

# Social media influencer marketing: the moderating role of materialism

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## Abstract

**Purpose** – Social media influencers (SMIs) have become an important source of influence that affects consumer behaviours in their decision-making processes. As such, this justifies scholarly attention in understanding how SMIs transfer their meanings to endorsed brands and drive consumers' positive behavioural intentions. With the intention to fill this knowledge gap, this paper aims to examine the impact of SMIs' credibility, as manifested by trustworthiness, attractiveness and expertise, along with the moderating effects of materialism, on followers' purchase intention.

**Design/methodology/approach** – Self-administrated online surveys were used to collect data from Instagram users. A total of 191 usable data were collected and analysed using partial least square structural equation modelling.

**Findings** – The results show that SMIs' trustworthiness and expertise are significant predictors of followers' purchase intention. Moreover, the moderating effect of materialism on the relationship between attractiveness and purchase intention is significant. Notably, the influence of attractiveness on purchase intention is greater when materialism is high.

**Originality/value** – This research contributes to the SMI literature by examining the influence of SMIs' trustworthiness, attractiveness and expertise, along with the moderating effect of materialism, on followers' purchase intention.

## 1. Introduction

Marketers increasingly use social media platforms to promote product-related information to consumers, given their tremendous ability in reaching consumers (Cheung *et al.*, 2020a; Koay *et al.*, 2020). The global social media penetration rate is reportedly at 45% (Statista, 2019), with an estimated 3.6 billion active users who consumed more than 130 min on social



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media platforms every day (Statista, 2018, 2019, 2020a). Nowadays, social media users with specific interests and expertise can use the interactive features of social media platforms serving as social media influencers (SMIs) of brands to promote product-related information to consumers on various social media platforms, such as Facebook, Twitter, Weibo, Instagram, YouTube, XiaoHongShu and TikTok (Jin *et al.*, 2019; Ortiz-Ospina, 2019). SMIs can create their own channels, pages and communities to share entertaining and trendy content about products and brands. Presently, many social media platforms allow SMIs to not only share their views, lifestyle and ideas on their accounts but also interact with their followers privately or publicly (Cheung *et al.*, 2020b). Moreover, SMIs can create and maintain social networks and communities worldwide without geographical boundaries (Torres *et al.*, 2019).

The emergence of SMIs has fundamentally changed the way businesses connect with their customers and prospects (Hughes *et al.*, 2019; Jin and Ryu, 2020). Recent studies reported that more than 75% of marketers are nowadays relying on SMIs to share product-related information while more than 65% of global brands have planned to allocate more budgets in SMI marketing, with spending expected to reach US\$373m by 2027 (Hughes *et al.*, 2019; Ki *et al.*, 2020). Given its importance, researchers have begun to focus specifically on investigating the impact of SMI marketing on companies' financial performance, with a particular focus on how SMIs transfer their meanings to the endorsed brands (Ki *et al.*, 2020; Wiedmann and von Mettenheim, 2020). Hughes *et al.* (2019) revealed the significance of SMIs' credibility in explaining consumers' engagement intention, as manifested by the number of likes and comments on Facebook pages. Similarly, Lou and Yuan (2019) discovered the importance of SMIs' trustworthiness, attractiveness and expertise in driving consumers' brand perceptions. Likewise, Koay *et al.* (2020) confirmed that SMIs' knowledge and attractiveness play a considerable role in driving consumers' purchase intention. More recently, Weismueller *et al.* (2020) reported that SMIs' attractiveness, trustworthiness and expertise directly predict followers' purchase intention while De Veirman and Hudders (2019) highlighted that SMIs' credibility is positively associated with consumers' brand attitude. Overall, prior studies demonstrated how SMIs transfer their meanings to the endorsed brands, and hence, create positive perceptions in consumers' minds. Accordingly, this study argues that followers of SMIs are more inclined to purchase products or services endorsed by SMIs who are perceived as attractive, trustworthy and expert.

Notwithstanding, the aforementioned meaning transfer process is theoretically to be moderated by consumers' materialism. Materialism is conceptualised as the importance people attach to worldly possessions which occupy an integral place in their lives and are known to be the key sources of their satisfaction and dissatisfaction (Belk, 1985; Richins and Dawson, 1992). Moreover, materialism plays a vital role in driving consumers' positive attitude towards SMIs, which, in turn, strengthens their perceptions of the endorsed brands (Jin and Ryu, 2020). Arguably, materialistic consumers are more easily stimulated by marketing stimuli, and thus materialism is conceptualised as a positive moderator in driving consumers' behavioural intentions (Chang *et al.*, 2018; Islam *et al.*, 2018). A study by Heaney *et al.* (2005) found that materialism has a significant positive association with the consumption of status-related products. This is because materialistic consumers are driven to acquire worldly possessions in pursuit of their happiness (Chan *et al.*, 2015). Besides, Islam *et al.* (2018) reported that social media users who like to compare themselves with celebrities are more materialistic, resulting in compulsive buying. Based on social comparison theory, individuals evaluate themselves in terms of attitudes, abilities and traits in comparison with others (Festinger, 1954). SMIs serve as cues that trigger followers' mental mechanisms of upward social comparison. Individuals who actively engage in

upward social comparison tend to display a higher desire to gain more possessions and consumption (Ogden and Venkat, 2001). Followers with higher levels of materialism are more willing to trust the information provided by SMIs, and thereby being more likely to engage with the endorsed brands (Jin and Ryu, 2020).

Although prior studies have applied the source credibility model to understand the influence of SMIs on followers' purchase intention (Lou and Kim, 2019; Weismueller *et al.*, 2020), the moderating effects of materialism on the relationship between SMIs' credibility (trustworthiness, attractiveness and expertise) and followers' purchase intention are yet to be explored. As such, the present study aims to address the aforementioned knowledge deficiencies by examining the influence of SMIs' credibility on their followers' purchase intention, along with the moderating effects of materialism. Specifically, this study argues that the influence of SMIs' attractiveness, trustworthiness and expertise on purchase intention will be stronger, if not heightened, for followers who have high levels of materialism, predicated on social comparison theory. Hence, this research aims to address the following research questions:

*RQ1:* Does SMIs' credibility (trustworthiness, attractiveness and expertise) predict followers' purchase intention?

*RQ2:* Does materialism moderate the relationship between source credibility (trustworthiness, attractiveness and expertise) and purchase intention?

This paper is organised as follows. The relevant literature on SMI marketing, source credibility and materialism and the development of hypotheses are discussed in Section 2. Following that, the methodology and data analysis are explained in Section 3 and 4, respectively. Finally, in Sections 5 and 6, the theoretical contributions, practical implications, limitations and future recommendations are expounded.

## 2. Literature review

### 2.1 Social media influencers

SMIs are understood as social media users who are famous in a niche area with many followers and can convince their followers to follow their endorsements in the decision-making processes (Lou and Yuan, 2019). In the past, the classification of SMIs was restricted to only those who became popular through their social media activities, excluding traditional celebrities who found fame from acting and/or singing (Khamis *et al.*, 2016). However, nowadays, there is no distinct boundary to differentiate between an SMI and a traditional celebrity, as a person can possess both identities. For instance, Kylie Jenner is not only an acclaimed American TV star but also a popular Instagram influencer with over 202 million followers (Statista, 2020b). Hence, SMIs include anyone, ranging from a blogger, a traditional celebrity or an online entrepreneur, who disseminates information related to products, health and lifestyles on social media platforms (Zhou *et al.*, 2020). Some examples include fashion enthusiasts who advocate their lifestyles and promote the image of beauty brands (Jin *et al.*, 2019), mainstream celebrities who present their selfie pictures with endorsed brands (Jin and Ryu, 2020), bloggers who educate consumers to use products offered by brands (Arrieta *et al.*, 2019) and vloggers who share their opinions on products on various social media platforms, such as YouTube, Weibo, Facebook and Instagram (Lee and Watkins, 2016).

