ISCTE Business School
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HOW INFLUENCERS AFFECT PURCHASE INTENTIONS TOWARDS ENDORSED PRODUCTS: THE ROLE OF INFLUENCERS' MATCH-UP WITH THE BRAND, PAYMENT AND CREDIBILITY

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ABSTRACT

As internet becomes an important part of people's daily life in China, online influencer marketing assumes increasingly vital role in internet advertisement. Online influencers post content about product on their social media accounts, which is their main approach to influence consumers' attitude toward the brand and purchase intentions. The current study is carried out to understand how online influencer endorsement affects consumers' attitude toward the brand and purchase intentions. Moreover, the current study explores the effects of the match between the online influencers and the brand, the credibility of online influencer and consumers' knowledge regarding online influencers being paid by the brand to post brand-related content. In total, 436 valid responses were obtained. The findings indicate that the match between the online influencer and the brand can enhance the credibility of the online influencer, which has positive influence on consumers' attitude toward the brand and purchase intentions. Moreover, consumers' knowledge regarding influencers being paid to post the content does not seem to affect their perception regarding influencers' credibility. This current study provides insights regarding online influencer endorsement in China, which can help brands to develop online influencer marketing strategy. Finally, the current study also tries to propose future research directions.

Keywords: online influencer, match-up hypothesis, sponsorship, source credibility

Resumo

Como a internet se tornou uma parte importante do cotidiano da população chinesa, a influência do marketing digital vem assumindo papel vital no setor de propaganda virtual. O conteúdo das publicações de influenciadores digitais nas suas redes sociais, cujo objetivo principal é influenciar nas escolhas dos consumidor face a marcas e intenções de consumo. Além disso, o presente estudo visa explorar os efeitos dos influenciadores digitais atrelados à marca, à credibilidade destes e ao conhecimento do consumidor, considerando que tais influenciadores são pagos pela marca em questão para vender o produto e a marca. No total, foram obtidas 436 respostas válidas. Os achados indicaram correlação entre quem anuncia online e o que é anunciado podem contribuir para aumento da credibilidade do próprio influenciador, a qual tem influência positiva sob a atitude do consumidor face à marca e no contexto das intenções de compra. Ademais, o conhecimento do consumidor, não levando em consideração o que é exposto pelos influenciadores digitais, não parece afetar em demasia sua percepção sobre o produto em questão. O presente estudo visa evidenciar o papel dos influenciadores digitais na China, os quais podem contribuir para o desenvolvimento de estratégias de marketing digital. Por fim, tal estudo tenta promover maiores estudos na área supracitada.

Palavras-chave: influenciador digital, hipótese de correspondência, patrocínio, credibilidade da fonte

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1. Introduction

In recent years, with the growth of internet user and the expansion of e-commerce, online advertisement is gaining more importance, in which online influencer marketing plays a crucial role.

In China, online influencer marketing, despite of being newcomer in economy, has seen rapid growth. The microblog called Weibo is one of the largest social network sites in China, in which online influencers can reach their audiences easily. It is reported that the average daily active users of Weibo were 203 million in March 2019 and advertising revenues of Weibo achieved 341 million USD (Weibo, 2019). According to the report of Weibo and iResearch (2018), in the second quarter of 2017, in China, the number of sales of online influencers' e-commerce stores reached 54 million per day. More and more brands start to cooperate with online influencers to promote their product and service in various categories from cosmetic to food, car, clothing, digital product and Fast-Moving Consumer Goods. The examples are including Mercedes-Benz, BMW, KFC, McDonald's, Coca Cola, Lancôme, L'Oréal, Channel, Nike, Canon, Samsung, Huawei, Dyson, P&G, etc.

FMCG need to find their way into e-commerce.

Despite the interest for this topic, there is still limited knowledge on how online influencers affect purchase intentions in the Chinese market. The current dissertation looks into this knowledge gap. While evaluating the effects of online influencer endorsement, consumers' knowledge regarding online influencer being paid to post and level of match-up of the online influencer with the brand are analyzed for their effects on influencers' credibility.

When the audiences know online influencers are paid to recommend a product, they become skeptical about the credibility of the online influencers, as they believe that online influencers try to sell the products rather than to introduce the features of the products, which may result in exaggerating the advantage of the products or even sugarcoating them. (Smith and Hunt, 1978; Wood and Burkhalter, 2014)

Match-up hypothesis suggests that the congruence between the endorser and the product, or so-called brand-fit, positively enhances the credibility of endorser and influences the attitude toward

the product and the brand and purchase intention (Kamins, 1990; Till and Busler, 1998; Fleck, Korchia and Roy, 2012; Zwilling, 2013). However, studies on match-up hypothesis are mostly focusing on traditional channel of advertisement (Kahle and Homer, 1985; Kamins, 1990; Till and Busler, 1998; Till and Busler, 2000; Silvera and Austad, 2004; Lee and Thorson, 2008), the research of match-up hypothesis on online advertisement is limited.

In view of these aspects, the current dissertation focuses on the following research questions:

Research question 1: What is the effect of online influencers' endorsement on consumers' purchase intentions and brand attitude?

Research question 2: How does consumers' knowledge regarding online influencers being paid by the brand to post the brand-related content affect influencers' credibility and, therefore, the effects on purchase intentions and brand attitude?

Research question 3: How does the online influencers' match-up with the brand affect influencers' credibility and, therefore, its effects on purchase intentions and brand attitude?

While evaluating the research questions proposed above, focus was placed in the Chinese market for its relevance in the world economy and in the industry of Fast-Moving Consumer Goods, which accounts for 68 billion euros, with annual growth of 13.7% (Chinese National Bureau of Statistics, 2019).

2. Literature Review

To study how online influencer endorsement influences consumers' attitude toward the brand and purchase intentions, we refer to previous studies to collect theoretical support. The theories as Elaboration Likelihood Model, match-up hypothesis and source credibility provide explanation to the effect of online influencer endorsement on consumers' attitude toward the brand and purchase intentions. Therefore, based on the result of previous studies, hypotheses of this current dissertation are proposed.

2.1 Elaboration Likelihood Model

According to Elaboration Likelihood Model (Petty, Cacioppo and Schumann, 1983), it is proposed that there are two routes for people to be persuaded and make decision. One is central route, in which people try to get more information and understand the issue itself before making decision. The other is peripheral route, in which people make decision by judging superficial cues. When it comes to making purchase decision toward products, some product categories follow central route, which need consumers searching information and acquiring a certain level of acknowledge about the product before making purchase decision; some product categories follow peripheral route, in these categories consumers more tend to look at the superficial characteristics of the products and listen to others' comment and recommendation before making purchase decision. (Petty et al, 1983)

In the dual process, argument quality is a crucial cue in central route, while attractiveness and credibility of endorser are essential to peripheral route. In the empirical study, it is concluded that the endorsers have stronger influence on purchase intention toward low involvement product than high involvement product (Petty et al, 1983). Moreover, there is a research suggesting that expertise of endorser is more a central cue than peripheral cue in some cases (Homer, 1990).

The level (high or low) of involvement is defined as the degree of personal relevance or importance (Park and Young, 1986). In latter research, it is concluded that when a consumer is not very involved with an product, the consumer considers it to be less important and feel uncaring and indifferent about it correspondingly (Mittal, 1995). For those customers who have low involvement with the product, peripheral cues (graphic and music) moderate how their attitude toward advertisement influences their attitude toward the brand (Park and Young, 1986).

2.2 Match-up Hypothesis

Match-up hypothesis implies that the image of the celebrity and the product should conduct consistent message in order to achieve better outcome in the advertisement. (Kahle and Homer, 1985).

Studies suggest that the match-up (some studies use the word, congruence) between the endorser and the endorsed product can positively influence consumers' attitude toward the advertisement, attitude toward the brand, purchase intention, brand belief, sales, the credibility of the endorser, predisposition toward the advertisement, attitude toward the product (Peterson and Kerin, 1977; Friedman and Friedman, 1979; Caballero and Solomon, 1984; Kamins and Gupta, 1994; Batra and Homer, 2004; Fleck et al, 2012; Zwilling, 2013).

In contrast to Elaboration Likelihood Model (Petty et al, 1983), match-up hypothesis suggests that attractiveness of endorser is not panacea in all kind of product endorsement. A study shows that attractiveness does not influence the sales of beer, as beer is an attractiveness-unrelated product, and male model sold more beer than female model in supermarket, as male model matches the predominant male image of beer (Caballero and Solomon, 1984). A study shows that different types of endorser's endorsement are effective to different types of product: the celebrity endorser triggers better purchase intention of consumer when the celebrity endorser endorses costume jewelry, but not when the celebrity endorser endorses vacuum cleaner or cookies. (Friedman and Friedman, 1979) In Friedman and Friedman's study, vacuum cleaner is defined as a high financial risk product, and consumers have better purchase intention towards it when it is endorsed by a home appliance expert, which shows the match between expertise of the endorser and the endorsed product can have positively influence how endorser affects consumers' purchase intention towards high involvement product. Another study suggests that the perceive performance risk and financial risk of high technology-oriented product is lower when the endorser is an expert rather than a celebrity, as expert matches up with the product better (Biswas, Biswas and Das, 2006).

Match-up, also known as Source congruity, is defined as the perceived degree of match between endorser's accessible attributes associated with the brand, which is affected by audiences' personal relevance, processing goal, judgmental confidence, and individual accountability (Kirmani, 1998).

Till and Busler (2000) suggest that how easily an associative link is built between two concepts (such as a brand and an endorser) depends on belongingness, relatedness, fit, or similarity.

Schema theory provides an explanation for match-up hypothesis: the match between the endorser and endorsed product could create new information that generates the schema of advertisement, which positively influences attitude toward the advertisement, while mismatch could demonstrate that the endorsed brand is not very different from other brand in the same category. (Lynch and Schuler, 1994). A latter study of schema theory shows that match between the endorser and the endorsed product leads to better attitude toward the advertisement and purchase intention, when consumers are motived to process the information of the advertisement (Lee and Thorson, 2008). Therefore, celebrity endorsers endorsement can achieve better result when there is a match between celebrity endorser and the endorsed product, as they can make consumers more focused on the advertisement to enhance the effect of match-up (Amos et al, 2008).

A study of Meaning Transfer Theory provides a similar explanation to this phenomenon: when the elements of a celebrity endorser match up with the endorsed product, the elements give cultural meanings to the advertisement and then the cultural meaning is conveyed to consumers (McCracken, 1989). When the match between the endorser and endorsed product is high, the endorser performs as a communicative role, helping the advertisement to convey message (Peterson and Kerin, 1977).

In early studies of match-up hypothesis, it is mostly focused on how attractiveness of the endorser contributes to the match between the endorse and the endorsed product (Peterson and Kerin, 1977; Caballero and Solomon, 1984; Kahle and Homer, 1985; Kamins, 1990; Kamins and Gupta, 1994; Lynch and Schuler, 1994). Later, studies of match-up hypothesis start to investigate how expertise of the endorser contributes to the match between the endorser and the endorse product (Friedman and Friedman, 1979; Till and Busler, 1998; Till and Busler, 2000). There are also studies focusing on the effect of overall congruency (Fleck et al, 2012) and the match between other specific attributes of the endorser and the endorsed product (Batra and Homer, 2004; Zwilling, 2013).

However, a study of match-up hypothesis carried out in China, shows that match-up between endorser and product positively influences on purchase intention, but physical attractiveness is more important than match-up degree in term of purchase intention (Liu et al, 2010). Another

study suggests that moderate incongruence leads to better evaluation of product (Meyers-levy and Tybout, 1989).

2.3 Source Credibility

Source credibility is defined as a communicator's positive characteristics that affects how receiver accepting a message (Ohanian, 1990). Source credibility is an effective factor in the process of persuasion, which positively influences the agreement on communicator when audiences hold a negative opinion at the beginning (Sternthal, Dholakia and Leavitt, 1978).

There were a lot of studies on source credibility, but they are decentralized and inconsistent. Therefore, source credibility had been left to be unidimensional for a long time. Smith and Hunt (1978) used truthfulness to measure source credibility. Some researchers studied trustworthiness and expertise as two factors of credibility, which positively influence the attitude of audiences (Sternthal et al, 1978). Joseph (1982) focused on attractiveness as a factor of source credibility, which has positive impact on the evaluation of the endorsed product and finds that attractiveness does not influence perceived trustworthiness and perceived expertise of the endorser.

In Dholakia and Sternthal's research (1977), it is concluded that source credibility consists of three dimensions: attractiveness, trustworthiness and expertise. Atkin and Block (1983) used attractive, trustworthy and competent to measure source credibility. After summarizing several empirical studies, Ohanian (1990) built a scale of source credibility with these three dimensions: attractiveness, trustworthiness and expertise.

In confirmatory analysis, it is confirmed that attractiveness, trustworthiness and expertise are main dimensions of source credibility, thought there are other dimensions of credibility left to be investigated (Amos, Holmes and Strutton, 2008). In empirical study, endorser credibility, consisting of attractiveness, trustworthiness and expertise, is suggested that can influence purchase intention and attitude toward the advertisement through influencing attitude toward the advertisement (Lafferty and Goldsmith, 1999; Goldsmith, Lafferty and Newell, 2000).

Attractiveness can be understood as model attractiveness, chicness, sexiness or sexualness and likability (Ohanian, 1990). Trustworthiness is defined as the consumer's confidence in the source for providing information in an objective and honest manner (Ohanian, 1991). Expertise is a

cognition-based attribute, and refers to the skills, knowledge and experience possessed by the endorser (Eisend and Langner, 2010).

Expertise indicates how much knowledge the endorser acquires with the endorsed product, which validates the endorser's claim and recommendation on the product, leading to better persuasion than when the endorse is only trustworthy but not expert (Silvera and Austad, 2004).

