro-wilk	brandAtt1	0.8314	<0.001	NO
2	Shapiro-wilk	brandAtt2	0.8590	<0.001	NO
3	Shapiro-wilk	brandAtt3	0.8502	<0.001	NO
4	Shapiro-wilk	attTowardAd1	0.8428	<0.001	NO
5	Shapiro-wilk	attTowardAd2	0.7998	<0.001	NO
6	Shapiro-wilk	attTowardAd3	0.7687	<0.001	NO
7	Shapiro-wilk	attTowardAd4	0.9060	<0.001	NO
8	Shapiro-wilk	sourceCred1	0.8186	<0.001	NO
9	Shapiro-wilk	sourceCred2	0.8064	<0.001	NO
10	Shapiro-wilk	sourceCred3	0.8171	<0.001	NO
11	Shapiro-wilk	sourceCred4	0.8099	<0.001	NO
12	Shapiro-wilk	sourceCred5	0.8084	<0.001	NO
13	Shapiro-wilk	purIntent1	0.8508	<0.001	NO
14	Shapiro-wilk	purIntent2	0.8928	<0.001	NO
15	Shapiro-wilk	purIntent3	0.8108	<0.001	NO
16	Shapiro-wilk	purIntent4	0.8874	<0.001	NO

**Figure A5.1:** Assessment of normality with univariate and multivariate normality tests for Influencer 1

\$multivariateNormality					
	Test	Statistic		p value	Result
1	Mardia Skewness	1630.91335835028	1.09644875531208e-56		NO
2	Mardia Kurtosis	14.9703802191258		0	NO
3	MVN	<NA>		<NA>	NO

\$univariateNormality					
	Test	Variable	Statistic	p value	Normality
1	Shapiro-wilk	brandAtt1	0.7680	<0.001	NO
2	Shapiro-wilk	brandAtt2	0.8601	<0.001	NO
3	Shapiro-wilk	brandAtt3	0.8585	<0.001	NO
4	Shapiro-wilk	attTowardAd1	0.8966	<0.001	NO
5	Shapiro-wilk	attTowardAd2	0.8545	<0.001	NO
6	Shapiro-wilk	attTowardAd3	0.8481	<0.001	NO
7	Shapiro-wilk	attTowardAd4	0.9092	<0.001	NO
8	Shapiro-wilk	sourceCred1	0.8486	<0.001	NO
9	Shapiro-wilk	sourceCred2	0.8395	<0.001	NO
10	Shapiro-wilk	sourceCred3	0.8464	<0.001	NO
11	Shapiro-wilk	sourceCred4	0.8565	<0.001	NO
12	Shapiro-wilk	sourceCred5	0.8384	<0.001	NO
13	Shapiro-wilk	purIntent1	0.8801	<0.001	NO
14	Shapiro-wilk	purIntent2	0.9093	<0.001	NO
15	Shapiro-wilk	purIntent3	0.8268	<0.001	NO
16	Shapiro-wilk	purIntent4	0.9017	<0.001	NO

**Figure A5.2:** Assessment of normality with univariate and multivariate normality tests for Influencer 2