Amongst the various social media platforms, Instagram stands out as the preferred choice for SMIs to communicate with consumers due to its high engagement rate per post (Jackson, 2019) and the high conversion rate (Sahu, 2020). SMIs disseminate updates and information about brands, share entertaining content, interact with consumers on Instagram and strengthen consumers' brand attitude (Jin and Ryu, 2020). Needless to say, the content

shared by SMIs is useful for both international and local brands because SMIs are regarded as credible experts in their areas of interest (Jin *et al.*, 2019). Furthermore, the interactive content shared by SMIs is regarded as meaningful stimuli in driving consumers' brand knowledge because SMIs transfer their meanings to the endorsed brands in the form of visually attractive posts and videos, thereby creating favourable brand images in consumers' minds (Torres *et al.*, 2019). As such, SMIs are acknowledged to be one of the most influential sources that drive consumer-brand engagement outcomes based on measures such as the number of followers, likes, comments and shares (Hughes *et al.*, 2019; Jin and Muqaddam, 2019; Jin *et al.*, 2019), warranting scholarly attention in SMIs' credibility.

### 2.2 Source credibility

Credibility is a critical element in celebrity endorsements that influences the effectiveness of the marketing message and subsequent consumer attitude and behaviours (Herbig and Milewicz, 1996; Pompitakpan, 2004; Schimmelpfennig and Hunt, 2020). According to Ohanian (1990), source credibility refers to "the positive characteristics of a communicator that affect their receiver's acceptance of a message" (p. 41). The perceived credibility of a source determines the recipient's acceptance of the source's message (Bannister, 1986; Suzuki, 1978). According to Ohanian (1990), source credibility can be segregated into three distinctive dimensions, namely, attractiveness, trustworthiness and expertise, that can determine an endorsement's success (Ohanian, 1991; Solomon, 2020). While earlier studies adopted Ohanian's (1990) source credibility model in the context of movie and music celebrities, it has been extended by recent studies (Pick, 2021; Saima and Altaf Khan, 2021; Weismueller *et al.*, 2020) to examine the importance of SMIs' credibility in shaping consumers' behaviours.

In the context of SMIs, trustworthiness is conceptualised as the extent to which a follower believes the SMI is reliable, as manifested by the perception of the SMI's honesty, dependability, sincerity and trustworthiness (Lou and Yuan, 2019). In contrast, attractiveness is understood as the extent to which a follower perceives the SMI as elegant, sexy and beautiful (Balabanis and Chatzopoulou, 2019). Expertise is understood as the extent to which a follower perceives the SMI as experienced, knowledgeable, qualified and reliable (Ki *et al.*, 2020). These three dimensions are useful in predicting the effectiveness of messages communicated by various sources.

### 2.3 Trustworthiness

The perceived trustworthiness of SMIs plays a considerable role in driving consumers' behavioural intentions (Yuan and Lou, 2020). When an SMI is perceived as trustworthy, followers tend to view that the information provided by the SMI regarding the product endorsements as believable (Cheung *et al.*, 2008). Moreover, an SMI who continuously shares informative content will strengthen emotional attachment with his/her followers and positively influencing them to acquire the recommended products or brands (Ki *et al.*, 2020). Brands associated with endorsers who are perceived as trustworthy have higher levels of brand credibility and brand attitude, resulting in higher levels of purchase intention (Wang and Scheinbaum, 2018). Therefore, in this study, we propose that SMIs who are perceived as trustworthy will be persuasive in their endorsements, resulting in a higher purchase intention. For this research, purchase intention indicates followers' willingness to purchase products endorsed by an SMI. Accordingly, the following hypothesis is proposed:

*H1.* Trustworthiness has a significant positive influence on purchase intention.

#### 2.4 Attractiveness

An SMI who is visually attractive is more likely to result in a higher acceptance of the endorsed product (Lim *et al.*, 2017). Physical attributes and characteristics of an SMI, as manifested by wisdom, beauty, wholesomeness, psychographic features and sportsmanship, are inextricably linked with perceived attractiveness in consumers' minds (Onu, 2019). As such, the effectiveness of the endorsements in driving consumers' behavioural intention relies on the degree of the endorser's attractiveness (McGuire, 1985; Till and Busler, 2000; Yuan and Lou, 2020). Extant studies reported that high levels of perceived attractiveness will lead to a positive attitude towards the SMI and subsequently resulting in purchase intention (Lim *et al.*, 2017; Wiedmann and von Mettenheim, 2020). In particular, Lou and Yuan (2019) found that SMIs who are attractive are more effective in driving consumers' brand trust, which, in turn, strengthening consumers' purchase intention. Similarly, Weismueller *et al.* (2020) found that the perceived attractiveness of SMIs is directly associated with followers' purchase intention. Therefore, the following hypothesis is proposed:

*H2.* Attractiveness has a significant positive influence on purchase intention.

#### 2.5 Expertise

Consumers' purchase intention and purchase behaviour are positively associated with celebrities' perceived expertise (Pornpitakpan, 2004). Applied in the social media context, consumers are more willing to buy products endorsed by SMIs who have certain levels of knowledge and experience about those endorsed products (Weismueller *et al.*, 2020). Likewise, when consumers believe that the online reviews are provided by reviewers who are credible and experienced, they tend to perceive those reviews as useful which could positively influence consumers' decision to buy the reviewed products (Filiari *et al.*, 2018; Weismueller *et al.*, 2020). Moreover, Lou and Kim (2019) reported that followers are more likely to develop a positive parasocial relationship with SMIs who are perceived as an expert on his/her area. Thus, we postulate the following hypothesis:

*H3.* Expertise has a significant positive influence on purchase intention.

#### 2.6 Materialism

Materialism has evolved to become a prominent feature of modern societies, manifesting itself in various forms such as envy, selfishness and possessiveness (Wang, 2016). Materialism refers to the belief that acquiring and possessing money together with worldly assets leads to happiness and success (Belk, 1985; Richins and Dawson, 1992). Materialistic individuals tend to acquire products in the belief that the products will improve their well-being and satisfaction in life (Ahuvia and Wong, 1995). Previous studies revealed that materialistic consumers are more prone to purchasing luxury products (Wella Yanti *et al.*, 2019) and genuine-looking counterfeit products (Davidson *et al.*, 2019) to exhibit their wealth, status, uniqueness and to impress others (Browne and Kaldenberg, 1997).

Social comparison theory states that individuals evaluate themselves regarding attitudes, abilities and traits compared to others (Festinger, 1954). The frequent use of online social networking has elevated the intensity of comparisons with their friends or SMIs, as social networking sites enable users to portray the best images of themselves (Verduyn *et al.*, 2020). Social comparison with media celebrities is also shown to be positively related to materialism, which subsequently results in compulsive buying (Islam *et al.*, 2018). SMIs are

often idolised by their followers, and therefore, these followers are more likely to purchase based on SMIs' product or brand recommendations in an attempt to reduce the gap of a particular attribute between the self and their idolised SMIs (Chan and Prendergast, 2008; Ki and Kim, 2019). SMIs typically are role models to their followers and can incite social comparisons, thereby stimulating their followers' interests in material possessions (Lou and Kim, 2019). For instance, SMIs post-pictures of themselves wearing the clothes that they endorse. As such, followers may become motivated to buy the same clothes in an attempt to look as attractive as the SMIs (Ki and Kim, 2019).