In previous researches on celebrity endorsement, expertise is an essential dimension contributing to the effectiveness of celebrity endorsement (Eisend and Langner, 2010; Erdogan, Baker and Tagg, 2001; Ohanian, 1991; Silvera and Austad, 2004; Till and Busler, 1998; Till and Busler, 2000). The perceived expertise of the celebrity endorser with the endorsed product impacts consumers' attitude on a cognitional base and has significant influence on the consumers' purchase intention towards the product, especially when consumers make purchase decision in a period of time after the exposure of the advertisement (Ohanian, 1991; Eisend and Langner, 2010). In the perspective of practitioners, expertise of the celebrity endorser is perceived important when the product is technical/attractiveness-unrelated (Erdogan, 2001).

A further investigation of match-up hypothesis (Till and Busler, 1998) shows that, the match-up effect between brand and endorser is based on the dimension of expertise instead of attractiveness.

According to Rossiter-Percy Grid, also known as Advertising Planning Grid (Lord and Putrevu, 2009; Eisend and Langner, 2010), expertise of the endorser can only influence the purchase intention towards informational products (e.g. electrical appliance, medicine), but not transformational products (e.g. food, clothes). Rossiter-Percy Grid suggests that consumers purchase and use products from two kinds of motive: informational motive or transformational motive. Consumers with informational motive want to use the product to solve problem, avoid problem or regulate negative emotion; While consumers with transformational motive want to use the product to gain psychological satisfaction, excitement or social approval (Rossiter, Percy and Donovan, 1991).

2.4 Celebrity Endorser

Celebrity endorser is believed to play a powerful role in advertising, as being able to attract consumers' attention and affect consumers' purchase intentions.

There are three types of endorsers: the celebrity, the professional expert and the typical consumer. Celebrity endorsers are defined as individuals who are known to the public (actor, sports figure, entertainer, etc.) for his or her achievements in areas which are not the area of the endorsed product. A professional expert endorser is an individual or group possessing superior knowledge regarding the endorsed product and the individual has obtained this knowledge as a result of experience, study, or training. (Friedman and Friedman, 1979) But as the internet and social network website rise, the line between these types blurred. Some bloggers have a certain knowledge in an area but are not well certificated (e.g., not having a doctor degree), gaining millions of fans in social network website, thus they become celebrities online, which is called online influencer.

Therefore, the definition of celebrity endorsement is updated: an agreement between an individual who enjoys public recognition (a celebrity) and an entity (e.g. a brand) to use the celebrity for the purpose of promoting the entity (Bergkvist and Zhou, 2016).

Besides of Elaboration Likelihood Model, Dual Entertainment Path Model provides another perspective of celebrity endorsement. Celebrities provide consumers with entertainment experience and, therefore, a strong bond is built between celebrities and consumers. There are two types of entertainment experience, aspirational experience and playful experience, and they both can lead to consumers' celebrity fantasy and emotional investment, which positively influence on consumers' attitude toward to the endorsed brand. (Hung, 2014)

Celebrity endorser is perceived more trustworthy, more competent and have more favorable impact on the advertisement and the product (Atkin and Block, 1983). Regardless of product type, celebrity endorsement leads to better memory of the advertisement and the brand name (Friedman and Friedman, 1979). The positive information and image of the celebrity can be transferred to the product and brand through endorsement, and celebrity endorsement is able to make consumers more focused to the advertisement to identify and evaluate the advertisement itself, less bothered by advertising clutter (Amos et al, 2008).

Celebrity endorsement is also a very common advertising strategy in Asian countries, including China (Choi, Lee and Kim, 2005; Hung, Chan and Tse, 2011). As China is a country ranking high in collectivism, risk aversion, and power distance, celebrity endorsement is more suitable for Chinese culture than other advertising forms, such as humorous or sexual-related

advertisement (Hung et al, 2012). A study with consumer-celebrity relational approach finds that, relationship between consumers and celebrity is an essential base for celebrity endorsement effect and fans of celebrity could become loyal consumers of the product that the celebrity endorses, which helps greatly in new launched products (Hung et al, 2011). Therefore, the effect of celebrity endorsement works differently in China than other western countries in a way. According to the study of Fong and Burton (2006), Chinese consumers rely on direct product recommendation more than the consumers in western countries (Hung et al, 2012).

2.4.1 Influencer

Online influencer is a new type of celebrity in the internet era. Internet advertising, as a form of interactivity advertising, witnesses an increasing importance in advertising. Compared to the passive communication channel of traditional mass media, online marketing is decentralized and efficient. On the internet consumers are able to experience "flow state", in which they focus on the interaction and have a sense of control over the interaction. (Hoffman, 1996)

Interactive is defined as the degree to which two or more communication parties can act on each other, on the communication medium and on the messages, and the degree to which such influences are synchronized (Liu and Shrum, 2002). In traditional advertising (e.g., TV and printed advertisement), the presentation of advertisement is linear, in which the consumers are passively exposed to product information, but in interactive advertising, the consumers actively browser the information (Bezjian-Avery, Calder and Iacobucci, 1998). Although Bezjian-Avery et al's (1998) research showed that consumers spent less time on the interactive advertisement and have lower purchase intention, a latter study (Sicilia, Ruiz and Munuera, 2005) has contrary result: for advertisement on interactive website, consumers are more focused on the advertisement and have higher information processing and better attitude toward the product. Young people are more willing to shop online and economic motivation (saving money) are positively related to online shopping (Joines, Scherer and Scheufele, 2003). According to Internet Advertising Bureau, in 2009, internet surpass television to be the biggest advertising sector by market share. Although, in term of return of investment and generating new sales, television advertising performs better than internet, but internet advertising performs better than print and outdoor advertising (Pfeiffer and Zinnbauer, 2010). In a survey, 73% of the interviewees agreed that Twitter provided them with new information about the products, 55%

were motivated to search for additional product information and purchase the product (Wood and Burkhalter, 2014)

In some circumstance, the persuasive effect of celebrity endorser is impaired. Attribution Theory suggests that consumers find the endorsement more credible when they attribute the endorsement of celebrity endorser to introducing the endorsed product's characteristics, instead of desiring to sell the product (Smith and Hunt, 1978). A latter study of Attribution Theory suggests that online influencers' followers believed that the online influencers truly like the product even when they are paid by the brand, as social network website is an environment with lots of distraction, which impairs consumers' deep thinking on the behavior of the online influencers. Therefore, the endorsement of online influencers drives up sales of the endorsed product. (Kapitan and Silvera, 2016).

2.5 Hypotheses and Research Model

All the Match-up Hypothesis studies above are examining how it works in the traditional advertisement, mainly printed advertisement (Kahle and Homer, 1985; Kamins, 1990; Till and Busler, 1998; Till and Busler, 2000; Silvera and Austad, 2004; Lee and Thorson, 2008). Since online influencer endorsement plays an more and more important role in adverting and is different from traditional celebrity endorsement as a more interactive form of advertising (Bezjian-Avery et al, 1998; Liu and Shrum, 2002; Sicilia and Austad, 2005), it is necessary to study in online advertising, how match-up effect impacts on online influencer endorsement influencing consumers' attitude toward the brand and purchase intentions (Till and Busler, 1990; Till and Busler, 2000; Fleck et al, 2012;Zwilling, 2013).

The match-up between endorser and product positively influences on attitude toward the advertisement (Kamins, 1990; Lee and Thorson, 2008) and brand attitude (Kirmani and Shiv, 1998; Fleck et al, 2012), while attitude toward the advertisement can influence purchase intention through brand attitude (Spears and Singh, 2004). Therefore, the first hypothesis is proposed:

H1: Posts that are endorsed by online influencer have stronger influence on (a)brand attitude and on (b)purchase intention toward the endorsed product, when the online influencer has a high match with the endorsed product than when the online influencer has a low match.

According to Persuasion Knowledge Model, after more and more exposure of advertisement, consumers are acquiring technique to identify the goal of advertiser and to cope with their persuasion attempt. For example, when consumers see an advertiser invests a lot of effort and money in the advertisement and pays a celebrity a lot to endorse the product, consumers may believe that the celebrity endorser is just a sales tactic and ignore him/her, then they will evaluate the product or service without the influence of the celebrity endorser. (Friestad and Wright, 1994)

If consumers believe the celebrity endorser appears in an advertisement without endorsement fee, they believe that the celebrity has a more genuine preference toward the product, comparing to the one with endorsement fee (Cronley et al, 1999). In third-party endorsement, non-profit organization endorsing without endorsement fee, is perceived more trustworthy than for-profit organization endorsing with endorsement fee (Dean and Biswas, 2001). In term of online advertising, another study suggests that the sign of sponsorship in online influencer's post, which implies the online influencer is paid to post about the product, negatively impacts on consumers' attitude toward the brand (Wood and Burkhalter, 2014).

In both traditional advertising and online advertising, the fact of endorser being paid negatively impacts the effectiveness of his/her endorsement on the product, thus negatively influences the attitude toward the brand and purchase intention towards the endorsed product. In the meantime, the effect of match-up between the endorser and the endorsed product leads to better credibility of the endorser (Kamins and Gupta, 1994), which could make up the negative influence of being paid. Therefore, the second and third hypotheses are proposed:

H2: The credibility of the online influencer is significantly different when the post is perceived as being paid than when it is not perceived as being paid. The effect is significant on the three dimensions of credibility: (a)attractiveness, (b)trustworthiness and (c)expertise.

H3: The credibility of the online influencer is significantly different when the online influencer is perceived as having a high math with the product than when the online influencer is perceived as having low match. The effect is significant on the three dimensions of credibility: (a)attractiveness, (b)trustworthiness and (c)expertise.

Studies suggest that source credibility in general positively influences on attitude toward the brand directly or indirectly (Lafferty and Goldsmith, 1999; Goldsmith et al, 2000), which is unidimensional. In this study the effect of each dimension of source credibility will be tested. Therefore, the fourth hypothesis is proposed:

H4: The three dimensions of credibility, (a)attractiveness, (b)trustworthiness and (c)expertise of the online influencer who endorses the brand, respectively have positive influence on attitude toward the endorsed brand.

A study on endorser effectiveness suggests that celebrity endorsers gain more favorable idea in endorsing products high in psychological and/or social risk, while professional expert endorsers are more suitable for products high in financial, performance and/or physical risk (Friedman and Friedman, 1979). Perceived quality of product, as the quality to meet expectations of consumers, can reduce the negative effect of perceived risks (Snoj, Korda and Mumel, 2004). Friedman and Friedman's research (1979) studied the overall effect of celebrity endorsement on perceived quality but did not mention which factor of it works on perceived quality. Therefore, the fifth hypothesis is proposed:

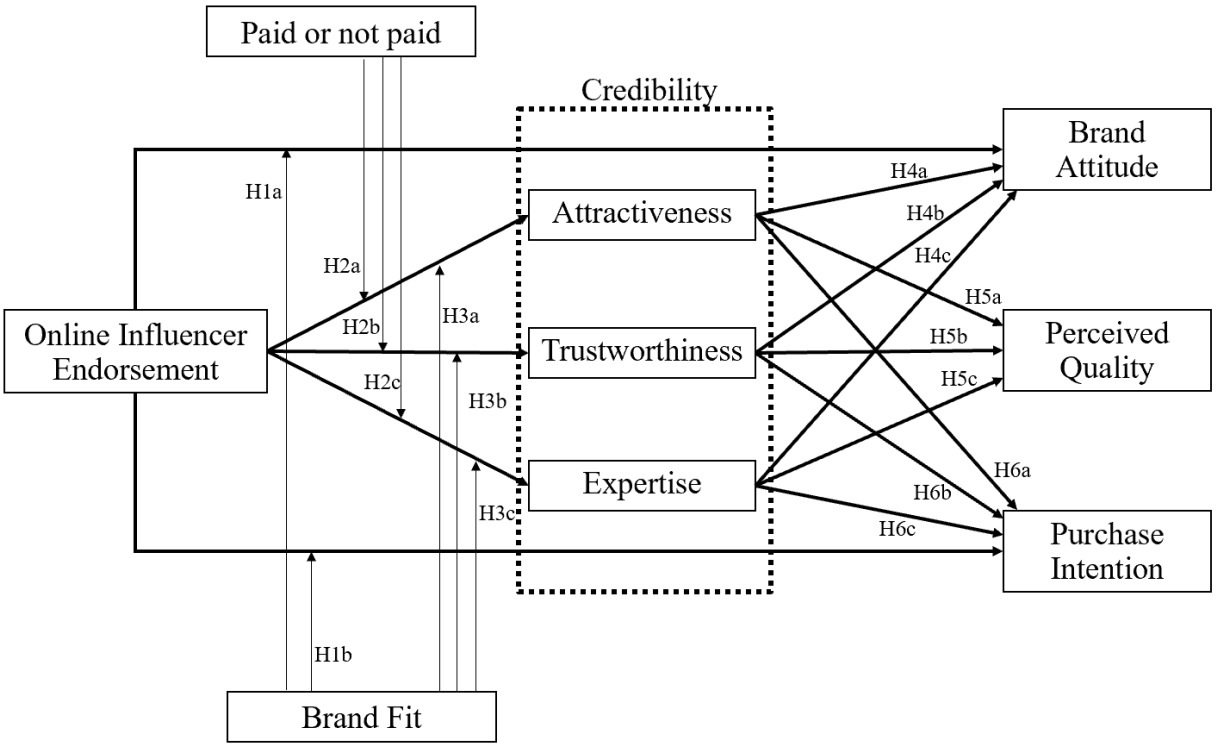
H5: The three dimensions of credibility, (a)attractiveness, (b)trustworthiness and (c)expertise of the online influencer who endorses the brand, respectively have positive influence on perceived quality of the endorsed product.

The research investigated source credibility in three dimensions (attractiveness, trustworthiness and expertise), shows that purchased intention is only related to the perceived expertise of the endorser: when consumers believe the celebrity endorser having high expertise with the product, they relatively have higher purchase intention toward the product (Ohanian, 1991). This study will research if the three dimensions of credibility of online influencer has positive influence on consumers' purchase intention. Therefore, the sixth hypothesis is proposed:

H6: The three dimensions of credibility, (a)attractiveness, (b)trustworthiness and (c)expertise of the online influencer who endorses the brand, respectively have positive influence on purchase intention towards the endorsed product.

