A Meta-analysis of the Antecedents of Social Media Influencers' Impact

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Abstract:

Social media influencers (SMIs) have become an important part of the marketing ecosystem as shaping consumer attitudes and behavioural intentions. However, research findings are inconsistent as to what factors increase SMIs' impact. For resolute answers and understanding discrepancies, we undertake an early meta-analytical study in the nascent field of SMIs. A review of empirical research has concentrated on influencer, content and brand characteristics; and assessed attitudinal and behavioural intention outcomes with hypothesizing moderator effects of type of social media, geography and methodological diversity. A meta-analysis of bivariate correlations reveals credibility, trust and perceived expertise are the most important attributes of SMIs for attitudinal outcomes. For behavioural intentions, credibility, para-social relationship, homophily and trust are the most important attributes. Content and brand characteristics are found to play a less important role.

Keyword: social media, influencers, meta-analysis
Track: digital marketing & social media

1. Introduction

In contrast to traditional marketing media, communicating unilateral, nowadays, social media takes consumers to "a new era of democratic media consumption where consumers choose" (Kastenholz, 2021). In this new era, as "plugged in" consumers receive more messages about the product from social media influencers than from companies (Kastenholz, 2021; De Veirman, Cauberghe, and Hudders, 2017), social media influencer marketing has been getting more important. However, the marketing empirical research provides inconsistent findings. For instance, expertise, an attribute for influencers, has been supported as an important characteristic in several studies (e.g., Martensen, Brockenhuus-Schack, and Zahid, 2018; Trivedi & Sama, 2020), resulting in positive attitudes toward influencers; whereas other studies (e.g., Ladhari, Massa, and Skandrani, 2020; Wiedmann & von Mettenheim, 2020) showed that expertise has no significant effect. These conflicting results suggest that social media influencer effects vary and that the extant literature and managerial guidelines are potentially unreliable.

Consequently, in this study, we synthesize the social media influencer literature's multiple perspectives and measures and present a framework for studying social media influencers. On the basis of the developed framework, a meta-analysis is undertaken using the reported effects. The meta-analysis addresses theoretical and practical gaps in the literature by exploring the antecedents, consequences, and potential moderators of social media influencers' impact. Our meta-analysis can provide an early explanation of the observed inconsistencies in empirical research by specifying appropriate moderators. We expect that the results will help researchers of this field to reflect on their conceptual and methodological choices and will guide future theoretical development.

2. Theoretical Background

2.1 Social media influencers (SMIs)

Influencers are individuals who create valuable content, have high reputations in specific fields (Kim, Han, Yoo, and Gerla, 2017) and are followed by a large number of users on online social networks (De Veirman, Cauberghe, and Hudders, 2017). Freberg, Graham, McGaughey, and Freberg (2011, p.90) firstly defined the term social media influencers

(SMIs) as “a new type of independent third-party endorser who shapes audience attitudes through blogs, tweets, and the use of other social media.”

Along with the emergence and development, marketers have started to develop a new communication practice, influencer marketing, to take advantage of the content created by SMIs (De Veirman, Cauberghe, and Hudders, 2017). Meanwhile, since the influencer market is an evolving space (Campbell & Grimm, 2019), there are a lot of challenges and risks are embedded in influencer marketing, especially, the choice of the best-suited and most effective influencers was most discussed by scholars (e.g., De Veirman, Cauberghe, and Hudders, 2017; Campbell & Farrell, 2020).

2.2 Theoretical framework

After synthesizing all the factors through a literature review, the framework shown in Figure 1 consisting of three different types of attributes and their consequences with potential moderators can be conceived. The attributes were categorised into three: attributes for SMIs, content attributes and brand-related attributes; and the outcomes were divided into two: attitudes and behavioural intention (see Figure 1).

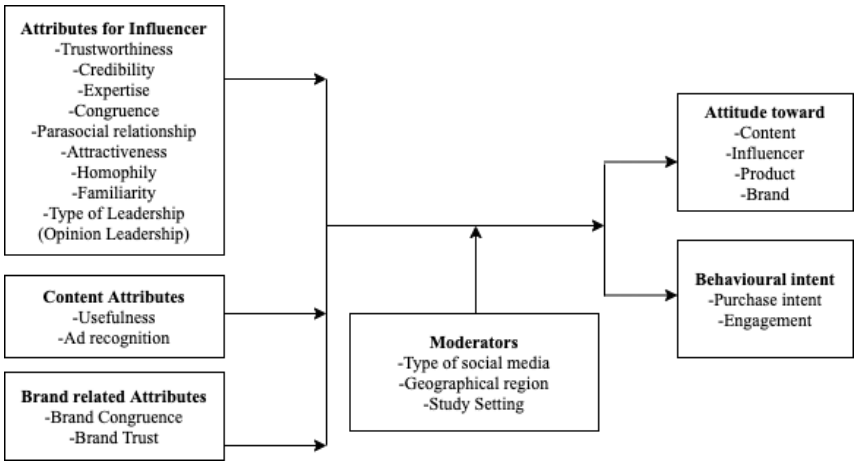

Figure 1. Meta-analytic Framework of Social Media Influencer Effects.