Extant research revealed that there is a positive association between materialism and individuals' attraction to celebrities and athletes (Green *et al.*, 2014). In addition, a study by Lou and Kim (2019) found that materialism promotes social comparisons amongst followers, which subsequently triggers purchase intention. Hence, we deduce that the influence of trustworthiness, attractiveness and expertise on purchase intention is stronger for followers who are materialistic as they are more likely to imitate the SMIs. Thus, we hypothesise as follows:

- H4. Materialism moderates the relationship between trustworthiness and purchase intention, such that the relationship is stronger when materialism is high.
- H5. Materialism moderates the relationship between attractiveness and purchase intention, such that the relationship is stronger when materialism is high.
- H6. Materialism moderates the relationship between expertise and purchase intention, such that the relationship is stronger when materialism is high.

The research model is presented in Figure 1.

### 3. Methodology

#### 3.1 Participants and procedures

A quantitative research design was used to validate the hypotheses proposed in this research. Specifically, data were collected via self-administrated online surveys. The

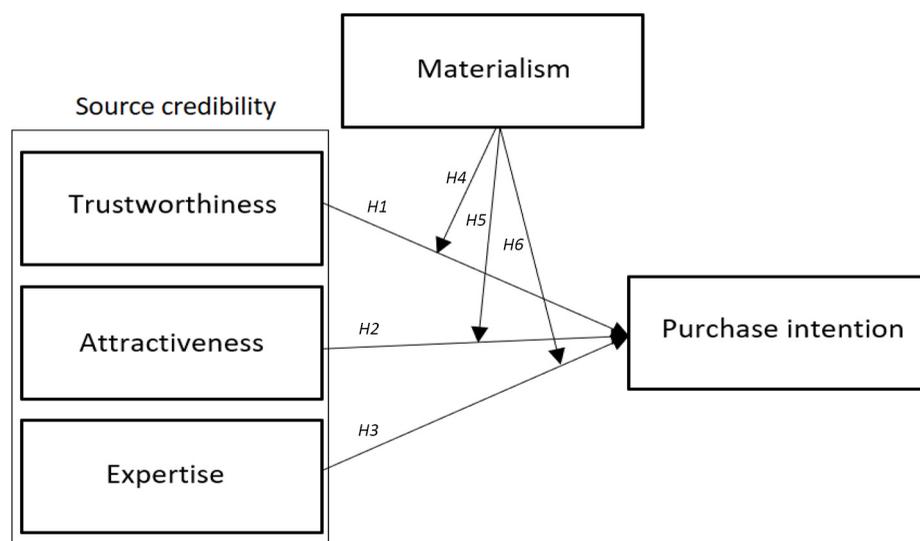


Figure 1.  
Research model

questionnaire was made up of two sections. Section 1 included items intended to measure trustworthiness, attractiveness, expertise and purchase intention using seven-point Likert scales. Section 2 captured respondents' demographic information. A cover page was appended on the first page of the questionnaire stating the purpose of the study. The respondents were informed that the information would not be exposed to external parties.

To ensure that our scales achieved a satisfactory level of reliability and validity, a pilot test was conducted by distributing the questionnaires to 30 Instagram users to identify potential errors. A preliminary reliability test was conducted on all the variables. Cronbach's alpha (CA) values for all the variables (trustworthiness: CA = 0.965, attractiveness: CA = 0.826, expertise: CA = 0.957, materialism: CA = 0.859 and purchase intention: CA = 0.921) passed the threshold of 0.7, indicating that all the variables had good internal consistency.

The target population of this study is social media users. Specifically, the sampling frame is Instagram users. Using a purposive sampling method, the respondents were sampled based on two criteria. First, they must be an Instagram user and second, they must at least follow one Instagram influencer who frequently endorsed products and/or brands on their Instagram account. Subsequently, the respondents were requested to provide the name of the Instagram influencer, which would later be used as an anchor reference to answer the following questions contained within the questionnaire, a technique that past studies have commonly applied (Ismail, 2017; Koay *et al.*, 2020). These two criteria would help to ensure that the respondents had sufficient and related knowledge to participate in this research. A research assistant promoted the online survey link through her social media accounts and online discussion platforms. Data collection took place between 30 September and 24 November 2020.

A total of 191 valid responses were received through the Google survey platform. The average age of the respondents was 24.18 years. Amongst the 191 participants, 123 were female and 68 were male. Regarding ethnicity, 24 (12.6%) respondents were Malays, 132 (69.1%) were Chinese, 33 (17.3%) were Indians and 2 (1%) were denoted as others. The majority of the respondents (72.8%) held a bachelor's degree. It is important to note that we did make any distinction between a celebrity Instagram influencer and a non-celebrity Instagram influencer.

### 3.2 Measures

**3.2.1 Source credibility.** The scales used to measure the three dimensions of source credibility (trustworthiness, attractiveness and expertise) were adapted from Ohanian (1991), consisting of a total of 15 items. Trustworthiness, attractiveness and expertise were each measured with five items on a seven-point Likert scale (1-strongly disagree and 7-strongly agree). A sample item to measure trustworthiness was "the (Instafamous) is dependable". A sample item to measure attractiveness was "the (Instafamous) is beautiful". A sample item to measure expertise was "the (Instafamous) is knowledgeable".

**3.2.2 Materialism.** A five-item scale by Wan *et al.* (2008) was used to measure materialism, which is a shortened scale that originated from Richins and Dawson (1992). The respondents were requested to answer five questions regarding materialism on a seven-point Likert scale. An example item included "some of the most important achievements in life, including acquiring material possessions".

**3.2.3 Purchase intention.** Purchase intention was evaluated using a three-item scale by Che *et al.* (2017). We instructed the respondents to indicate their agreement on statements regarding their intention to purchase products and/or services endorsed by the (Instafamous) on a seven-point Likert scale. A sample item was "It is likely that I will buy products or services advertised by the (Instafamous) in the near future".

#### 4. Data analysis

SmartPLS version 3.2.8 software was used to perform partial least squares structural equation modelling (PLS-SEM) to analyse the data for this research (Ringle *et al.*, 2015). Given that this research's primary aim was to inspect the moderating effects of materialism on the relationship between source credibility and purchase intention, which is exploratory in nature, PLS-SEM was deemed suitable and fitting. Moreover, PLS-SEM is also suitable for estimating small sample size models with high levels of statistical power. In addition, Sarstedt *et al.* (2020) stated that SEM should be used instead of the PROCESS macro when estimating models with latent variables. For this reason, the PROCESS macro was not used in this research.

##### 4.1 Common method variance

As our data were self-reported by the same respondents using a single survey, the results might have been prone to common method variance (CMV), causing researchers to make incorrect conclusions (Min *et al.*, 2016; Podsakoff *et al.*, 2003). Hence, it is important to check whether CMV is a serious threat in this research. First, we conducted a full collinearity test (Kock, 2015) and created a dummy variable with random numbers to perform the test before regressing it on all variables, including trustworthiness, attractiveness, expertise, materialism and purchase intention. The variance inflation factor (VIF) values were less than the recommended value of 3.3 (Table 1) (Kock, 2015), indicating no issue of CMV. Second, we performed the measured latent marker variable approach to detect CMV (Chin *et al.*, 2013), where we compared the coefficient of determination ( $R^2$ ) of purchase intention between a model with ( $R^2 = 0.560$ ) and without ( $R^2 = 0.506$ ) a marker variable represented by a shortened social desirability scale by Fischer and Fick (1993). The difference was less than 10%, which was very small, implying that our data were not contaminated by CMV and posing a minimal validity threat to our research findings.