The research model is proposed as follow:

Figure 1 – Proposed model



Source: Developed by author (2019)

3. Methodology

3.1 Research Method

The quantitative approach is applied in this study, by distributing questionnaires, as many previous studies on match-up hypothesis have performed (Kahle and Homer, 1985; Kamins, 1990; Kamins and Gupta, 1994; Till and Busler, 2000; Fleck et al, 2011; Wright, 2016). With a large number of participants involved and scales that have been validated, the error and bias of the participants can be limited. Therefore, the result of hypothesis testing will be more credible and evidential, which will draw a firmer conclusion and will lead to a better understanding of the relationship between match-up degree, source credibility, attitude toward the brand, perceived quality and purchase intention.

3.2 Questionnaire

3.2.1 Endorser and Product

In an empirical study to test the interaction between the endorser expertise and the endorsed product, it is suggested that the expertise of the endorser has significant interaction in term of brand attitude but not purchase intention, which is not completely supporting match-up hypothesis (Till and Busler, 2000). However, in the experiment, the endorsed products are energy bar and candy bar, which are transformational products. According to Rossiter-Percy Grid (Lord and Putrevu, 2009), the purchase intention of transformational products is not affected by the perceive expertise of the endorser, which means that the type of tested products may affect the match-up effect. Moreover, according to Elaboration Likelihood Model (Petty et al, 1983), the celebrity endorsers are more effective on consumers' purchase intention towards low-involvement product. A study (Wu, 2007) shows that when browsing online, consumers' pre-visit intention towards product differs among low-involvement/informational, low-involvement/transformational, high-involvement/informational and high-involvement/transformational these four types of products, which leads to difference in attitude toward the site and brand attitude change. Therefore, this study will focus on the sector of low-involvement/informational product, and in the questionnaire the endorsed product is dishwashing liquid from a fictional brand COCONUT, which is made of natural and eco-friendly ingredients. Accordingly, two fictional online influencer endorsers are created: household hack blogger

(match-up with dishwashing liquid) and make-up blogger (not match-up with dishwashing liquid). The profile photos of two fictional bloggers are the same picture of a Chinese female model from a picture website, who is not celebrity and is not recognized by participants. In the two profiles, one introduces that the household hack blogger has posted a lot of techniques and products for household cleaning, maintenance of furniture and appliance in Weibo and she has a phD degree in applied chemistry, which explains where her expertise comes from; another profile introduces that the make-up blogger often uploads make-up tutorials and tips related to beauty and cosmetics.

3.2.2 Stimuli

Four different groups of stimuli are designed: matchup/not-paid, non-matchup/not-paid, matchup/paid, non-matchup/paid. The model's picture and the profile of household hack blogger will be shown in the group of matchup/nonpaid and group of matchup/paid, while the model's picture and the profile of make-up blogger will be shown in the group of non-matchup/nonpaid and the group of non-matchup/paid. The content of the post recommending dishwashing liquid is the same for the four groups, except in the group of matchup and paid and the group of non-matchup and paid, there is an added sentence: "#Advertisement# This post is sponsored by COCONUT Dishwashing Liquid. #Advertisement#". The profiles and contents are fictional but in the form of the post of Weibo.

Table 1 – Groups in the Questionnaire

Group		**Content of the post**	
		Not-Paid	Paid
Blogger type	Household Hack	Group1: Matchup/not-paid	Group 2: Matchup/paid
	Make-up	Group 3: Non-matchup/not-paid	Group 4: Non-matchup/paid

Source: Developed by author (2019)

3.2.3 Procedure

Questionnaires are distributed online through a Chinese survey website, Wenjuanxing, which provides sample-collecting service with 2.6 million members in the sample pool. As this research

is about online influencers, online questionnaire is easier to reach the target participants: audiences of online influencers. We purchase sample-collecting service of the website. Therefore, the participants are rewarded by the website for submitting valid questionnaire. How much reward the participants will received is decided by the website, between 1 to 5 RMB (around 0.1 to 0.6 euro).

The participants are randomly distributed to one of the four groups of stimuli. Before the material is shown, there are two questions to screen out the non-target participant. First question is "In general, how much do you like online influencer?" with a 7-point scale from strongly dislike to strongly like. Second question is "Do you use Weibo or other SNS?". Those who choose strongly dislike or dislike in the first question, and those who choose no or not sure in the second question, are screened out, to make sure the participants of this research are Weibo users who do not have strong bias on online influencers. Then one of the four stimuli is randomly shown in the questionnaire. After reading the material, all the participants answer the same questions, as the following measures.

3.2 Measures

3.2.1 Control

Controlling questions are designed to make sure that participants are targeted participants and read the post carefully, which assure that the manipulation of stimuli is successful. Before the material is shown, to make sure the participants are Weibo user and do not have strong negative impression on online influencers, the participants are asked: In general, how much do you like online influencer (with a 7-point scale, from strongly dislike to strongly like); Do you use Weibo or other SNS? (Yes, no or not sure). In the first question, who answers strongly dislike and dislike will be screened out. In the second question, who answers no or not sure will be screened out. After the stimuli is shown, to make sure that the participants read it carefully, the participants are asked: What is the category of this blogger (Household hack, Make-up or I did not notice); Is there a sentence of "*#Advertisement# This post is sponsored by COCONUT dishwashing liquid #Advertisement#"* in this post (Yes, No or I did not notice); Does this post mention that this dishwashing liquid is eco-friendly. The participants are screened out if their answers are "I did not notice" or not comply with the profile and the post that are shown in the stimuli.

3.2.2 Match-up Degree

According to the scale of brand/celebrity congruence (Fleck and Quester, 2007; Fleck et al, 2012), some adjustments were made when translated to Chinese to ensure the Chinese participants answer the questions without misunderstanding. Besides, in the questionnaire, sponsor/sponsorship is replaced by recommend/recommendation, as in two groups of stimuli the bloggers are not paid. Based on Likert 7-point scale (1-strongly disagree, 7-strongly agree), the participants are asked to indicate: (1)[brand X] and [celebrity Y] go well together; (2)[brand X] is well matched with [celebrity Y]; (3)In my opinion, [celebrity Y] is very appropriate as a celebrity endorser for [brand X]; (4)I am not surprised that this company sponsors this event; (5)One would expect this company to sponsor this event; (6)It was predictable that this company would sponsor this event; (7)That this company sponsors this event tells me something about it; (8)When I hear of this sponsorship, I can understand (Company/Brand X) better; (9)With this sponsorship, I discover a new aspect of this company.

3.2.3 Source Credibility

Adapting the scale of credibility (Ohanian, 1990), the participants are asked to score how much do they agree with the words describing about the celebrity on the scale from 1-strongly disagree to 7-strongly agree: (1)attractive; (2)classy; (3)beautiful; (4)elegant; (5)sexy; (6)dependable; (7)honest; (8)reliable; (9)sincere; (10)trustworthy; (11)expert; (12)experienced; (13) knowledgeable; (14)qualified; (15)skilled.

In this part of questionnaires, questions from 1 to 5 are to test the attractiveness of the celebrity, questions from 6 to 10 are to test the trustworthiness of the celebrity, and questions from 11 to 15 are to test the expertise of the celebrity.

3.2.4 Brand Attitude

Based on the scale of Spears and Singh(2004), the participants are asked to score how much do they agree with the sentences about the brand on the scale from 1-strongly disagree to 7-strongly agree: (1)This brand is appealing; (2)This brand is good; (3)This brand is pleasant; (4)This brand is favorable; (5)This brand is likable.

3.2.5 Perceived Quality

Based on the scale of Schivinski and Dabrowski (2015), the participants are asked to score how much do they agree with the sentences about the brand on the scale from 1-strongly disagree to 7-strongly agree: (1)Most of the products of [brand] are of great quality; (2)The likelihood that [brand] is reliable is very high; (3)Products of [brand] are worth their price.

3.2.6 Purchase Intention

Based on the scale of Putrevu and Lord (1994), the participants are asked to score how much do they agree with the sentences about their purchase intention on the scale from 1-strongly disagree to 7-strongly agree: (1) It is very likely that I will buy (brand); (2) I will purchase (brand) the next time I need a (product); (3) I will definitely try (brand).

3.2.7 Demographic

Studies suggest that people of different gender and in different age group show different attitude toward the same product and the credibility of celebrities (Peterson and Kerin, 1977; Atkin and Block, 1983; Caballero and Solomon, 1984). A study investigated on the relationship between age, gender, education, income and the frequency of searching for products and services information online, (Joines et al, 2003). In these researches, the demographic information included age, gender and education. For age, it is divided into five groups: under 18, 18-25, 26-35, 35-45 and above 45. For gender, there are four groups: male, female, other and prefer not to say. For education, the highest degree completed is asked: high school degree or less than high school, college, bachelor's degree, master's degree and doctorate (ex. PhD). As the product in the questionnaire is dishwashing liquid, to understand participants' purchase behavior, they are asked: "Are you the person responsible for the purchase of dishwashing liquid in your house? (purchase for family, or for yourself if you live alone.)"

Table 2 – Items of the Measurements

Author	Dimension	Item	
Fleck and Quester, 2007; Fleck et al, 2012	Match-up degree	MU1: [brand X] and [celebrity Y] go well together MU2: [brand X] is well matched with [celebrity Y] MU3: In my opinion, [celebrity Y] is very appropriate as a celebrity endorser for [brand X] MU4: I am not surprised that this company sponsors this event MU5: One would expect this company to sponsor this event MU6: It was predictable that this company would sponsor this event MU7: That this company sponsors this event tells me something about it MU8: When I hear of this sponsorship, I can understand (Company/Brand X) better MU9: With this sponsorship, I discover a new aspect of this company	
Ohanian, 1990	Source Credibility	Attractiveness	SC-A1: attractive; SC-A2: classy; SC-A3: beautiful; SC-A4: elegant; SC-A5: sexy;
		Trustworthiness	SC-T1: dependable; SC-T2: honest; SC-T3: reliable; SC-T4: sincere; SC-T5: trustworthy;
		Expertise	SC-E1: expert; SC-E2: experienced; SC-E3: knowledgeable; SC-E4: qualified; SC-E5: skilled
Spears and Singh, 2004	Brand Attitude	BA1: This brand is appealing BA2: This brand is good BA3: This brand is pleasant BA4: This brand is favorable BA5: This brand is likable	
Schivinski and Dabrowski, 2015	Perceived Quality	PQ1: Most of the products of [brand] are of great quality PQ2: The likelihood that [brand] is reliable is very high PQ3: Products of [brand] are worth their price	
Putrevu and Lord, 1994	Purchase Intention	PI1: It is very likely that I will buy (brand) PI2: I will purchase (brand) the next time I need a (product) PI3: I will definitely try (brand)	

Source: Developed by author (2019)

3.3 Pre-test

Before the final version of questionnaires are distributed, three pre-tests were carried out to make sure there would not be misunderstanding and error in the questionnaire. The procedure of pre-test is as the procedure written above. All the participants are randomly distributed to one of the four stimuli.

3.3.1 First Pre-test

In the first pre-test, there were 60 participants. Many of participants did not correctly notice the category of the blogger and the sign of advertisement. And some of them were confused by the question, "how much do they like online influencer", as this question is shown after the introduction of the blogger and the post, which made them confused about the "online influencer" is referring to online influencer in general or this specific online influencers.

3.3.2 Second Pre-test

In the second pre-test, adjustments were made according to the feedback in the first pre-test. The screen-out questions were shown before the introduction of the blogger and the post, which are "In general, how much do you like online influencer" and "Do you use Weibo or other SNS". In the material of introduction of the blogger and the post, the category of the blogger is highlighted and the sign of advertisement is changed from "#Advertisement#" to a more complete sentence "*#Advertisement# This post is sponsored by COCONUT dishwashing liquid #Advertisement#"*. Kamins and Gupta's scale (1994) of Congruence is used to indicate the match-up degree, but in this scale, there is only one item, which is unidimensional.

In the second pre-test, those who failed to correctly answer the questions about category of the blogger and whether there is a sign of advertisement, were screened out. There are 194 participants answered the second pre-test, and 132 of them submitted valid questionnaire.

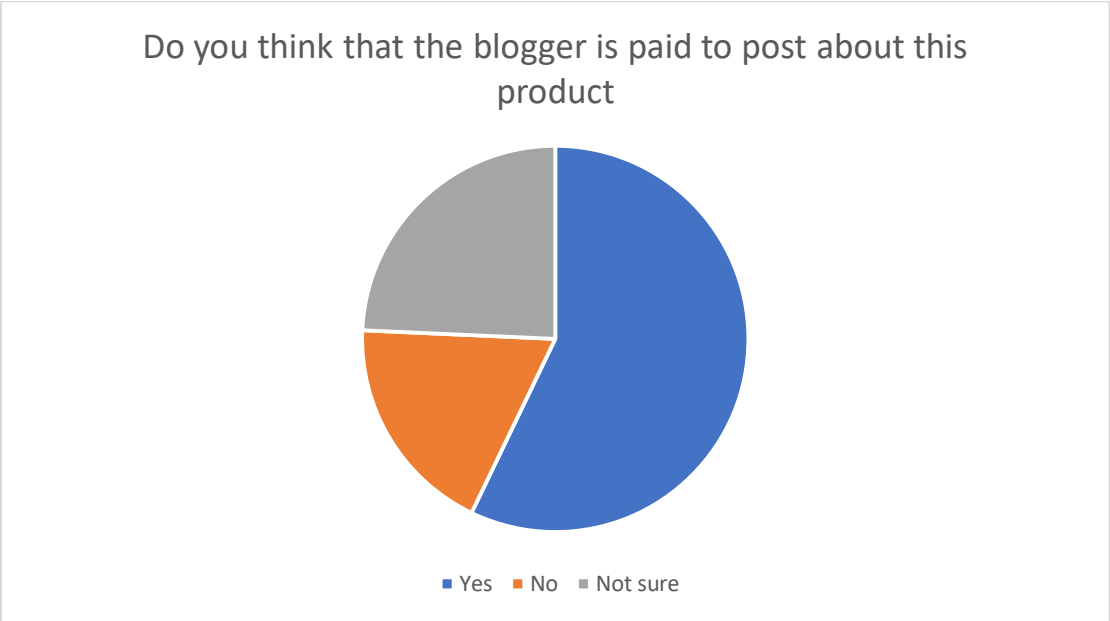
3.3.3 Third Pre-test

The adjustment of the third pre-test questionnaire was made based on the second pre-test questionnaire. Fleck et al.'s scale (2007 & 2012) is used to indicated match-up degree, which includes global questions on congruence between online influencer and endorsed product, and questions on the two dimensions of congruence: relevancy and expectance.