Variables	Definition	Sample related variables
Attributes for SMIs		
Trust/Trustworthiness	Trust is defined as “the perceived credibility and benevolence of a target of trust” (Doney & Cannon, 1997, p.36) while trustworthiness is "the perceived willingness of the source to make valid assertions" (McCracken, 1989, p. 311), thus refers to an audience’s belief that the communicator provides information in an honest, fair, sincere, and honourable manner (Chu, Kamal, and Kim, 2019).	Perceived trustworthiness, Trustworthiness dimension of source credibility
Credibiilty	Credibility is generally understood to mean that viewers trust messages, information and sources of the advertising as a result of their objective and subjective cognition (Yaakop, Anuar, and Omar, 2013).	Influencer credibility
Expertise	Expertise is a concept that indicates that the source has sufficient relevant knowledge, skills, or experience the endorser is perceived to be possessing (Erdogan, 1999; Mattson, 2005). Sternthal, Phillips, and Dholakia (1978) suggested that expertise is a component of the credibility along with the trustworthiness as showing that the credibility allows endorsers to be perceived as trustworthy (Colliander & Marder, 2018).	Expert infuencer, Expertise dimension of source credibility
Congruence	Broadly congruence refers to a match between an object and the schema it evokes (Clemente, Dolansky, Mantonakis, and White, 2014). Within the influencer context, sit refers to the extent to which the schema induced by SMIs are recognised to be aligned with the product and/or service being showcasing (Schouten, Janssen, and Verspaget 2020).	Product-endorser fit, Influencer-product congruence, Self-influencer congruence,
Para-social relationship	This refers to an imaginary relationship developed by an audience with a media persona (Horton & Wohl, 1956). In the context of SMIs, para-social relationship can be defined as the one-sided relationship followers perceive to have with an influencer (Cohen, 2014).	Influencer-follower relationship, Self-influencer connection, Wishful identification, Desire to mimic, Closeness

Attractiveness	Attractiveness stands for the physical attractiveness (i.e., appreciation) of the individual, influencing advertisement and product evaluations (Till & Busler, 2000).	Physical attractiveness, Social attraciveness, Likeability, Attractiveness dimension of source credibility
Homophily	Homophily refers to "the degree to which people who interact are similar in beliefs, education, social status and the like" (Eyal & Rubin, 2003, p. 80).	Attitue homophily, Similarity, Perceived similarity
Familiarity	Familiarity, according to Luhmann's theory of Trust and Power (2018), is a prerequisite of trust. Based on previous learning, experiences and interactions, familiarity allows people to understand factors that they encounter. In that familiarity handles with an understanding of current actions, while trust handles with beliefs about the future actions, they are distinctively different. Thus, Luhmann (2018) articulated that uncertainty can be reduced by familiarity as establishing a structure, while by trust with "relatively reliable expectations (p. 19)."	Influencer familiarity
Type of leadership (Opinion leadership)	Opinion leadership is defined as the extent to which influencer is perceived as an opinion leader for others and provides useful and interesting information (Casalo et al., 2018).\	Opinion leader
Content Attributes		
Usefulness of content	Informative post type (i.e., useful content) conveys a message through explanations about a product and/ or a brand based on facts (Cutler, Thomas, and Rao, 2000). In that followers are those who follow other users including SMIs and willing to receive automatic feeds of all posts from them, they show keen interests in them and often use them, mainly SMIs, as information sources. (De Veirman, Cauberghe, and Hudders, 2017; McCormick, 2016).	Informative, Utilitarian
Ad recognition	According to the Persuasion Knowledge Model (PKM) (Friestad & Wright, 1994), advertising recognition activates persuasion knowledge and triggers the use of various coping mechanisms, which can subsequently affect attitudinal and behavioural outcomes. Thus, the degree to which audiences pay attention to the advertising format probably influences the likelihood that they would recognize it as advertising (Boerman, Van Reijmersdal, and Neijens, 2015).	Awareness campaigns, Awarness of paid endorsement by social media influencrs
Brand related Attributes		
Brand congruence	Brand congruence refers to the similarity or consistency between the celebrity and the brand, and it is specific to a particular endorsement situation (Bergkvist, Hjalmarson, and Magi, 2016).	Fit between a influencer and a brand
Brand trust	Trust in a brand can be built through engagement and relationships with the brand (Habibi et al., 2014); however, trust can also be transferred when initial trust in a target (a person, a group or an organization) turns into trust in another target (Stewart, 2003).	Trust in brand
Behavioural Intention		
Purchase intention	Purchase intention refers to a consumer's conscious plan or intention to make a payment for a product or service (Spears & Singh, 2004).	Consumption behaviour, Behavioural intention to buy, Intention to shop
Engagement	Pansari and Kumar (2017, p. 295) define customer engagement as "the mechanics of a customer's value addition to the firm, either through direct or/and indirect contribution."	Commenting, Sharing, Likes, Creating behaviour, Contribution behaviour
Attitude	It refers to the individual's affective-evaluative predispositions to respond favourably or unfavourably toward a target or an object (Shaver, 1977). In the social media context, users are more likely to follow the content uploaded by SMIs in that the topics covered and images they portray on their accounts are particularly attractive to them (Djafarova & Rushworth, 2017).	Attitude towards advertising, Attitude toward the endorsement, Satisfaction
Attitude toward influencer		Attitude toward the endorser
Attitude toward product		Product attitude
Attitude toward content		Attitude toward brand content
Attitude toward brand		Brand attitude