##### 4.2 Measurement model

Evaluating the measurement model's quality involved the estimation of internal consistency and examinations of convergent and discriminant validity for all reflective constructs measured with multi-item scales. Here, we followed the guidelines recommended by Hair *et al.* (2017) to evaluate the measurement model. The establishment of internal consistency of measures is achieved when the values of CA, rho\_A and composite reliability (CR) exceed the value of 0.7 (Hair *et al.*, 2017). As shown in Table 2 below, the values of CA, rho\_A and CR were well above the acceptable value of 0.7, displaying evidence of internal consistency. Next, the metrics used to assess the convergent validity were the factor loadings and average variance extracted (AVE). Generally, the factor loadings and the AVEs should be greater than 0.7 and 0.5, respectively. Table 2 indicates that the conditions to pass the convergent validity were met (Hair *et al.*, 2017).

Constructs	VIF
Attractiveness	1.421
Expertise	2.813
Materialism	1.739
Purchase intention	2.248
Trustworthiness	2.426

**Table 1.**  
Full collinearity test

EBR 34,2	Constructs	Items	Loadings	CA	rho_A	CR	AVE
<b>232</b>	Attractiveness	A1	0.828	0.894	0.906	0.922	0.703
		A2	0.858				
		A3	0.855				
		A4	0.886				
		A5	0.759				
	Expertise	E1	0.910	0.944	0.947	0.957	0.817
		E2	0.900				
		E3	0.909				
		E4	0.878				
		E5	0.920				
	Materialism	M1	0.882	0.915	0.931	0.936	0.747
		M2	0.867				
		M3	0.891				
		M4	0.906				
		M5	0.768				
	Purchase intention	PI1	0.952	0.956	0.956	0.971	0.918
		PI2	0.960				
		PI3	0.963				
	Trustworthiness	T1	0.847	0.930	0.932	0.947	0.782
		T2	0.915				
T3		0.902					
T4		0.843					
T5		0.910					

**Table 2.**  
Measurement model

The final assessment of the measurement model was discriminant validity. To confirm that the partial least square (PLS)-model was free from the issue of discriminant validity, the square root of the AVE of each construct should be higher than the correlation with any other construct (known as the Fornell and Larcker criterion) (Fornell and Larcker, 1981) and heterotrait-monotrait (HTMT) values should not be greater than 0.9 or else discriminant validity might be a problem (known as the HTMT criterion) (Henseler *et al.*, 2015). Tables 3 and 4 show that both criteria were satisfied. Furthermore, the bootstrapped confidence interval of HTMT values did not exceed the value of 1, providing solid evidence that the violation of discriminant validity was non-existent. The values of standardised root mean square residual (SRMR) and normed fit index (NFI) were reported to assess the model fit for each model (Table 5). A model is deemed fit when the SRMR value is lower than the recommended value of 0.1 and the NFI value is greater than 0.8 (Henseler *et al.*, 2016).

#### 4.3 Structural model

Bootstrapping is a non-parametric procedure (5,000 re-samples) allowing researchers to generate the *t*-values and standard error, which are important for evaluating the significance

Constructs	1	2	3	4	5
1. Attractiveness	0.838				
2. Expertise	0.532	0.904			
3. Materialism	0.418	0.556	0.864		
4. Purchase intention	0.394	0.674	0.593	0.958	
5. Trustworthiness	0.523	0.776	0.465	0.660	0.884

**Table 3.**  
Fornell-Larcker  
criterion

of path coefficients specified in the PLS-model. In Table 5, the results of Model 1 showed that trustworthiness ( $\beta = 0.345, p < 0.001, f^2 = 0.091$ ) and expertise ( $\beta = 0.408, p < 0.001, f^2 = 0.126$ ) have a significant positive influence on purchase intention, supporting *H1* and *H3*. However, the relationship between attractiveness ( $\beta = -0.003, p > 0.05, f^2 = 0.000$ ) and purchase intention was not significant. Hence, *H2* was not supported. For the moderation analysis, a two-stage approach was used to produce the interaction terms, as this method provides the highest statistical power as compared to the product indicator and orthogonalisation methods (Henseler and Chin, 2010). As shown in Table 5 and Figure 2, materialism does not moderate the relationship between trustworthiness ( $\beta = 0.029, p > 0.05, f^2 = 0.003$ ), expertise ( $\beta = 0.046, p > 0.05, f^2 = 0.008$ ) and purchase intention but moderates the relationship between attractiveness ( $\beta = 0.085, p < 0.05, f^2 = 0.027$ ) and purchase intention. Therefore, we can conclude that *H4* and *H6* were not supported, but *H5* was supported.

We also reported the coefficient of determination ( $R^2$ ) values for the assessment of explanatory power (in-sample prediction) and Stone-Geisser's ( $Q^2$ ) and PLS predict ( $Q^2$  predict) values for the assessment of predictive power (out-of-sample prediction) (Geisser, 1974; Shmueli *et al.*, 2016; Stone, 1974). The  $R^2$  values for Models 1–4 were 0.501, 0.567, 0.577 and 0.569, respectively. Also, the  $Q^2$  values for Models 1–4 were 0.430, 0.483, 0.489 and 0.484, respectively, which were greater than zero, suggesting evidence of predictive relevance. Moreover, PLS predict values including the prediction errors of the PLS-model and linear regression model were reported in Table 6. Given the prediction errors (in terms of the root mean squared error – RMSE and the mean absolute error – MAE) of the PLS path model were lower than the linear regression model (Shmueli *et al.*, 2019), it can be concluded that our specified PLS-model has a reasonably good predictive performance.

#### 4.4 Importance-performance map analysis

IPMA was performed to obtain further insights into the key sources of the credibility of SMIs that predict purchase intention. The significance of an independent variable on a dependent variable is represented by the total effect, whereas the performance of an independent variable on a dependent variable is measured by the mean score (Ringle and Sarstedt, 2016). Figure 3 below shows that the performance scores of trustworthiness, attractiveness and expertise were 80.455, 85.711 and 81.266, respectively. Additionally, the importance scores of trustworthiness, attractiveness and expertise were 0.345,  $-0.003$  and 0.408, respectively. The results showed that all sources of credibility perform well, but only trustworthiness and expertise are important in predicting purchase intention. Thus, when a company's marketing objective is to stimulate followers' purchase intention, SMIs' trustworthiness and expertise should be prioritised.