There was also one question added after the question of "Is there a sentence of *#Advertisement# This post is sponsored by COCONUT dishwashing liquid #Advertisement#* in this post": "Do you think that the blogger is paid to post about this product". In group 1 (the blogger has a high match with the endorsed product and is not being paid), in those participants who answer all the screen-out questions correctly, there were 40 answers of "yes", 13 answers of "no" and 17 answers of "not sure" (Figure 2). In group 2 (the blogger has low match with the endorsed product and is not being paid), in those participants who answer all the screen-out questions correctly, there were 47 answers of "yes", 12 answers of "no" and 20 answers of "not sure". Therefore, in the two group of blogger not being paid, there are 87 participants who answer all the screen-out questions correctly (especially those who noticed that whether there is a sign of "advertisement), believed that the blogger is paid to post about the product. But there are only 25 participants who answer all the screen-out question correctly, thought that the blogger is not paid to post about the product, as the content of post did not mention anything about sponsorship. This question is removed from the formal survey.

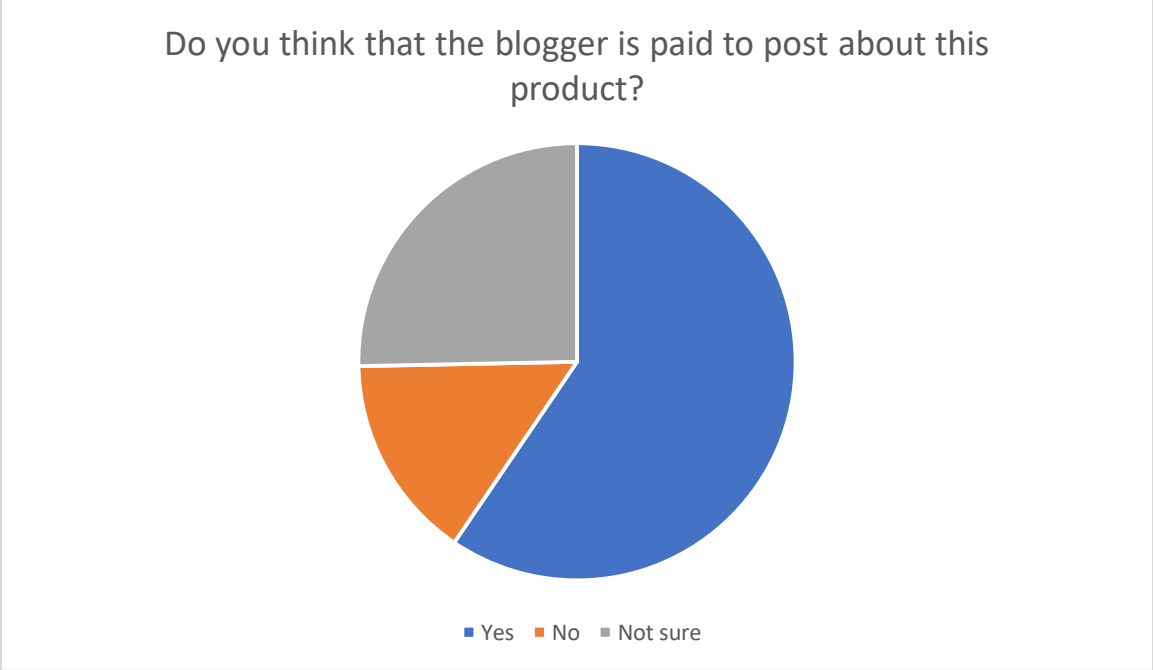
466 questionnaires are collected in the third pre-test and 128 of them are valid.

Figure 2 – Distribution of the samples by the answer to "Do you think that the blogger is paid to post about this product" in group 1 (matchup and not-paid)



Source: Developed by author (2019)

Figure 3 – Distribution of the samples by the answer to "Do you think that the blogger is paid to post about this product" in group 2 (non-matchup and not-paid)



Source: Developed by author (2019)

3.5 Data Analysis Procedure

Before analyzing the data, the filter function in the survey website, Wenjuanxing, will be used to screen out the invalid questionnaires automatically. The expected answers of control questions are set in the filter function before distributing questionnaires. Then all the valid questionnaires will be downloaded and analyzed in the statistical software, IBM SPSS Statistics 25.

The four stimuli are input in SPSS as four blocks: group of matchup/not-paid is coded as 1, group of non-matchup/not-paid is coded as 2, group of matchup/paid is coded as 3, group of non-matchup/paid is coded as 4.

Firstly, analysis of demographic characteristics is performed to understand the composition of participants: age, gender and education; their attitude toward online influencer; their purchase habit of dishwashing liquid.

Secondly, validation and reliability analysis of the scales is performed. The first validation test is Principal Component Analysis (PCA), which is a practical tool for dimensionality reduction and

is widely used in construct validity testing (Tipping, 2002). Before this analysis, to make sure the collected data is suitable for factor analysis, Kaiser-Meyer-Olkin value should be above 0.5. In Principal Component Analysis, factors with initial eigenvalue above 1 will be extracted. Then the items of scales are assigned to the factor in which the item has the greater factor loading. If the factors are corresponding to the measures of the scale, the construct valid of the scale is excellent. The items of the scale that have similar value in different factor in the Rotated Factor Matrix, should be excluded from the following analysis. In Reliability Analysis, the value of Cronbach α of each scale should be higher than 0.7. (Chen and Huang, 2014)

After excluding those items that did not pass Principal Component Analysis, those items for evaluating the same variable will be added up together to compute the mean of each variable: match-up degree, attractiveness, trustworthiness, expertise, brand attitude, perceived quality and purchase intention. The means of the variables will be used in the hypothesis testing.

When it comes to hypothesis testing, first thing to do is test of normality and homogeneity of variance. The data is tested among all groups and in each of the four groups. When the data is normally distributed and variance homogeneous, One-way ANOVA is used to test hypothesis 1 and 2, and Pearson's Correlation and Linear Regression Analysis are used to test hypothesis 3, 4, 5 and 6. When the data is not normally distributed or not variance homogeneous, it non-parametric and Kruskal-Wallis One-way ANOVA is used to test hypothesis 1 and 2, and Spearman's Correlation and Logistics Regression are used to test hypothesis 3, 4, 5 and 6. Kruskal-Wallis One-way ANOVA, also known as H test, can be used to analyze nonparametric data as H test is based on ranked data instead of the original observations. (Chan and Walmsley, 1997)

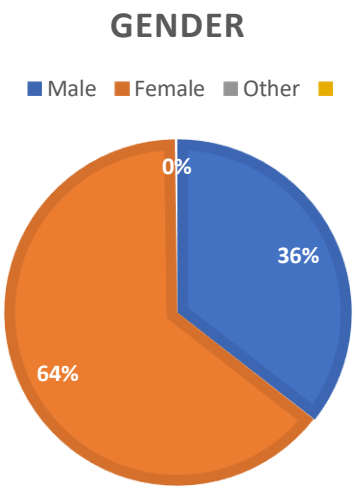
4. Results

4.1 Demographic and Descriptive Analysis

717 questionnaires are collected, in which 436 questionnaires are valid. Among the 436 participants who submitted valid questionnaires, 106 participants were distributed to group of matchup/not-paid, 116 participants were distributed to group of non-matchup/not-paid, 107 participants were distributed to group of matchup/paid, and 107 participants were distributed to group of non-matchup/paid.

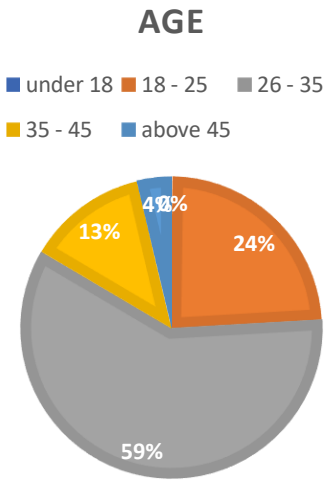
Among 436 valid questionnaires, 155 participants (35.6%) are male, 280 participants (64.2%) are female and 1 participant chose other (0.2%) (Figure 4). In term of age, most of the participants are between 26 and 35 (59.4%), 23.9% are between 18 and 25, 12.8% are between 35 and 45, 3.7% are above 45, and only 1 (0.2%) a under 18 (Figure 5). In term of education, 11 participants (2.5%) are high school graduate or less than high school, 47 participants (10.8%) are college graduated, 330 participants (75.7%) obtain bachelor's degree, 45 participants (10.3%) obtain master's degree, and 3 participants (0.7%) obtain doctorate's degree, which shows that most of the participants are bachelor (Figure 6).

Figure 4 – Distribution of the sample by gender (in percentage)



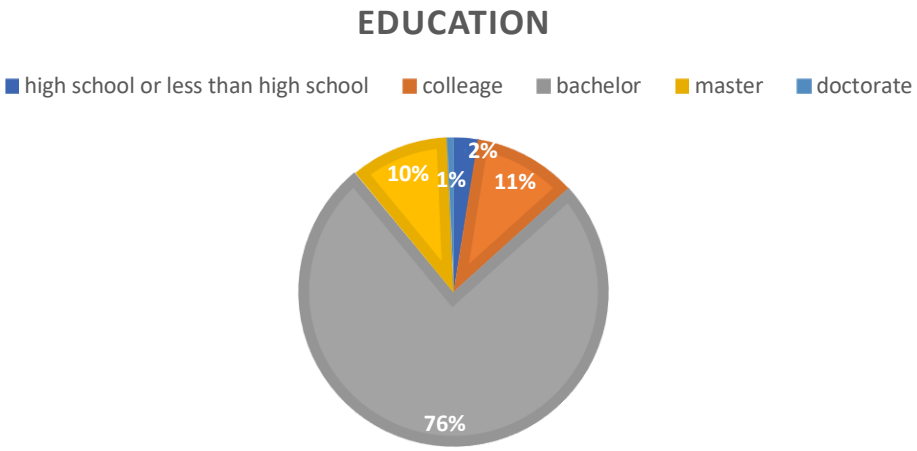
Source: Developed by author (2019)

Figure 5 – Distribution of the sample by age (in percentage)



Source: Developed by author (2019)

Figure 6 – Distribution of the sample by education (in percentage)

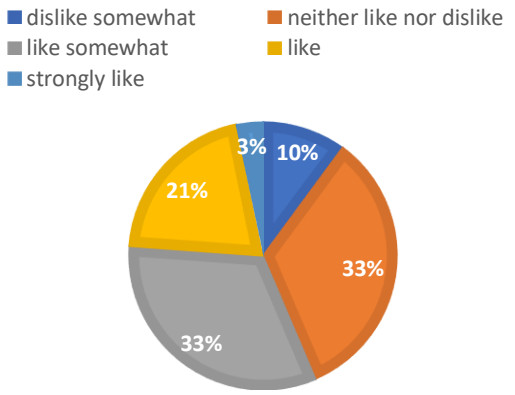


Source: Developed by author (2019)

In the first control question, "In general, how much do you like online influencer", participants who answered strongly dislike or dislike were screened out and valid questionnaires are as follow: 44 participants (10.1%) dislike online influencer somewhat, 146 (33.5%) participants neither like nor dislike online influencer, 142 (32.6%) participants like online influencer somewhat, 90 (20.6%) participants like online influencer, 14 (3.2%) participants strongly like online influencer. (Figure 7)

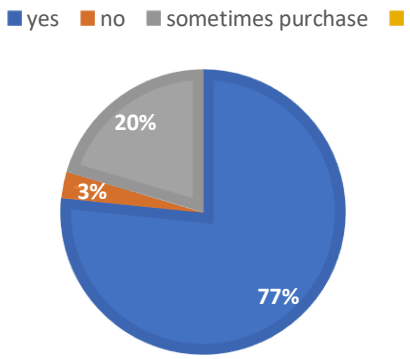
For the question, "Are you the person responsible for the purchase of dishwashing liquid in your house? (purchase for family, or for yourself if you live alone.)", 334 participants answered yes, 13 participants answered no, and 89 participants answered sometimes purchase. Most of the participants have purchased dishwashing liquid, which make them feel more related to the material about dishwashing liquid. (Figure 8)

Figure 7 – Distribution of the sample by attitude toward online influencer (in percentage)



Source: Developed by author (2019)

Figure 8 – Distribution of the sample by purchase habit of dishwashing liquid (in percentage)



Source: Developed by author (2019)

4.2 Validation of Scales

According to the result of Principle Component Analysis, the KMO value is 0.968. Components after Varimax Rotation are as below (Absolute value below 0.4 are not shown):

All the items in the five scales had been subjected to Principle Component Analysis and 5 components were extracted as their eigenvalues exceeding 1. The 5 components explained 66.12% of variance cumulatively.

The scale of source credibility was measured in three dimensions: attractiveness, trustworthiness and expertise (Ohanian, 1990; Ohanian, 1991). In principle component analysis, the items of the three dimensions fell in three different components, which complied with the original construct.

The items of brand attitude, perceived quality and purchase intention fell in the same components. But as these three constructs were tested separately in many previous researches (Bezjian-Avery et al, 1998; Kirmani, 1998; Fleck, 2012; Zwilling, 2013), in the following research these three constructs will be tested separately.