Constructs	1	2	3	4	5
1. Attractiveness					
2. Expertise	0.570 [0.414; 0.704]				
3. Materialism	0.450 [0.293; 0.575]	0.593 [0.479; 0.694]			
4. Purchase intention	0.412 [0.289; 0.521]	0.706 [0.612; 0.782]	0.624 [0.494; 0.730]		
5. Trustworthiness	0.567 [0.432; 0.694]	0.827 [0.741; 0.886]	0.499 [0.377; 0.605]	0.698 [0.608; 0.771]	

**Table 4.**  
HTMT criterion

**Table 5.**  
Structural model  
results

Relationships	Model 1	Model 2	Model 3
	$R^2_{PI} = 0.501/Q^2_{PI} = 0.430$ SRMR: 0.051, NFI: 0.862 0.345*** (3.741) [0.195, 0.496]	$R^2_{PI} = 0.567/Q^2_{PI} = 0.483$ SRMR: 0.052, NFI: 0.845 0.340*** (3.789) [0.194, 0.484]	$R^2_{PI} = 0.577/Q^2_{PI} = 0.489$ SRMR: 0.052, NFI: 0.845 0.294** (2.996) [0.120, 0.443]
H1 T->PI	-0.003 (0.054) [-0.110, 0.087]	-0.059 (0.909) [-0.182, 0.034]	-0.016 (0.264) [-0.114, 0.083]
H2 A->PI	0.408*** (3.794) [0.230, 0.586]	0.287* (2.220) [0.081, 0.504]	0.309** (2.443) [0.117, 0.535]
H3 E->PI		0.309*** (3.252) [0.149, 0.464]	0.333*** (3.639) [0.179, 0.479]
M->PI		0.029 (0.517) [-0.061, 0.122]	0.085* (1.695) [0.013, 0.180]
H4 T*M->PI			0.100
H5 A*M->PI			0.005
H6 E*M->PI			0.061
			0.148
			0.003

**Notes:** T: trustworthiness; A: attractiveness; E: expertise; M: materialism; PI: purchase intention, SRMR: standardised root mean square residual, *t*-values in parentheses, Bootstrapping 95% confidence intervals bias-corrected in square brackets (based on *n* = 5,000 subsamples). \*\*\**p* < 0.001 (3.092); \*\**p* < 0.01 (2.327); \**p* < 0.05 (1.645); ns = not significant (one-tailed test)

(continued)

Relationships	Model 4	Support
	$R^2_{PI} = 0.569/Q^2_{PI} = 0.484$	
	SRMR: 0.052, NFI: 0.845	
H1 T-> PI	0.326*** (3.424) [0.166, 0.474]	Yes
H2 A-> PI	-0.054 (0.844) [-0.166, -0.043]	No
H3 E-> PI	0.314*** (2.420) [0.157, 0.466]	Yes
M-> PI	0.314 (3.362) [0.157, 0.466]	No
H4 T*M-> PI		Yes
H5 A*M-> PI		No
H6 E*M-> PI	0.046 (0.998) [-0.026, 0.125]	Yes
		No
	$f^2$	
	0.074	0.093
	0.000	0.004
	0.074	0.066
	0.169	0.152
	0.027	0.008

Table 5.

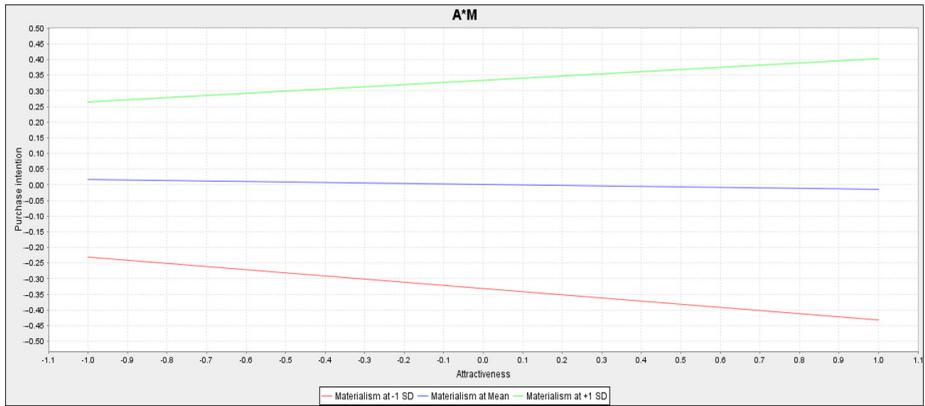
**5. Discussion**

*5.1 Theoretical implications*

Consistent with prior studies (Djafarova and Rushworth, 2017; Ohanian, 1990; Weismueller et al., 2020), support was found for *H1*, indicating that SMIs’ trustworthiness directly influences followers’ purchase intention. When followers believe that the information about the SMIs’ endorsements is dependable, honest, reliable, sincere and trustworthy, they are more likely to purchase the endorsed products. Next, the relationship between SMIs’ attractiveness and purchase intention was not significant; hence, *H2* was not supported. Despite the seemingly logical explanation to associate endorsers’ attractiveness with purchase behaviour, such an association is not supported by our empirical data. Further examining our results revealed that the relationship between attractiveness and purchase intention is moderated by materialism (explained in the next paragraph). Next, this study also established that SMIs’ expertise predicts purchase intention, concurring with some of the past studies (Thomas and Johnson, 2017; Weismueller et al., 2020). This shows the importance of SMIs to be perceived as experienced, knowledgeable and qualified in promoting products and brands they are endorsing.

A significant discovery of this study is that our data supported the moderating effect of materialism on the relationship between attractiveness and purchase intention, which could explain the insignificant direct influence of attractiveness on purchase intention. The effect

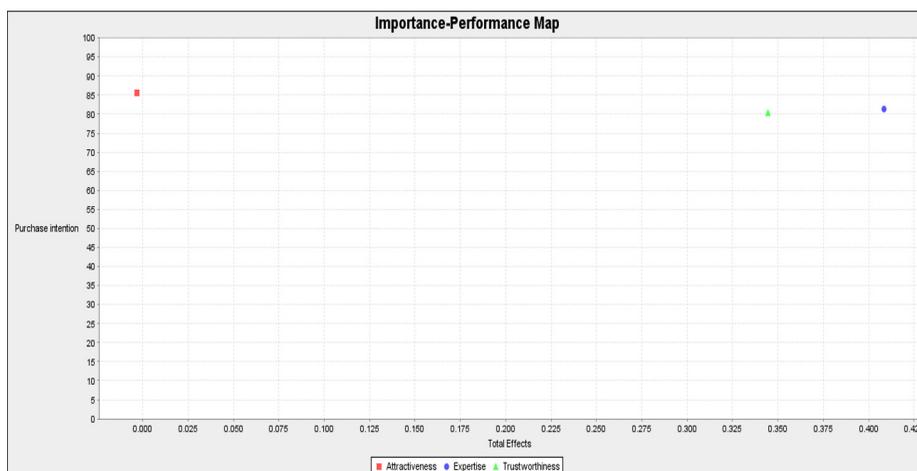
**Figure 2.**  
Moderating effect of materialism on the relationship between attractiveness and purchase intention



Construct prediction summary

		Indicator prediction summary								
		PLS			LM			PLS-LM		
		RMSE	MAE	Q <sup>2</sup> _predict	RMSE	MAE	Q <sup>2</sup> _predict	RMSE	MAE	Q <sup>2</sup> _predict
Purchase intention	Q <sup>2</sup> _predict	0.466								
	PI2	1.106	0.801	0.433	1.144	0.850	0.394	-0.038	-0.049	0.039
	PI3	1.169	0.858	0.421	1.246	0.915	0.343	-0.076	-0.058	0.078
PLS predict	PI1	1.057	0.756	0.461	1.104	0.802	0.411	-0.047	-0.045	0.049

**Table 6.**  
PLS predict

**Figure 3.**  
IPMA

of attractiveness on purchase intention is heightened for materialistic followers and lessened for less materialistic followers. As possessions are central, if not pivotal, to materialistic individuals' happiness (Richins and Dawson, 1992), materialistic followers are more inclined to purchase products recommended by SMIs, whom they find attractive. Moreover, materialistic individuals are more likely to worship celebrities in an attempt to fill the emptiness in their lives, which is characterised by "striving for self-contained individualism, autonomy, self-sufficiency and attempts to master the environment for one's own needs" (Reeves *et al.*, 2012, p. 675). This study found that materialism does not moderate the relationship between trustworthiness, expertise and purchase intention. This is feasible considering materialistic people could be attracted to superficiality and ostentatious consumption and be less concerned by the trustworthiness and expertise of the source (Riquelme *et al.*, 2011).