Table 3 – Rotated Component Matrix

	Component				
	1	2	3	4	5
PI2	0.761				
PI1	0.741				
PI3	0.702				
BA2	0.693				
PQ2	0.688				
BA1	0.680				
PQ3	0.669				
BA5	0.660				
BA4	0.660				
PQ1	0.651				
BA3	0.640				
MU8	*0.489*				
MU7	*0.481*				
SC-E5		0.822			
SC-E1		0.817			
SC-E4		0.799			
SC-E3		0.788			
SC-E2		0.756			
MU1		*0.591*		*0.430*	
MU3		*0.556*		*0.443*	
MU2		*0.547*		*0.498*	
SC-A3			0.797		
SC-A1			0.703		
SC-A4			0.689		
SC-A5			0.667		
SC-A2			0.653		
MU9	*0.421*		*0.448*		
MU5				0.749	
MU6				0.712	
MU4				0.709	
SC-T1			0.414		0.601
SC-T2					0.593
SC-T3					0.572
SC-T4					0.569
SC-T5	0.417				0.546

Source: Developed by author (2019)

As the 6 items of scale of match-up degree have absolute value in two or more components, these 6 items of match-up degree are deleted in further research:

Item 1: COCONUT dishwashing liquid and the blogger go well together; Item 2: COCONUT dishwashing liquid is well matched with the blogger; Item 3: In my opinion, the blogger is very appropriate to post about COCONUT dishwashing liquid; Item 7: That COCONUT dishwashing liquid is recommended by this blogger tells me something about it; Item 8: When I hear of the recommendation of this blogger, I can understand COCONUT dishwashing liquid better; Item 9: With the recommendation of this blogger, I discover a new aspect of COCONUT dishwashing liquid.

Reliability test of the scales are carried out and all the constructs have Cronbach's α higher than 0.80, which prove that the scale is highly reliable. In the Principal Component Analysis, the items of brand attitude, perceived quality and purchase intention fells in the same component, therefore these three constructs were tested by the reliability analysis together and the Cronbach's α is 0.940.

Table 4 – Cronbach's Alpha of the Scales

Scale	Cronbach's α
Match-up Degree	0.875
Source Credibility	0.932
Brand Attitude	0.886
Perceived Quality	0.840
Purchase Intention	0.860
Brand Attitude/Perceived Quality/Purchase Intention	0.940

Source: Developed by author (2019)

4.3 Hypothesis Testing

The data is collected from four groups of participants who read different materials. Participants in group 1 read material of online influencer having a high match with the endorsed product and not being paid by the brand. Participants in group 2 read material of online influencer having a

low match with the endorsed product and not being paid by the brand. Participants in group 3 read material of online influencer having a high match with the endorsed product and being paid by the brand. Participants in group 4 read material of online influencer having a low match with the endorsed product and being paid by the brand.

According to Levene's Test, the variance of match-up degree is homogeneous between group 1and group 3 (sig.= 0.753 > 0.05) and between group 2 and group 4 (sig.= 0.829 > 0.05), but not homogeneous between group 1 and group 2 (sig.= 0.000 < 0.05) and between group 3 and group 4 (sig.= 0.000 < 0.05), which suggests nonparametric test to run on them.

According to Kruskal-Wallis test, there is no significant difference of match-up degree between group 1 and group 3 and between group 2 and group 4, but there is significant difference of match-up degree between group 1 and group 2 and between group 3 and group 4.

Therefore, the manipulation of brand fit is successful. The online influencer whose expertise matches the endorsed product, is perceived having a higher match with the endorsed product than the online influencer whose expertise does not match the endorsed.

Table 5 – Adjusted significance of Kruskal-Wallis test on match-up degree among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1 / 3**	**2 / 4**	**1 / 2**	**2 /4**
Match-up Degree	1.000	1.000	0.000	0.000

Source: Developed by author (2019)

There are 436 samples in the study and every group of participants in the four groups are more than 100. As the sample is large enough, Levene's Test is used to decide the data should be tested by parametric analysis or nonparametric analysis.

H1: Posts that are endorsed by online influencer have stronger influence on (a)brand attitude and on (b)purchase intention toward the endorsed product, when the online influencer has a high match with the endorsed product than when the online influencer has a low match.

Hypothesis 1a is to test how the match between online influencer and the endorsed product moderates the influence of online influencer endorsement on brand attitude. Hence, the groups to

be compared are: group 1 (high match and not-paid) and group 2 (low match and not-paid); group 3 (high match and paid) and group 4 (low match and paid). According to Levene's Test, the variance of match-up degree and brand attitude is not homogeneous between group 1 and group 2, and between group 3 and group 4, which suggests nonparametric analysis should be run on hypothesis 1a.

Table 6 – Levene's test on match-up degree and brand attitude among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	1 / 2	3 / 4
Match-up Degree	0.000	0.000
Brand Attitude	0.000	0.001

Source: Developed by author (2019)

According to the result of Kruskal-Wallis Test, between group 1 and group 2, the mean of match-up degree is significantly different, but the mean of brand attitude is not significantly different. Between group 3 and group 4, the mean of match-up degree and brand attitude are all significantly different, which means only in the condition of being paid, the influencer's endorsement has stronger influence on brand attitude when the influencer´s expertise has a high match with the endorsed product than when it has a low match. Therefore, hypothesis 1a is partly supported.

Table 7 – Adjusted significance of Kruskal-Wallis test on match-up degree and brand attitude among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	1 / 2	3 / 4
Match-up Degree	0.000	0.000
Brand Attitude	0.104	0.008

Source: Developed by author (2019)

Table 8 – Mean of match-up degree and brand attitude (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	1	2	3	4
Match-up Degree	5.40	4.32	5.26	4.31
Brand Attitude	4.92	4.54	5.01	4.50

Source: Developed by author (2019)

Hypothesis 1b is to test if the match between online influencer and the endorsed product moderates the influence of online endorsement on purchase intention. Hence, the groups to be compared are: group 1 (high match and not-paid) and group 2 (low match and not-paid); group 3 (high match and paid) and group 4 (low match and paid). According to Levene's Test, the variance of match-up degree and purchase intention is not homogeneous between group 1 and group 2, and between group 3 and group 4, which suggests nonparametric analysis should be run on hypothesis 1b.

Table 9 – Levene's Test on match-up degree and purchase intention among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	1 / 2	3 / 4
Match-up Degree	0.000	0.000
Purchase Intention	0.000	0.001

Source: Developed by author (2019)

According to the result of Kruskal-Wallis Test, between group 1 and group 2, the means of match-up degree are significantly different, but the mean of purchase intention is not significantly different. Between group 3 and group 4, the mean of match-up degree and purchase intention are all significantly different, which means only in the condition of being paid, the influencer's endorsement has stronger influence on purchase intention when the influencer´s expertise has a high match with the endorsed product than when it has a low match. Therefore, hypothesis 1b is partly supported.

Table 10 – Adjusted Significance of Kruskal-Wallis test on match-up degree and purchase intention among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	1 / 2	3 / 4
Match-up Degree	0.000	0.000
Purchase Intention	0.063	0.046

Source: Developed by author (2019)

Table 11 – Mean of match-up degree and purchase intention (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	1	2	3	4
Match-up Degree	5.30	4.30	5.30	4.30
Purchase Intention	5.32	4.86	5.42	4.96

Source: Developed by author (2019)

H2: The credibility of the online influencer is significantly different when the post is perceived as being paid than when it is not perceived as being paid. The effect is significant on the three dimensions of credibility: (a)attractiveness, (b)trustworthiness and (c)expertise.

Hypothesis 2a is to test how the fact of being paid influences the perceived attractiveness of the influencer. Hence, the groups to be compared are: group 1 (high match and not-paid) and group 3 (high match and paid), group 2 (low match and not-paid) and group 4 (low match and paid). According to Levene's test, the variance of attractiveness is homogeneous between group 1 and group 3 (sig.= 0.219 < 0.05) but is not homogeneous between group 2 and group 4 (sig.= 0.010 < 0.05). Therefore, nonparametric analysis should be run on hypothesis 2a

Kruskal-Wallis test suggests that there is no significant difference of attractiveness between group 1 and group 3 and between group 2 and group 4, which means there is no significant difference of perceived attractiveness between the influencer not being paid to endorse the product and influencer being paid to endorse the product. Therefore, hypothesis 2a is not supported.

Table 12 – Adjusted significance of Kruskal-Wallis test on attractiveness among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1 / 3**	**2 / 4**
Attractiveness	0.052	1.000

Source: Developed by author (2019)

Table 13 – Mean of attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	1	**2**	**3**	**4**
Attractiveness	4.57	4.57	4.92	4.48

Source: Developed by author (2019)

Hypothesis 2b is to test how the fact of being paid influences the perceived trustworthiness of the influencer. Hence, the groups to be compared are: group 1 (high match and not-paid) and group 3 (high match and paid), group 2 (low match and not-paid) and group 4 (low match and paid). According to Levene's test, the variance of trustworthiness is homogeneous between group 1 and group 3 (sig.= 0.285 > 0.05) and between group 2 and group 4 (sig.= 0.172 < 0.05). Therefore, ANOVA test should be run to test hypothesis 2b.

ANOVA test suggests that there is no significant difference of trustworthiness between group 1 and group 3 and between group 2 and group 4, which means the fact of being paid does not influence the perceived trustworthiness of the influencer. Therefore, hypothesis 2b is not supported.

Table 14 – ANOVA test on trustworthiness among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1 / 3**	**2 / 4**
Trustworthiness	0.885	0.306

Source: Developed by author (2019)

Table 15 – Mean of trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1**	**2**	**3**	**4**
Trustworthiness	4.69	4.30	4.78	4.14

Source: Developed by author (2019)

Hypothesis 2c is to test how the fact of being paid influences the perceived expertise of the influencer. Hence, the groups to be compared are: group 1 (high match and not-paid) and group 3 (high match and paid), group 2 (low match and not-paid) and group 4 (low match and paid). According to Levene's test, the variance of expertise is homogeneous between group 1 and group 3 (sig.=0.813 < 0.05) and between group 2 and group 4 (sig.= 0.196 < 0.05). Therefore, ANOVA test should be run to test hypothesis 2c.

ANOVA test suggests that there is no significant difference of expertise between group 1 and group 3 and between group 2 and group 4, which mean the fact of being paid does not influence the perceived expertise of the influencer. Therefore, hypothesis 2c is not supported.

Table 16 – ANOVA test on expertise among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1 / 3**	**2 / 4**
Expertise	0.498	0.717

Source: Developed by author (2019)

Table 17 – Mean of expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1**	**2**	**3**	**4**
Expertise	5.19	3.4	5.24	3.5

Source: Developed by author (2019)

H3: The credibility of the online influencer is significantly different when the online influencer is perceived as having a high math with the product than when the online influencer is perceived as having low match. The effect is significant on the three dimensions of credibility: (a)attractiveness, (b)trustworthiness and (c)expertise.

Hypothesis 3a is to test how the match between online influencer and the endorsed product influences the perceived attractiveness of the influencer. Hence the groups to be compared are: group 1 (high match and not-paid) and group 2 (low match and not-paid); group 3 (high match and paid) and group 4 (low match and paid). According to Levene's test, the variance of attractiveness is homogeneous between group 1 and group 2 (sig.=0.061 > 0.05), while it is not homogeneous between group 3 and group 4 (sig.=0.005 < 0.05). Therefore, non-parametric test should be run to test hypothesis 3a.

According to the result of Kruskal-Wallis, there is no significant difference of attractiveness between group 1 and group 2, and between group 3 and group 4, which means there is no significant difference of the perceived attractiveness between the influencer perceived as having a high match with the endorsed product and the influencer perceived as having a low match with the endorsed product. Therefore, hypothesis 3a is not supported.

Table 18 – Adjusted significance of Kruskal-Wallis test on attractiveness among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1 / 2**	**3 / 4**
Attractiveness	1.000	0.086

Source: Developed by author (2019)

Table 19 – Mean of attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	1	**2**	**3**	**4**
Attractiveness	4.57	4.57	4.92	4.48

Source: Developed by author (2019)

Hypothesis 3b is to test how the match between influencer and the endorsed product influences the perceived trustworthiness of the influencer. Hence the groups to be compared are: group 1 (high match and not-paid) and group 2 (low match and not-paid); group 3 (high match and paid) and group 4 (low match and paid). According to Levene's test, the variance of trustworthiness is not homogeneous between group 1 and group 2 (sig.= 0.035 < 0.05), and between group 3 and group 4 (sig.=0.000 < 0.05). Therefore, Kruskal-Wallis test should be run to test hypothesis 3b.

According to Kruskal-Wallis test, there is significant difference of trustworthiness between group 1 and group 2 and between group 3 and group 4, which means trustworthiness is perceived higher when the influencer is perceived as having a high match with the endorsed product than when the influencer is perceived as having a low match with the endorsed product. Therefore, hypothesis 3b is supported.

Table 20 – Adjusted significance of Kruskal-Wallis test on trustworthiness among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1 / 2**	**3 / 4**
Trustworthiness	0.021	0.004

Source: Developed by author (2019)

Table 21 – Mean of trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	**1**	**2**	**3**	**4**
Trustworthiness	4.69	4.30	4.78	4.14

Source: Developed by author (2019)

Hypothesis 3c is to test how the match between influencer and the endorsed product influences the perceived expertise of the influencer. Hence the groups to be compared are: group 1 (high match and not-paid) and group 2 (low match and not-paid); group 3 (high match and paid) and group 4 (low match and paid). According to Levene's test, the variance of expertise is not homogeneous between group 1 and group 2 (sig.= 0.000 < 0.05), and between group 3 and group 4 (sig.=0.000 < 0.05). Therefore, Kruskal-Wallis test should be run to test hypothesis 3c.

According to Kruskal-Wallis test, there is significant difference of expertise between group 1 and group 2 and between group 3 and group 4, which means expertise is perceived higher when the influencer is perceived as having a high match with the endorsed product than when the influencer is perceived as having a low match with the endorsed product. Therefore, hypothesis 3c is supported.

Table 22 – Adjusted significance of Kruskal-Wallis test on expertise among groups (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

Group	1 / 2	3 / 4
Expertise	0.000	0.000

Source: Developed by author (2019)

Table 23– Mean of expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	1	2	3	4
Expertise	5.19	3.4	5.24	3.5

Source: Developed by author (2019)

H4: The three dimensions of credibility, (a)attractiveness, (b)trustworthiness and (c)expertise of the online influencer who endorses the brand, respectively have positive influence on attitude toward the endorsed brand.

Hypothesis 4a is to test if the perceived attractiveness of the online influencer has positive influence on attitude toward the endorsed brand. According to Levene's test, the variance between brand attitude and attractiveness is homogeneous in all groups (sig.=0.783> 0.05), in group 1 (sig.=0.908> 0.05), in group 2 (sig.=0.163> 0.05), in group 3 (sig.=0.628> 0.05) and in group 4 (sig.=0.174> 0.05). Thus, the relation between brand attitude and attractiveness in all groups and in each group will be tested by Pearson's Correlation and Linear Regression Model.

According to Pearson's Correlation, attitude toward the endorsed brand is positively correlated to the perceived attractiveness of the influencer in all groups and in each group. Besides, there is linear relation between attitude toward the endorsed brand and the perceived attractiveness of the influencer in all groups, in group 2 and group 4. Therefore, perceived attractiveness of the influencer has positive influence on attitude toward the endorsed brand. Hypothesis 4a is supported.

Table 24 – Pearson's Correlation between brand attitude and attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Attractiveness				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.603	0.613	0.658	0.285	0.686
Sig. (2-tailed)	0.000	0.000	0.000	0.003	0.000

Source: Developed by author (2019)

Table 25 – Linear Regression Model between brand attitude and attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Attractiveness				
Group	**All**	**1**	**2**	**3**	**4**
Adjusted R Square	0.061	-0.009	0.113	-0.004	0.096
Coefficient	0.226	0.035	0.291	0.072	0.353
F	29.022	0.094	15.657	0.613	12.195
Sig.	0.000	0.759	0.000	0.435	0.001

Source: Developed by author (2019)

Hypothesis 4b is to test if the perceived trustworthiness of the online influencer has influence attitude toward the endorsed brand. According to Levene's test, the variance between brand attitude and trustworthiness is homogeneous in all groups (sig.=0.579 > 0.05), in group 1 (sig.=0.558 > 0.05), in group 2 (sig.=0.665 > 0.05), in group 3 (sig.=0.729> 0.05) and in group 4 (sig.=0.288> 0.05). Thus, the relation between brand attitude and trustworthiness in all groups and in each group will be tested by Pearson's Correlation and Linear Regression Model.

According to Pearson's Correlation, attitude toward the endorsed brand is positively correlated to perceived trustworthiness of the influencer in all groups and in each group. Besides, there is linear relation between attitude toward the endorsed brand and trustworthiness of the influencer in all groups, in group 2, in group 3 and group 4. Therefore, the perceived trustworthiness of the

online influencer has positive influence on attitude toward the endorsed brand. Hypothesis 4b is supported.

Table 26 – Pearson's Correlation between brand attitude and trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Trustworthiness				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.721	0.694	0.744	0.584	0.738
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Table 27 – Linear Regression Model between brand attitude and trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Trustworthiness				
Group	**All**	**1**	**2**	**3**	**4**
Adjusted R Square	0.134	-0.008	0.187	0.048	0.146
Coefficient	0.345	-0.038	0.415	0.239	0.406
F	68.490	0.121	27.530	6.356	19.106
Sig.	0.000	0.729	0.000	0.013	0.000

Source: Developed by author (2019)

Hypothesis 4c is to test if the perceived expertise of the online influencer has positive influence on attitude toward the endorsed brand. According to Levene's test, the variance between brand attitude and expertise is homogeneous in group 1 (sig.=0.612 > 0.05), in group 3 (sig.=0.247 > 0.05), but is not homogeneous in all group (sig.=0.000 < 0.05), in group 2 (sig.=0.035 < 0.05) and in group 4 (sig.=0.000 < 0.05). Therefore, non-parametric analysis, Spearman's Correlation and Logistic Regression Analysis, should be used to test hypothesis 4c.

According to the result of Spearman's Correlation, attitude toward the endorsed brand is positively correlated to the perceived expertise of the influencer.

Table 28 – Spearman's Correlation between brand attitude and expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Expertise				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.580	0.472	0.578	0.570	0.611
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

For logistic regression analysis, the dependent variable must be categorical. Therefore, a categorical variable of brand attitude is created, in which there are two values, 1 and 0. When the participants score their attitude toward the brand from 5 (agree) to 7 (strongly disagree), they are perceived as having positive attitude toward the brand, and their value in categorical variable of brand attitude is 1. When the participants score their attitude toward the brand from 1 (strongly disagree) to 5 (5 is not included), they are perceived as having non-positive attitude toward the brand, and their value in categorical variable of brand attitude is 0.

According to the result of logistic regression analysis, except when the online influencer has a high match with the product and is not paid to endorse, the perceived expertise of online influencer has positive influence on attitude toward the brand: the higher the consumers perceive the expertise of online influencer, the more likely the consumers have positive attitude toward the brand. Therefore, hypothesis 4c is partly supported.

Table 29 – Logistic Regression Analysis between brand attitude and expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Expertise				
Group	**All**	**1**	**2**	**3**	**4**
Coefficient	0.403	0.276	0.459	1.214	0.458
Sig.	0.000	0.419	0.049	0.002	0.041
Exp(B)	1.496	1.318	1.582	3.367	1.580

Source: Developed by author (2019)

H5: The three dimensions of credibility, (a)attractiveness, (b)trustworthiness and (c)expertise of the online influencer who endorses the brand, respectively have positive influence on perceived quality of the endorsed product.

Hypothesis 5a is to test if the perceived attractiveness of the influencer has positive influence on perceived quality of the endorsed product. According to Levene's test, the variance between perceived quality and attractiveness is homogeneous in all groups (sig.= 0.860> 0.05), in group 1 (sig.= 0.511> 0.05), in group 2 (sig.= 0.984> 0.05), in group 3 (sig.= 0.483> 0.05) and in group 4 (sig.= 0.159> 0.05). Thus, the relation between perceived quality and attractiveness in all groups and in each group will be tested by Pearson's Correlation and Linear Regression Model.

According to Pearson's Correlation, perceived quality of the endorsed product is positively correlated to the perceived attractiveness of the influencer in all groups and in each group. Besides, there is linear relation between perceived quality and the perceived attractiveness of the influencer in all groups and in each group. Therefore, the perceived attractiveness of the influencer has positive influence on perceived quality of the endorsed product. Hypothesis 5a is supported.

Table 30 – Pearson's Correlation between perceived quality and attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Attractiveness				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.608	0.560	0.627	0.370	0.720
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Table 31 – Linear Regression Model between perceived quality and attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Attractiveness				
Group	**All**	**1**	**2**	**3**	**4**
Adjusted R Square	0.368	0.307	0.387	0.129	0.513
Coefficient	0.598	0.548	0.660	0.388	0.644
F	254.705	47.460	73.684	16.705	112.861
Sig.	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Hypothesis 5b is to test if the perceived trustworthiness of the influencer has positive influence on perceived quality of the endorsed product. According to Levene's test, the variance between perceived quality and trustworthiness is homogeneous in all groups (sig.= 0.320> 0.05), in group 1 (sig.= 0.771> 0.05), in group 2 (sig.= 0.389> 0.05), in group 3 (sig.= 0.883> 0.05) and in group 4 (sig.= 0.263> 0.05). Thus, the relation between perceived quality and trustworthiness in all groups and in each group will be tested by Pearson's Correlation and Linear Regression Model.

According to Pearson's Correlation, perceived quality of the endorsed product is positively correlated to the perceived trustworthiness of the influencer in all groups and in each group. Besides, there is linear relation perceived quality of the endorsed product and the perceived trustworthiness of the influencer in all groups and in each group. Therefore, the perceived trustworthiness of the influencer has positive influence on perceived quality of the endorsed product. Hypothesis 5b is supported.

Table 32 – Pearson's Correlation between perceived quality and trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Trustworthiness				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.739	0.750	0.753	0.657	0.729
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Table 33 – Linear Regression Model between perceived quality and trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Trustworthiness				
Group	**All**	**1**	**2**	**3**	**4**
Adjusted R Square	0.546	0.558	0.563	0.426	0.527
Coefficient	0.704	0.753	0.705	0.659	0.689
F	523.750	133.338	149.164	79.731	118.867
Sig.	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Hypothesis 5c is to test if the perceived expertise of the influencer has positive influence on perceived quality of the endorsed product. According to Levene's test, the variance between perceived quality and expertise is homogeneous in group 1 (sig.= 0.811 > 0.05), in group 3 (sig.= 0.321 > 0.05), but is not homogeneous in all group (sig.=0.000 < 0.05), in group 2 (sig.=0.001 < 0.05) and in group 4 (sig.=0.000 < 0.05). Therefore, non-parametric analysis, Spearman's Correlation and Logistic Regression Analysis, should be used to test hypothesis 5c.

According to the result of Spearman's Correlation, perceived quality of the endorsed product is positively correlated to perceived expertise of the influencer.

Table 34 – Spearman's Correlation between perceived quality and expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Expertise				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.556	0.647	0.502	0.552	0.563
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

For logistic regression analysis, the dependent variable must be categorical. Therefore, a categorical variable of perceived quality is created, in which there are two values, 1 and 0. When the participants score perceived quality of the endorsed product from 5 (agree) to 7 (strongly agree) , they are perceived as having positive quality perception of the product, and their value in categorical variable of perceived quality is 1. When the participants score perceived quality of the endorsed product from 1(strongly disagree) to 5 (5 is not included), they are perceived as having non-positive quality perception of the endorsed product, and their value in categorical variable of perceived quality is 0.

According to the result of Logistic Regression Analysis, when the online influencer has a high match with the product, the perceived expertise of the online influencer has positive influence on perceived quality of the endorse product: the higher the consumers perceive the expertise of the online influencer, the more likely the consumers have positive quality perception of the endorsed product. Therefore, hypothesis 5c is partly supported.

Table 35 – Logistic Regression Analysis between perceived quality and expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

		Expertise			
Group	**All**	**1**	**2**	**3**	**4**
Coefficient	0.286	1.304	0.150	1.197	0.180
Sig.	0.006	0.002	0.547	0.003	0.410
Exp(B)	1.330	3.684	1.162	3.310	1.198

Source: Developed by author (2019)

H6: The three dimensions of credibility, (a)attractiveness, (b)trustworthiness and (c)expertise of the online influencer who endorses the brand, respectively have positive influence on purchase intention towards the endorsed product.

Hypothesis 6a is to test if the perceived attractiveness of the online influencer has positive influence on purchase intention towards the endorsed product. According to Levene's test, the variance between purchase intention and attractiveness is homogeneous in all groups (sig.=0.910> 0.05), in group 1 (sig.=0.989 > 0.05), in group 2 (sig.=0.151> 0.05), in group 3 (sig.=0.777> 0.05) and in group 4 (sig.=0.124> 0.05). Thus, the relation between purchase intention and attractiveness in all groups and in each group will be tested by Pearson's Correlation and Linear Regression Model.

According to Pearson's Correlation, purchase intention towards the endorsed product is positively correlated to perceived attractiveness of the influencer in all groups and in each group. Besides, there is linear relation between purchase intention and perceived attractiveness of the influencer in all groups and in each group. Therefore, perceived attractiveness of the influencer has positive influence on purchase intention towards the endorsed product. Hypothesis 6a is supported.

Table 36 – Pearson's Correlation between purchase intention and attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Attractiveness				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.575	0.586	0.553	0.355	0.683
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Table 37 – Linear Regression Model between purchase intention and attractiveness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Attractiveness				
Group	**All**	**1**	**2**	**3**	**4**
Adjusted R Square	0.368	0.307	0.387	0.129	0.513
Coefficient	0.598	0.548	0.660	0.388	0.644
F	254.705	47.460	73.684	16.705	112.861
Sig.	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Hypothesis 6b is to test if the perceived trustworthiness of the online influencer has positive influence purchase intention towards the endorsed product. According to Levene's test, the variance between purchase intention and trustworthiness is homogeneous in all groups (sig.= 0.320> 0.05), in group 1 (sig.= 0.771> 0.05), in group 2 (sig.= 0.389> 0.05), in group 3 (sig.= 0.883> 0.05) and in group 4 (sig.= 0.263> 0.05). Thus, the relation between purchase intention and trustworthiness in all groups and in each group will be tested by Pearson's Correlation and Linear Regression Model.

According to Pearson's Correlation, purchase intention towards the endorsed product is positively correlated to perceived trustworthiness of the influencer in all groups and in each group. Besides, there is linear relation purchase intention towards the endorsed product and perceived trustworthiness of the influencer in all groups and in each group. Therefore, the

perceived trustworthiness of the influencer has positive influence on purchase intention of the endorsed product. Hypothesis 6b is supported.

Table 38 – Pearson's Correlation between purchase intention and trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Trustworthiness				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.615	0.638	0.648	0.551	0.553
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Table 39 – Linear Regression Model between purchase intention and trustworthiness (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Trustworthiness				
Group	**All**	**1**	**2**	**3**	**4**
Adjusted R Square	0.546	0.558	0.563	0.426	0.527
Coefficient	0.704	0.753	0.705	0.659	0.689
F	523.750	133.338	149.164	79.731	118.867
Sig.	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

Hypothesis 6c is to test if the perceived expertise of the influencer has positive influence on purchase intention towards the endorsed product. According to Levene's test, the variance between purchase intention and expertise is homogeneous in group 1 (sig.= 0.725 > 0.05), in group 2 (sig.= 0.064 > 0.05) and in group 3 (sig.=0.075 > 0.05), but is not homogeneous in all group (sig.=0.000 < 0.05) and in group 4 (sig.=0.000 < 0.05). Therefore, non-parametric analysis, Spearman's Correlation and Logistic Regression Analysis, should be used to test hypothesis 6c.