This study contributes to the SMI literature in two major ways. First, we empirically examined the influence of source credibility on purchase intention in the SMI context, drawing samples from Instagram users. In short, SMIs' trustworthiness and expertise are important factors influencing followers' purchase intention except for attractiveness. Second, this study further advanced the understanding of the influence of SMIs' credibility on purchase intention by testing materialism as a moderator, drawing on social comparison theory. In brief, the insignificant relationship between attractiveness and purchase intention can be explained by the moderating effect of materialism. That is, followers high in materialism are more likely to buy sponsored products or services promoted by attractive SMIs.

### 5.2 Practical implications

The realisation of consumers spending increasingly more time on social media platforms has driven organisations to focus on SMI marketing. In particular, many organisations choose to engage SMIs for advertising given their high number of followers and expertise in their niche domain. The findings of this research indicate that companies need to judiciously select an SMI who is perceived as trustworthy, attractive and expert by their followers to induce an intention to purchase. Before engaging an SMI, companies could undertake a background check by verifying the perception of the followers towards the SMI in terms of

trustworthiness, attractiveness and expertise. Not all famous SMIs with a high number of followers may be suitable, particularly if the influencer is not perceived to have expertise in the company's products or not deemed worthy of trust. Indeed, companies should judiciously select suitable SMIs who are consistent with the brands' business values and offerings; otherwise, it may not translate to higher purchase intention (Lou and Yuan, 2019). Ideally, the SMI must be perceived as trustworthy, attractive and expert in that company's product domain.

On the other hand, SMIs also need to be very cautious in choosing to endorse brands or promote products that are compatible with their expert domain; otherwise, their credibility may be damaged. For instance, it may not be suitable for a beauty SMI to endorse a sports brand or promote a fitness-related product. It should also be noted that the influence of SMIs' attractiveness on purchase intention is more intense for materialistic followers as compared to less materialistic followers. Hence, it would be beneficial if companies choose SMIs that have aesthetically pleasing physical features. However, attractiveness is not limited to physical appearance as attractive pictures, stories and captions can also captivate the attention of followers. In addition, attractive SMIs are likely to garner more public attention and publicity.

## 6. Conclusion

Overall, the source credibility model is a useful model to explain followers' purchase intention with a high  $R^2$  value of 0.501. SMIs' trustworthiness and expertise are important drivers of followers' purchase intention except for attractiveness. Furthermore, materialism was found to have only moderated the relationship between attractiveness and purchase intention. That is, the influence of attractiveness on purchase intention is subject to the level of the materialism of followers, such that the degree of influence tends to be stronger for materialistic followers.

### 6.1 Limitations and further research

Despite its interesting findings, this study suffers from several drawbacks, which can be served as a basis for further improvements from future research. A potential limitation of this study is the lack of confidence in drawing causal inferences, given the cross-sectional research design. It is suggested that future studies should collect longitudinal data that are more useful to establish causal relationships. Another possible limitation of this research is that we did not distinguish between a non-celebrity Instagram influencer and a celebrity Instagram influencer when asking respondents to give a name of an Instagram influencer whom they follow on Instagram, which might prejudice the results as their effects could be different. Future studies could consider this issue. Third, we studied only the impact of influencers' credibility on purchase intention in the Instagram channel. Future scholars may wish to test the research model on other types of SMIs from different social media platforms such as TikTok and Vero. Different population demographics favour different social media platforms and each social media platform has its own distinct characteristics. For instance, the audience group for TikTok is mainly Generation Z, whereas Instagram users are mostly Generation Y (Fernandocomet, 2020). Finally, the data were collected in Malaysia, which is a developing country. Therefore, replicating the same model on samples from developed countries could yield interesting results as people from developed countries might demonstrate lower levels of materialism (Cho *et al.*, 2016).

## References

- Ahuvia, A. and Wong, N.Y. (1995), "Materialism: origins and implications for personal well-being", *European Advances in Consumer Research*, Vol. 2, pp. 172-178.

- Arrieta, B.U., Peña, A.I.P. and Medina, C.M. (2019), "The moderating effect of blogger social influence and the reader's experience on loyalty toward the blogger", *Online Information Review*, Vol. 43 No. 3, pp. 326-349.
- Balabanis, G. and Chatzopoulou, E. (2019), "Under the influence of a blogger: the role of information-seeking goals and issue involvement", *Psychology and Marketing*, Vol. 36 No. 4, pp. 342-353.
- Bannister, B.D. (1986), "Performance outcome feedback and attributional feedback: interactive effects on recipient responses", *Journal of Applied Psychology*, Vol. 71 No. 2, pp. 203-210.
- Belk, R. (1985), "Materialism: trait aspects of living in the material world", *Journal of Consumer Research*, Vol. 12 No. 3, pp. 265-280.
- Browne, B.A. and Kaldenberg, D.O. (1997), "Self-monitoring and image appeals in advertising", *Psychological Reports*, Vol. 81 No. 3\_suppl, pp. 1267-1275.
- Chan, K. and Prendergast, G.P. (2008), "Social comparison, imitation of celebrity models and materialism among chinese youth", *International Journal of Advertising*, Vol. 27 No. 5, pp. 799-826.
- Chan, W.Y., To, C.K. and Chu, W.C. (2015), "Materialistic consumers who seek unique products: how does their need for status and their affective response facilitate the repurchase intention of luxury goods?", *Journal of Retailing and Consumer Services*, Vol. 27, pp. 1-10.
- Chang, H.H., Wong, K.H. and Chu, T.W. (2018), "Online advertorial attributions on consumer responses: materialism as a moderator", *Online Information Review*, Vol. 42 No. 5, pp. 697-717.
- Che, J.W., Cheung, C.M. and Thadani, D.R. (2017), "Consumer purchase decision in instagram stores: the role of consumer trust", *Proceedings of the 50th HI International Conference on System Sciences, 4 Jan - 7 Jan. 24-33, Waikoloa Village, HI*.
- Cheung, C.M.K., Lee, M.K.O. and Rabjohn, N. (2008), "The impact of electronic word-of-mouth", *Internet Research*, Vol. 18 No. 3, pp. 229-247.
- Cheung, M.L., Pires, G., Rosenberger, P.J. and De Oliverira, M.J. (2020a), "Driving consumer – brand engagement and co-creation by Brand interactivity", *Marketing Intelligence and Planning*, Vol. 38 No. 4, pp. 523-541.
- Cheung, M.L., Pires, G.D., Rosenberger, P.J., III, and De Oliveira, M.J. (2020b), "Driving COBRAs: the power of social media marketing", *Marketing Intelligence and Planning*, Vol. 39 No. 3, pp. 361-376.
- Chin, W.W., Thatcher, J.B., Wright, R.T. and Steel, D. (2013), "Controlling for common method variance in PLS analysis: the measured latent marker variable approach", *New Perspectives in Partial Least Squares and Related Methods*, pp. 231-239.
- Cho, H.J., Jin, B. and Watchravesringkan, K. (2016), "A cross-cultural comparison of materialism in emerging and newly developed Asian markets", *International Journal of Business, Humanities, and Technology*, Vol. 6 No. 1, pp. 1-10.
- Davidson, A., Nepomuceno, M.V. and Laroche, M. (2019), "Shame on you: when materialism leads to purchase intentions toward counterfeit products", *Journal of Business Ethics*, Vol. 155 No. 2, pp. 479-494.
- De Veirman, M. and Hudders, L. (2019), "Disclosing sponsored instagram posts: the role of material connection with the brand and message-sidedness when disclosing covert advertising", *International Journal of Advertising*, Vol. 39 No. 1, pp. 94-130.
- Djafarova, E. and Rushworth, C. (2017), "Exploring the credibility of online celebrities' instagram profiles in influencing the purchase decisions of young female users", *Computers in Human Behavior*, Vol. 68, pp. 1-7.
- Fernandocomet (2020), "TikTok vs instagram", available at: <https://uxplanet.org/tiktok-vs-instagram-907fe88989c7> (accessed 8 December 2020).
- Festinger, L. (1954), "A theory of social comparison processes", *Human Relations*, Vol. 7 No. 2, pp. 117-140.