According to the result of Spearman's Correlation, purchase intention towards the endorsed product is positively correlated to the perceived expertise of the influencer.

Table 40 – Spearman's Correlation between purchase intention and expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Expertise				
Group	**All**	**1**	**2**	**3**	**4**
Correlation Coefficient	0.497	0.506	0.427	0.485	0.475
Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000

Source: Developed by author (2019)

For logistic regression analysis, the dependent variable must be categorical. Therefore, a categorical variable of purchase intention is created, in which there are two values, 1 and 0. When the participants score their purchase intention towards the endorsed product from 5 (agree) to 7 (strongly agree), they are perceived as having positive purchase intention towards the product, and their value in categorical variable of purchase intention is 1. When the participants score their purchase intention of the endorsed product from 1 (strongly disagree) to 5 (5 is not included), they are perceived as having non-positive purchase intention towards the endorsed product, and their value in categorical variable of brand attitude is 0.

According to the result of Logistic Regression Analysis, only when the online influencer has a high match with the product and is not paid to endorse, the perceived expertise of the online influencer has positive influence on purchase intention towards the endorsed product. When the consumers perceive the expertise of then online influencer 1 score higher, the chance of consumers have positive purchase intention to the product endorsed by the online influencer is multiplied by 2.275. Therefore, hypothesis 6c is partly supported.

Table 41 – Logistic Regression Analysis between purchase intention and expertise (Group 1: matchup/not-paid; Group 2: non-matchup/not-paid; Group 3: matchup/paid; Group 4: non-matchup/paid)

	Expertise				
Group	**All**	**1**	**2**	**3**	**4**
Coefficient	0.253	0.822	0.281	0.568	0.144
Sig.	0.012	0.015	0.212	0.122	0.517
Exp(B)	1.287	2.275	1.324	1.764	1.155

Source: Developed by author (2019)

Therefore, according to analysis has been performed, the result of hypothesis testing is as follow:

Table 42 – Result of testing on hypothesis 1 and 2

	Hypothesis	Result
1a	Posts that are endorsed by online influencer have stronger influence on (a)brand attitude towards the product endorsed, when the online influencer has a higher match with the endorsed product than when the online influencer has a low match.	Partly supported
1b	Posts that are endorsed by online influencer have stronger influence on (b)purchase intention towards the product endorsed, when the online influencer has a higher match with the endorsed product than when the online influencer has a low match.	Partly supported
2a	The (a)attractiveness of the online influencer is significantly different when the post is perceived as being paid than when it is not perceived as being paid.	Partly supported
2b	The (b)trustworthiness of the online influencer is significantly different when the post is perceived as being paid than when it is not perceived as being paid.	Not supported
2c	The (c)expertise of the online influencer is significantly different when the post is perceived as being paid than when it is not perceived as being paid.	Not supported

Source: Developed by author (2019)

Table 43 – Result of testing on hypothesis 3 and 4

	Hypothesis	Result
3a	The (a)attractiveness of the online influencer is significantly different when the online influencer is perceived as having a high math with the product than when the online influencer is perceived as having a low match.	Not supported
3b	The (b)trustworthiness of the online influencer is significantly different when the online influencer is perceived as having a high math with the product than when online influencer is perceived as having a low match.	Supported
3c	The(c)expertise of the online influencer is significantly different when the online influencer is perceived as having a high math with the product than when online influencer is perceived as having a low match.	Supported
4a	The perceived (a)attractiveness of the online influencer who endorses the brand, has positive influence on attitude toward the endorsed brand.	Supported
4b	The perceived (b)trustworthiness of the online influencer who endorses the brand, has positive influence on attitude toward the endorsed brand.	Supported
4c	The perceived (c)expertise of the online influencer who endorses the brand, has positive influence on attitude toward the endorsed brand.	Partly Supported

Source: Developed by author (2019)

Table 44 – Result of testing on hypothesis 5 and 6

	Hypothesis	Result
5a	The perceived (a)attractiveness of the online influencer who endorses the brand, has positive influence on perceived quality of the endorsed product.	Supported
5b	The perceived (b)trustworthiness of the online influencer who endorses the brand, has positive influence on perceived quality of the endorsed product.	Supported
5c	The perceived (c)expertise of the online influencer who endorses the brand, has positive influence on perceived quality of the endorsed product.	Partly Supported
6a	The perceived (a)attractiveness of the online influencer who endorses the brand, has positive influence on purchase intention towards the endorsed product.	Supported
6b	The perceived (b)trustworthiness of the online influencer who endorses the brand, has positive influence on purchase intention towards the endorsed product.	Supported
6c	The perceived (c)expertise of the online influencer who endorses the brand, has positive influence on purchase intention towards the endorsed product.	Partly Supported

Source: Developed by author (2019)

5.Conclusions

5.1 Discussions

The dissertation is focusing on these research questions: What is the effect of online influencers' endorsement on consumers' purchase intention and brand attitude? How does consumers' knowledge regarding influencers being paid to post the content affect influencers' credibility and, therefore, the effects on purchase intentions and brand attitude? How does the online influencers' match-up with the brand affect influencers' credibility and, therefore, its effect on purchase intention and brand attitude?

To research how the match between online influencer and the endorsed product and the fact of online influencer being paid by the brand to post brand-related content influence the effect of online influencer endorsement, we propose a model of online influencer endorsement, source credibility, brand attitude, perceived quality and purchase intention: how brand fit and the fact of being paid influence the three dimensions of the credibility (attractiveness, trustworthiness and expertise) of online influencer endorser, consumers' attitude toward the brand and purchase intention; how the three dimensions of the credibility (attractiveness, trustworthiness and expertise) of online influencer endorser respectively influence attitude toward the brand, perceived quality and purchase intention.

Overall, in this study, most of our finding confirms the hypotheses that we proposed before, which is consistent with the previous researches that we referred to. The result that is most contrary to our hypothesis, is how the fact of being paid influences attractiveness, trustworthiness and expertise of the online influencer. We find that consumers do not perceive differently on attractiveness, trustworthiness and expertise of the online influencer, whether the online influencer is paid to endorse the product or not. This finding contrasts the study of Wood and Burkhalter (2014), which suggests that sign of being paid in the post of online influencer negatively affects consumers' attitude toward the brand. But this can be explained by another research on traditional advertisement (Cronley et al, 1999). Cronley et al (1999) find that consumers have the common sense that celebrities appearing in advertisement are usually paid by the endorsed brand, but the fact of being paid does not impair the effect of endorsement and consumers still believe that the celebrity endorser genuinely likes the product and the brand.

Another research on online influencer also suggests that the consumers believe that influencer truly likes the product even when the influencer is paid by the endorsed brand, as there are many distractions on the internet affecting their judgement (Kapitan and Silvera, 2016).

In the third pre-test of this study, participants attributed to the four groups were all asked, "Do you think that the blogger is paid to post about this product". In the two groups where there is no sigh of online influencer being paid (group 1: matchup/non-paid; group 2: non-matchup/not-paid), there are 149 participants correctly answered all the questions about the category of the online influencer and the content of the post in the material, which means they have notice most of the information of the questionnaire's material. But in these 149 participants, there are still 58% of them believe that the influencer is paid to post about the product. This result of pre-test is complying with the study of Cronley et al (1999), which can also explain the result of this study.

But we also find that in the condition of online influence being paid, the consumers have better attitude toward the brand and purchase intention when online influencer has a higher match with the endorsed product, as many studies of match-up hypothesis on traditional advertisement have suggested (Till and Busler, 1990; Till and Busler, 2000; Fleck et al, 2012;Zwilling, 2013). But when the online influencers are not paid to post about the product, the match-up degree between the online influencer and the endorsed product does not influence consumers' attitude toward brand and purchase intention. This finding shows that the fact of being paid affects the consumers' judgement on the endorsement, which suggests how the fact of online influencer endorser being paid influences online influencer endorsement needs further research at great length.

When it comes to the relationship between match-up degree and source credibility, we find that the influencer having a higher match with the endorsed product is perceived as more trustworthy and more expert but is not perceived as more attractive.

This study finds out that the perceived attractiveness, trustworthiness and expertise of the online influencer endorser respectively have positive influence on consumers' attitude toward the brand, perceived quality and purchase intention toward the endorsed.

5.2 Theoretical and Practical Implications

As most of studies of match-up hypothesis is focusing on traditional advertisement(Kahle and Homer, 1985; Kamins, 1990; Till and Busler, 1998; Till and Busler, 2000; Silvera and Austad, 2004; Lee and Thorson, 2008), this study offers a perspective of present-day marketing, online influencer advertisement. This study finds the match between online influencer and endorsed product can positively influence attitude toward the brand and purchase intention, which is corresponding to the previous studies (Till and Busler, 1990; Till and Busler, 2000; Fleck et al, 2012; Zwilling, 2013).

Most of the studies of the relationship between source credibility and celebrity endorsement are unidimensional. Kamins and Gupta (1994) suggest that the match between celebrity endorser and the endorsed product has positive influence on credibility of the celebrity endorser in general. Atkin and Block (1983) have divided credibility into three dimensions (attractive, trustworthy and competent) in the questionnaires to investigate how participants perceive the credibility of the celebrity endorser but did not test how each dimension influences the effect of celebrity endorsement. Ohanian (1991) studies at how the three dimensions of credibility (attractiveness, trustworthiness and expertise) are related with purchase intention, but only finds that expertise of celebrity endorser is significantly related to consumers' purchase intention. In this study, it is tested how attractiveness, trustworthiness and expertise respectively influence attitude toward brand, perceived quality and purchase intention, and proves that these three dimensions of source credibility all have positive influence on attitude toward brand, perceived quality and purchase intention. This finding is also filing the gap between source credibility and perceived quality, which contributes to the study of celebrity endorsement and perceived quality (Friedman and Friedman, 1979; Snoj et al, 2004).

Furthermore, this study confirms the finding of studies of Attribution Theory. Attribution Theory suggests that there is an attributing process of consumers when they are exposed to an advertisement of celebrity endorsement, in which they would attribute the motive of the endorser to promoting the own characteristics of the product, or to the eagerness of selling it. When they attribute the motive to promoting the own characteristics of the product, they believe the endorser truly likes the product and find the endorsement more credible (Smith and Hunt, 1978). Our study finds that the consumers perceive the credibility (attractiveness, trustworthiness and

expertise) of online influencer endorser the same, whether the online influencer is paid to endorse the product or not. This finding is consistent with the study of Kapitan and Silvera (2016): as consumers are distracted by the various information on the internet, they pay less attention to whether the online influencer endorser is paid to endorse or not and believe that the online influencer truly like product even there is a sign of paid endorsement.

To test participants' perceived match-up degree between online influencer and the endorsed product, this study adopts and combines two scales of congruence (Fleck and Quester, 2007; Fleck et al, 2012). The original scale of expectancy and relevancy (Fleck and Quester, 2007), is mainly used to test the congruence between the brand and the event it sponsors, but not between celebrity endorser and the endorsed product. When it comes to the validation of the scale, the three items of relevancy (Fleck and Quester, 2007) and the three items of match between celebrity endorser and the endorsed brand (Fleck et al, 2012), are removed from the further analysis, as they can be attributed to different components according to Principle Component Analysis. This finding suggests there is a need of a more developed scale of match-up degree.

As the use of social media is expanding, online influencer plays a crucial role in online advertisement. This study suggests that the brands should cooperate with those online influencers whose expertise have a better match with the product they want to promote, which can result in better attitude toward the brand, better perceived quality of the product and better purchase intention towards the product.

The survey of this study was carried out in China, in which the market is different from European market. The product in the questionnaire of this study is a dishwashing liquid, made of natural and eco-friendly ingredients. In the participants, 77% of them are the person responsible for purchasing dish washing liquid in their house, and 20% of them purchase sometimes. Dishwashing liquid is a very popular FMCG in China, as the penetration rate of dishwasher is very low in China comparing to in Europe. In China the penetration rate of dishwasher is only 1%, but in Europe it is over 60%, according to the 2018 China Dishwasher Industry report (Askci, 2018). Therefore, this study brings a perspective of Chinese marketing to let multinational brands understand Chinse consumers' purchase pattern of FMCG better, which is different from European consumers' purchase pattern.

5.3 Limitations and Suggestions for Future Research

Despite that we elaborated on the literature review, methodology design and data analysis of this study, there are limitations in this study.

First, the data is collected through questionnaire and most of the data are nonparametric, which could lead to error in data analysis and fail to present the accurate result. In future researches, these attempts could be made: recruit more participants to enlarge the size of sample; find other scales that are more suitable for online influencer, or develop and validate scale accordingly; design the stimuli of questionnaire material to be more relevant to online influencer endorsement in real life, which could trigger more authentic response of participants.

Second, there is a slight paradox in the result of how the fact of being paid influence the effect of online influencer endorsement, as in this study it is not considered of the interaction of match between online influencer and the endorsed product and the fact of being paid. The future researches should put more effort on studying how the fact of online influencer being paid influences the effect of online influencer endorsement.

Third, this study only focuses on the low-involvement/informational product, in which we choose dishwashing liquid, a common FMCG in Chinese market, to be shown in the questionnaire. The endorsement of online influencer might not be restrained by Rossiter-Percy Grid, as it is different from traditional celebrity endorsement. Therefore, in future researches, other kinds of product can be investigated to better understand the effect of online influencer endorsement.

Lastly, this study only investigates one platform, Weibo. Weibo is a matured platform for online influencers, in which the average daily active users reached 203 million (Weibo, 2019). But there are more platforms emerging, for example, TikTok, in which the average daily active users reached 2.5 million in 2018 (All Weather TMT, 2018). In Weibo, online influencers usually post with text and photos, but TikTok is a social media video app in which online influencers communicate with their audiences with video. In future researches, the different forms of online influencer endorsement should be studied.

In general, this study is trying to fill the gap of the studies of match-up hypothesis and online influencer endorsement, it takes more future researches to go deep into this topic and to

understand how the match between online influencer and the endorse product influences the effect of online influencer endorsement.

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7. Appendix

Appendix 1 – Questionnaire in English

Dear Sir/Madam:

Hello! I am a student of the master program of ISCTE-IUL in Portugal. With this poll, I would like to collect data for my study on social media. This questionnaire is anonymous and there is no right or wrong answer, please answer according to your own opinion. This survey may take you 5 minutes. Thank you for your help!

My e-mail: codielu1010@gmail.com

1. In general, how much do you like online influencer?
    - Strongly dislike
    - dislike
    - dislike somewhat
    - Neither dislike nor like
    - like Somewhat
    - like
    - strongly like

2. Do you use Weibo or other SNS?
    - Yes
    - No
    - Not sure

3. Please read the introduction of the blogger and content of the post carefully

Block 1

【the introduction of the blogger】Ms. Tang is a household hack expert. She shares household hacks in Weibo, about techniques and products for household cleaning, maintenance of furniture etc. She has a phD degree in applied chemistry, which explains where her expertise comes from.

【content of the post】

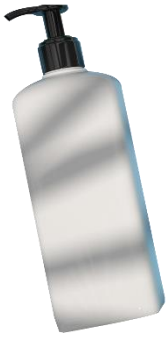
I have already used my first full bottle of COCONUT dishwashing liquid! I really recommend this product! Differently from regular ones, COCONUT has its main components extracted from coconut oil, which is eco-friendly, biodegradable and safe. And the best part is that it WORKS and REMOVES greasy from my dishes. PERFECT!

Block 2

【Introduction of the blogger】 Ms. Tang is a make-up blogger. She often uploads make-up tutorials and tips related to beauty and cosmetics.

【content of the post】

I have already used my first full bottle of COCONUT dishwashing liquid! I really recommend this product! Differently from regular ones, COCONUT has its main components extracted from coconut oil, which is eco-friendly, biodegradable and safe. And the best part is that it WORKS and REMOVES greasy from my dishes. PERFECT!

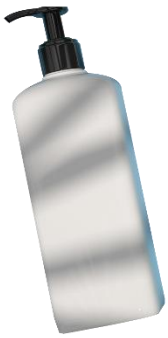


Block 3

【the introduction of the blogger】Ms. Tang is a household hack expert. She shares household hacks in Weibo, about techniques and products for household cleaning, maintenance of furniture etc. She has a phD degree in applied chemistry, which explains where her expertise comes from.

【content of the post】

#Advertisement# This post is sponsored by COCONUT dishwashing liquid #Advertisement#
I have already used my first full bottle of COCONUT dishwashing liquid! I really recommend this product! Differently from regular ones, COCONUT has its main components extracted from coconut oil, which is eco-friendly, biodegradable and safe. And the best part is that it WORKS and REMOVES greasy from my dishes. PERFECT!

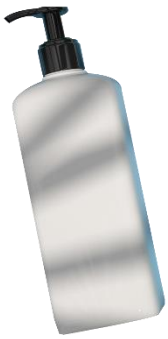


Block 4

【Introduction of the blogger】Ms. Tang is a make-up blogger. She often uploads make-up tutorials and tips related to beauty and cosmetics.

【content of the post】

#Advertisement# This post is sponsored by COCONUT dishwashing liquid #Advertisement#
I have already used my first full bottle of COCONUT dishwashing liquid! I really recommend this product! Differently from regular ones, COCONUT has its main components extracted from coconut oil, which is eco-friendly, biodegradable and safe. And the best part is that it WORKS and REMOVES greasy from my dishes. PERFECT!



4. What is the category of this blogger?

- Household hack
- Make-up
- I did not notice

5. Is there a sentence of #Advertisement# This post is sponsored by COCONUT dishwashing liquid #Advertisement# in this post?

- Yes
- No
- I did not notice

6. Does this post mention that this dishwashing liquid is eco-friendly?

- Yes
- No
- I did not notice

7. Are you the person responsible for the purchase of dishwashing liquid in your house? (purchase for family, or for yourself if you live alone.)

- Yes
- No
- Sometimes

8. How much do you agree the sentences below?

1. The image of COCONUT dishwashing liquid and the blogger go well together.
2. The image COCONUT dishwashing liquid is well matched with the blogger.
3. In my opinion, the blogger is very appropriate to post about COCONUT dishwashing liquid.
4. I am not surprised that this blogger recommends dishwashing liquid.
5. One would expect that this blogger recommends dishwashing liquid.
6. It was predictable that this blogger would recommend dishwashing liquid.
7. That COCONUT dishwashing liquid is recommended by this kind of blogger tells me something about it.

8. When I hear of the recommendation of this blogger, I can understand COCONUT dishwashing liquid better.

9. With the recommendation of this blogger, I discover a new aspect of COCONUT dishwashing liquid (With this sponsorship, I discover a new aspect of this company).

- Strongly disagree
- Disagree
- Disagree somewhat
- Neither disagree nor agree
- Agree somewhat
- Agree
- Strongly agree

9. How much do you agree the sentences below?

1. She is attractive
2. She is classy
3. She is beautiful
4. She is elegant
5. She has good figure

- Strongly disagree
- Disagree
- Disagree somewhat
- Neither disagree nor agree
- Agree somewhat
- Agree
- Strongly agree

10. How much do you agree the sentences below?

Strongly disagree

1. She is dependable
2. She is honest
3. She is reliable

4. She is sincere
5. She is trustworthy
   - Disagree
   - Disagree somewhat
   - Neither disagree nor agree
   - Agree somewhat
   - Agree
   - Strongly agree

11. How much do you agree the sentences below?
    1. She is expert
    2. She is experienced
    3. She is knowledgeable
    4. She is qualified
    5. She is skilled
    - Strongly disagree
    - Disagree
    - Disagree somewhat
    - Neither disagree nor agree
    - Agree somewhat
    - Agree
    - Strongly agree

12. How is your attitude toward the brand?
    1. I think COCONUT is an appealing brand
    2. I think COCONUT is a good brand
    3. I think COCONUT is a pleasant brand
    4. I think COCONUT is a favorable brand
    5. I think COCONUT is a likable brand
    - Strongly disagree

- Disagree
- Disagree somewhat
- Neither disagree nor agree
- Agree somewhat
- Agree
- Strongly agree

13. How is your perceived quality of this brand?
    1. The COCONUT is of great quality
    2. The likelihood that COCONUT is reliable is very high
    3. Products of COCONUT are worth their price
    - Strongly disagree
    - Disagree
    - Disagree somewhat
    - Neither disagree nor agree
    - Agree somewhat
    - Agree
    - Strongly agree

14. How is your purchase intention of this brand?
    1. It is very likely that I will buy COCONUT's product
    2. I will purchase COCONUT's product the next time I need a dishwashing liquid
    3. I will definitely try COCONUT's product
    - Strongly disagree
    - Disagree
    - Disagree somewhat
    - Neither disagree nor agree
    - Agree somewhat
    - Agree
    - Strongly agree

Your personal information will only be used in the data analysis of this study

15. What is your age?
    - under 18
    - 18 – 25
    - 26 - 35
    - 35 – 45
    - above 45

16. What is your gender?
    - male
    - female
    - other
    - prefer not to say

17. What is the highest degree you have completed?
    - high school degree or less than high school
    - college
    - bachelor's degree
    - master's degree
    - doctorate (ex. PhD)

Appendix 2 – Questionnaire in Chinese

尊敬的女士/先生：

您好！我是一名葡萄牙里斯本工商管理大学的研究生，为完成毕业论文需要进行一次关于社交网站的问卷调查。本次调查不记名，答案无对错之分，请您根据自己的感受回答，将占用您五分钟的时间。感谢您的帮助！

本人邮箱地址：codielu1010@gmail.com

1. 体而言，您是否喜欢网红博主
   - 非常厌恶
   - 厌恶
   - 有点厌恶
   - 既不厌恶也不喜欢
   - 有点喜欢
   - 喜欢
   - 非常喜欢

2. 您是否使用微博或其他社交网站？
   - 是
   - 否
   - 不确定

3. 请仔细阅读以下博主简介与微博内容

情景 1

【博主简介】唐小姐是一位家政技巧达人，在微博分享关于家居清洁、器具维护等方面的家政技巧和产品比较。唐小姐具备应用化学博士学位，因此对家政技巧的见解科学深入。

【微博内容】

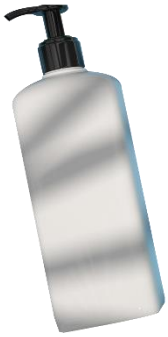
这款椰子洗洁精我用完第一瓶了，非常推荐！和市面上大多洗洁精不同， 椰子洗洁精主要成分提取自椰子油，环保易分解且安全无害。关键是它很好用，能清除餐具上的所有油渍，非常干净！

情景 2

【博主简介】唐小姐是一位美妆博主，长期上传美妆教程。

【微博内容】

这款椰子洗洁精我用完第一瓶了，非常推荐！和市面上大多洗洁精不同， 椰子洗洁精主要成分提取自椰子油，环保易分解且安全无害。关键是它很好用，能清除餐具上的所有油渍，非常干净！



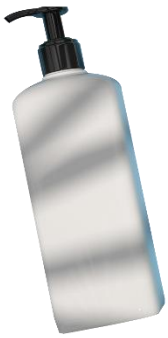
情景 3

【博主简介】唐小姐是一位家政技巧达人，在微博分享关于家居清洁、器具维护等方面的家政技巧和产品比较。唐小姐具备应用化学博士学位，因此对家政技巧的见解科学深入。

【微博内容】

#广告#本条微博由椰子洗洁精赞助#广告#

这款椰子洗洁精我用完第一瓶了，非常推荐！和市面上大多洗洁精不同， 椰子洗洁精主要成分提取自椰子油，环保易分解且安全无害。关键是它很好用，能清除餐具上的所有油渍，非常干净！



情景 4

【博主简介】唐小姐是一位美妆博主，长期上传美妆教程。

【微博内容】

#广告#本条微博由椰子洗洁精赞助#广告#

这款椰子洗洁精我用完第一瓶了，非常推荐！和市面上大多洗洁精不同， 椰子洗洁精主要成分提取自椰子油，环保易分解且安全无害。关键是它很好用，能清除餐具上的所有油渍，非常干净！



4. 这位博主所在的领域是？
    - 家政技巧
    - 美妆
    - 没有注意

5. 请问这条微博中是否有 “#广告#本条微博由椰子洗洁精赞助#广告#” 这一句话？
    - 有
    - 无
    - 没有注意

6. 请问这条微博是否说明了这是一款天然环保的洗洁精？
    - 有
    - 没有
    - 没有注意

7. 您是否负责购买洗洁精？
    - 是
    - 否
    - 偶尔购买

8. 您是否同意以下句子？
    1. 椰子洗洁精的形象和这位博主的形象很协调
    2. 椰子洗洁精的形象和这位博主的形象很匹配
    3. 我认为这位博主发椰子洗洁精相关的微博是合适的
    4. 这位博主推荐洗洁精，我对此并不感到惊讶
    5. 有人可能会预期这位博主推荐洗洁精
    6. 这位博主推荐洗洁精，是可以预见的
    7. 椰子洗洁精被这类型博主推荐，让我对椰子洗洁精有了一些认识

8. 当我看到这位博主的推荐，我对椰子洗洁精有了更好的了解
9. 当我看到这位博主的推荐，我发现了椰子洗洁精新的一面

- 非常反对
- 反对
- 有点反对
- 既不反对也不同意
- 有点同意
- 同意
- 非常同意

9. 你是否同意下列描述上面博主的句子？
   1. 这位博主很有吸引力
   2. 这位博主很有格调
   3. 这位博主很漂亮
   4. 这位博主很优雅
   5. 这位博主身材很好

- 非常反对
- 反对
- 有点反对
- 既不反对也不同意
- 有点同意
- 同意
- 非常同意

10. 你是否同意下列描述上面博主的句子？
    1. 这位博主很可靠
    2. 这位博主很诚实
    3. 这位博主值得信赖

4. 这位博主很真诚
5. 这位博主很可信
   - 非常反对
   - 反对
   - 有点反对
   - 既不反对也不同意
   - 有点同意
   - 同意
   - 非常同意

11. 你是否同意下列描述上面博主的句子？
    1. 对于这一类产品，这位博主很专业
    2. 这位博主对这类产品很有经验
    3. 这位博主对这类产品的知识很丰富
    4. 对于推荐这类产品，这位博主具备专业资质
    5. 对于使用这类产品，这位博主具备专业技能
       - 非常反对
       - 反对
       - 有点反对
       - 既不反对也不同意
       - 有点同意
       - 同意
       - 非常同意

12. 您对椰子洗洁精这个品牌的态度是？
    1. 我认为这个品牌很有吸引力
    2. 我认为这个品牌很好
    3. 我认为这个品牌令人愉快

4. 相比同类品牌，我偏好这个品牌
5. 我认为这个品牌很讨喜
   - 非常反对
   - 反对
   - 有点反对
   - 既不反对也不同意
   - 有点同意
   - 同意
   - 非常同意

13. 您认为椰子洗洁精这个品牌的质量怎样？
    1. 椰子洗洁精这个品牌的产品质量非常好
    2. 椰子洗洁精这个品牌很有可能是非常可靠的
    3. 椰子洗洁精这个品牌的产品物有所值
    - 非常反对
    - 反对
    - 有点反对
    - 既不反对也不同意
    - 有点同意
    - 同意
    - 非常同意

14. 您对这个品牌的购买意愿是？
    1. 我会考虑购买这个品牌的产品
    2. 当我需要洗洁精时我会购买椰子洗洁精
    3. 我会尝试这个品牌的产品
    - 非常反对
    - 反对

- 有点反对
- 既不反对也不同意
- 有点同意
- 同意
- 非常同意

您的个人信息仅用于本研究的统计分析

15. 您的年龄是？
    - 十八岁以下
    - 18 - 25
    - 26 - 35
    - 35 - 45
    - 45 以上

16. 您的性别是？
    - 男
    - 女
    - 其他
    - 不愿透露

17. 您的学历是？
    - 高中及以下
    - 专科
    - 大学本科
    - 硕士
    - 博士