- Filieri, R., McLeay, F., Tsui, B. and Lin, Z. (2018), "Consumer perceptions of information helpfulness and determinants of purchase intention in online consumer reviews of services", *Information and Management*, Vol. 55 No. 8, pp. 956-970.
- Fischer, D.G. and Fick, C. (1993), "Measuring social desirability: short forms of the Marlowe-Crowne social desirability scale", *Educational and Psychological Measurement*, Vol. 53 No. 2, pp. 417-424.
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382-388.
- Geisser, S. (1974), "A predictive approach to the random effects model", *Biometrika*, Vol. 61 No. 1, pp. 101-107.
- Green, T., Griffith, J., Aruguete, M.S., Edman, J. and McCutcheon, L.E. (2014), "Materialism and the tendency to worship celebrities", *North American Journal of Psychology*, Vol. 16 No. 1, pp. 33-42.
- Hair, J.F.J., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed., Sage Publications, Thousand Oaks, CA.
- Heaney, J.G., Goldsmith, R.E. and Jusoh, W.J.W. (2005), "Status consumption among Malaysian consumers", *Journal of International Consumer Marketing*, Vol. 17 No. 4, pp. 83-98.
- Henseler, J. and Chin, W.W. (2010), "A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modelling", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 17 No. 1, pp. 82-109.
- Henseler, J., Hubona, G. and Ray, P.A. (2016), "Using PLS path modeling in new technology research: updated guidelines", *Industrial Management and Data Systems*, Vol. 116 No. 1, pp. 2-20.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modelling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Herbig, P. and Milewicz, J. (1996), "To be or not to be... credible that is: a model of reputation and credibility among competing firms", *Corporate Communications: An International Journal*, Vol. 1 No. 2, pp. 19-29.
- Hughes, C., Swaminathan, V. and Brooks, G. (2019), "Driving brand engagement through online social influencers: an empirical investigation of sponsored blogging campaigns", *Journal of Marketing*, Vol. 83 No. 5, pp. 78-96.
- Islam, T., Sheikh, Z., Hameed, Z., Khan, I.U. and Azam, R.I. (2018), "Social comparison, materialism, and compulsive buying based on stimulus-response-model: a comparative study among adolescents and young adults", *Young Consumers*, Vol. 19 No. 1, pp. 19-37.
- Ismail, A.R. (2017), "The influence of perceived social media marketing activities on brand loyalty", *Asia Pacific Journal of Marketing and Logistics*, Vol. 29 No. 1, pp. 129-144.
- Jackson, D. (2019), "Instagram vs Facebook: which is best for your brand's strategy?", available at: <https://sproutsocial.com/insights/instagram-vs-facebook/> (accessed 8 December 2020).
- Jin, S.V. and Muqaddam, A. (2019), "Product placement 2.0: do brands need influencers, or do influencers need brands?", *Journal of Brand Management*, Vol. 26 No. 5, pp. 522-537.
- Jin, S.V. and Ryu, E. (2020), "I'll buy what she's wearing": the roles of envy toward and parasocial interaction with influencers in instagram celebrity-based Brand endorsement and social commerce", *Journal of Retailing and Consumer Services*, Vol. 55, p. 102121.
- Jin, S.V., Muqaddam, A. and Ryu, E. (2019), "Instafamous and social media influencer marketing", *Marketing Intelligence and Planning*, Vol. 37 No. 5, pp. 567-579.
- Khamis, S., Ang, L. and Welling, R. (2016), "Self-branding, "micro-celebrity" and the rise of social media influencers", *Celebrity Studies*, Vol. 8 No. 2, pp. 191-208.
- Ki, C.W.C., and Kim, Y.K. (2019), "The mechanism by which social media influencers persuade consumers: The role of consumers' desire to mimic", *Psychology and Marketing*, Vol. 36 No. 10, pp. 905-922.

- Ki, C.W., Cuevas, L.M., Chong, S.M. and Lim, H. (2020), "Influencer marketing: social media influencers as human brands attaching to followers and yielding positive marketing results by fulfilling needs", *Journal of Retailing and Consumer Services*, Vol. 55, p. 102133.
- Koay, K.Y., Ong, D.L.R., Khoo, K.L. and Yeoh, H.J. (2020), "Perceived social media marketing activities and consumer-based brand equity: testing a moderated mediation model", *Asia Pacific Journal of Marketing and Logistics*, Vol. 33 No. 1.
- Kock, N. (2015), "Common method bias in PLS-SEM: a full collinearity assessment approach", *International Journal of e-Collaboration*, Vol. 11 No. 4, pp. 1-10.
- Lee, J.E. and Watkins, B. (2016), "YouTube vloggers' influence on consumer luxury brand perceptions and intentions", *Journal of Business Research*, Vol. 69 No. 12, pp. 5753-5760.
- Lim, X.J., Radzol, M.A.R., Cheah, J.H. and Wong, M.W. (2017), "The impact of social media influencers on purchase intention and the mediation effect of customer attitude", *Asian Journal of Business Research*, Vol. 7 No. 2, pp. 19-36.
- Lou, C. and Kim, K. (2019), "Fancying the new rich and famous? Explicating the roles of influencer content, credibility, and parental mediation in adolescents' parasocial relationship, materialism, and purchase intentions", *Frontiers in Psychology*, Vol. 10, p. 2567.
- Lou, C. and Yuan, S. (2019), "Influencer marketing: how message value and credibility affect consumer trust of branded content on social media", *Journal of Interactive Advertising*, Vol. 19 No. 1, pp. 58-73.
- McGuire, W.J. (1985), "Attitudes and attitude change", in Lindzey, G. and Aronson, E. (Eds), *Handbook of Social Psychology*, Vol. 2, Random House, New York, NY.
- Min, H., Park, J. and Kim, H.J. (2016), "Common method bias in hospitality research: a critical review of literature and an empirical study", *International Journal of Hospitality Management*, Vol. 56, pp. 126-135.
- Ogden, H.J. and Venkat, R. (2001), "Social comparison and possessions: Japan vs", *Asia Pacific Journal of Marketing and Logistics*, Vol. 13 No. 2, pp. 72-84.
- Ohanian, R. (1990), "Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness", *Journal of Advertising*, Vol. 19 No. 3, pp. 39-52.
- Ohanian, R. (1991), "The impact of celebrity spokespersons' perceived image on consumers' intention to purchase", *Journal of Advertising Research*, Vol. 31 No. 1, pp. 46-54.
- Onu, C.A., Nwaulune, J., Adegbola, E. and Nnorom, G. (2019), "The effect of celebrity physical attractiveness and trustworthiness on consumer purchase intentions: a study on Nigerian consumers", *Management Science Letters*, Vol. 9 No. 12, pp. 1965-1976.
- Ortiz-Ospina, E. (2019), "The rise of social media", available at: <https://ourworldindata.org/rise-of-social-media> (accessed 8 December 2020).
- Pick, M. (2021), "Psychological ownership in social media influencer marketing", *European Business Review*, Vol. 33 No. 1, pp. 9-30.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.
- Pornpitakpan, C. (2004), "The effect of celebrity endorsers' perceived credibility on product purchase intention", *Journal of International Consumer Marketing*, Vol. 16 No. 2, pp. 55-74.
- Reeves, R.A., Baker, G.A. and Truluck, C.S. (2012), "Celebrity worship, materialism, compulsive buying, and the empty self", *Psychology and Marketing*, Vol. 29 No. 9, pp. 674-679.
- Richins, M.L. and Dawson, S. (1992), "A consumer values orientation for materialism and its measurement: scale development and validation", *Journal of Consumer Research*, Vol. 19 No. 3, pp. 303-316.

- Ringle, C.M. and Sarstedt, M. (2016), "Gain more insight from your PLS-SEM results: the importance-performance map analysis", *Industrial Management and Data Systems*, Vol. 116 No. 9, pp. 1865-1886.
- Ringle, C.M. Wende, S. and Becker, J.M. (2015), "SmartPLS 3. Bönningstedt: SmartPLS", available at: [www.smartpls.com](http://www.smartpls.com)
- Riquelme, H.E., Rios, R.E. and Al-Sharhan, N. (2011), "Antecedents of ostentatious consumption in Kuwait", *Journal of Islamic Marketing*, Vol. 2 No. 3, pp. 295-308.
- Sahu, P. (2020), "12 Benefits of engaging in influencer marketing on instagram", available at: [www.wpcodingdev.com/blog/12-benefits-of-engaging-in-influencer-marketing-on-instagram/](http://www.wpcodingdev.com/blog/12-benefits-of-engaging-in-influencer-marketing-on-instagram/) (accessed 8 December 2020).
- Saima, and Altaf Khan, M. (2021), "Effect of social media influencer marketing on consumers' purchase intention and the mediating role of credibility", *Journal of Promotion Management*, Vol. 27 No. 4, pp. 503-523.
- Sarstedt, M., Hair, J.F., Nitzl, C., Ringle, C.M. and Howard, M.C. (2020), "Beyond a tandem analysis of SEM and PROCESS: use of PLS-SEM for mediation analyses", *International Journal of Market Research*, Vol. 62 No. 3, pp. 288-299.
- Schimmelpfennig, C. and Hunt, J.B. (2020), "Fifty years of celebrity endorser research: support for a comprehensive celebrity endorsement strategy framework", *Psychology and Marketing*, Vol. 37 No. 3, pp. 488-505.
- Shmueli, G., Ray, S., Velasquez Estrada, J.M. and Chatla, S.B. (2016), "The elephant in the room: evaluating the predictive performance of PLS models", *Journal of Business Research*, Vol. 69 No. 10, pp. 4552-4564.
- Shmueli, G., Sarstedt, M., Hair, J.F., Cheah, J.H., Ting, H., Vaithilingam, S. and Ringle, C.M. (2019), "Predictive model assessment in PLS-SEM: guidelines for using PLSpredict", *European Journal of Marketing*, Vol. 53 No. 11, pp. 2322-2347.
- Solomon, M.R. (2020), *Consumer Behavior Buying, Having, and Being*, 13th ed., Pearson Education.
- Statista (2018), "Daily time spent on social networking by internet users worldwide from 2012 to 2018 (in minutes)", available at: [www.statista.com/statistics/433871/daily-social-media-usage-worldwide/](http://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/) (accessed 10 Oct 2020).
- Statista (2019), "Global social network penetration rate as of January 2019, by region", available at: [www.statista.com/statistics/269615/social-network-penetration-by-region/](http://www.statista.com/statistics/269615/social-network-penetration-by-region/) (accessed 10 Oct 2020).
- Statista (2020a), "Number of social network users worldwide from 2017 to 2025", available at: [www.statista.com/statistics/278414/number-of-worldwide-social-network-users/](http://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/) (accessed 8 December 2020).
- Statista (2020b), "Instagram accounts with the most followers worldwide as of December 2020", available at: [www.statista.com/statistics/421169/most-followers-instagram/](http://www.statista.com/statistics/421169/most-followers-instagram/) (accessed 8 December 2020).
- Stone, M. (1974), "Cross-validatory choice and assessment of statistical predictions", *Journal of the Royal Statistical Society*, Vol. 36 No. 2, pp. 111-147.
- Suzuki, K. (1978), "Acceptance and rejection of a suggestion", *Japanese Psychological Research*, Vol. 20 No. 2, pp. 60-70.
- Thomas, T. and Johnson, J. (2017), "The impact of celebrity expertise on advertising effectiveness: the mediating role of celebrity brand fit. Vision: The ", *Vision: The Journal of Business Perspective*, Vol. 21 No. 4, pp. 367-374.
- Till, B.D. and Busler, M. (2000), "The matchup hypothesis: physical attractiveness, expertise and the role of fit on Brand attitude, purchase intent and brand beliefs", *Journal of Advertising*, Vol. 29 No. 3, pp. 1-13.
- Torres, P., Augusto, M. and Matos, M. (2019), "Antecedents and outcomes of digital influencer endorsement: an exploratory study", *Psychology and Marketing*, Vol. 36 No. 12, pp. 1267-1276.
- Verduyn, P., Gugushvili, N., Massar, K., Täht, K. and Kross, E. (2020), "Social comparison on social networking sites", *Current Opinion in Psychology*, Vol. 36, pp. 32-37.

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- Wan, W.W.N., Luk, C.L., Yau, O.H.M., Tse, A.C.B., Sin, L.Y.M., Kwong, K.K. and Chow, R.P.M. (2008), "Do traditional chinese cultural values nourish a market for pirated CDs?", *Journal of Business Ethics*, Vol. 88 No. S1, pp. 185-196.
- Wang, S.W. and Scheinbaum, A.C. (2018), "Enhancing brand credibility via celebrity endorsement", *Journal of Advertising Research*, Vol. 58 No. 1, pp. 16-32.
- Wang, Y. (2016), "Social stratification, materialism, post-materialism and consumption values: an empirical study of a Chinese sample", *Asia Pacific Journal of Marketing and Logistics*, Vol. 28 No. 4, pp. 580-593.
- Weismueller, J., Harrigan, P., Wang, S. and Soutar, G.N. (2020), "Influencer endorsements: how advertising disclosure and source credibility affect consumer purchase intention on social media", *Australasian Marketing Journal*, Vol. 28 No. 4, pp. 160-170.
- Wella Yanti, K.D., Martini, L.K.B. and Sapta, I.K.S. (2019), "The effect of social, individual, and materialism factors on the purchase of purchasing luxury mixed bags and consumer attitudes as a mediation variable (behavior study in career women in denpasar)", *International Journal of Contemporary Research and Review*, Vol. 10 No. 2, pp. 21297-21308.
- Wiedmann, K.P. and von Mettenheim, W. (2020), "Attractiveness, trustworthiness and expertise – social influencers' winning formula?", *Journal of Product and Brand Management*.
- Yuan, S. and Lou, C. (2020), "How social media influencers foster relationships with followers: the roles of source credibility and fairness in parasocial relationship and product interest", *Journal of Interactive Advertising*, Vol. 20 No. 2, pp. 133-147.
- Zhou, S., Barnes, L., McCormick, H. and Cano, M.B. (2020), "Social media influencers' narrative strategies to create eWOM: a theoretical contribution", *International Journal of Information Management*, Vol. 102293.

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