Table 1. Definitions of Variables

3. Research Design

3.1 Data

In order to ensure extensive and complete coverage, I conducted a detailed bibliographic search of all empirical studies appearing in marketing and management since 2011 when the "influencer" term was firstly introduced. I searched multiple search engines: ABI/INFORM, Google Scholar, and Social Sciences Citation Index, as well as journals, using keywords such as "influencer," "micro-influencer," and "Instagrammer." To avoid the "file drawer problem" (Rosenthal, 1979), relevant doctoral dissertations were searched on UMI Dissertation Abstract.

3.1.1 Sample

The constructed database contained 27 independent samples reported in 24 articles from 2011 referring to a combined sample of 10046 respondents. The average sample had a mean proportion of female respondents of 79%. For those samples that had an origin

available, 37% were from North America, 40% from Europe and 23% from others. The accumulated data across the samples allowed for the extraction of 80 effect sizes.

3.1.2 Variables

Following Geyskens, Steenkamp and Kumar (1999), I cumulate similar constructs to generate our variables. The final sample includes 20 constructs as described in the theoretical background part with definitions. In addition, to check robustness, to check robustness, we created several other variables. The variables were coded (see Table 2 for more details).

Variable	Moderators Description	Coding
Study Characteristics		
Study Setting	The study setting was coded by survey (N = 17) or experiment (N = 10). This information was obtained from a methodological section of individual studies.	0 = Experiment 1 = Survey
Geographical Region	We defined the cultural orientation in three groups, North America (N = 10), Europe (N = 11) or Others (N = 6).	0 = North America 1 = Europe 2 = Others
Contextual Characteristics		
Type of Social Media	We identified the type of social media by Instagram (N = 12) or others (N = 15).	0 = Others 1 = Instagram

Table 2. Coding Procedure in the Meta-Analysis

3.2 Data analyses and results

3.2.1 Data integrity and study precision

Meta in R package was used to conduct the meta-analysis, which accounts for correlation among identified constructs throughout 27 studies. When bringing various studies together, it is important to consider to what extent the results of studies are consistent, statistical heterogeneity is inevitable (Higgins, Thompson, Deeks, and Altman, 2003). Thereby, I computed the Q-statistic, the heterogeneity index indicating the proportion of total variation in the pooled sample sizes and, an estimate of the between-study variance in a random-effects meta-analysis, due to heterogeneity among the studies (Higgins, Thompson, Deeks, and Altman, 2003).

In order to confirm if correlations vary systematically across studies, I modelled the variation using a random-effect (RE) parameter as well as a fixed-effect (FE) parameter. When there is heterogeneity that cannot readily be explained, one analytical approach was to incorporate it into a random-effect model, which is why both of them were presented.

In addition, to test publication bias, an editorial inclination for publishing positive results rather submitting negative (John, 2001), I used two publication bias techniques as a sensitivity analysis: (1) Egger's regression test (Egger, Smith, Schneider, and Minder, 1997) and (2) the rank-correlation test (Begg and Mazumdar, 1994). The publication bias analysis was concluded with the trim-and-fill method (Duval and Tweedie, 2000) and Rosenthal

(1979)'s Fail-safe Numbers (Fail-safe *N*) to determine the number of missing studies. Rosenthal (2005) suggested that the result can be considered sufficiently robust when the number is larger than $5k + 10$ (*k* stands for the number of studies in the model).

3.2.2 Results of meta-analysis

Most noticeably, among the 80 effect sizes, the correlation between credibility and attitude toward influencers showed significantly the highest effects (FE=0.764, RE=0.764). However, the number of studies was two and the I^2 was 0%, implying that more studies were required. Whereas, there were three studies that linked credibility to purchase intention, showing comparatively strong statistically significant effects (FE=0.642, RE=0.632). The I^2 (87.6% [65.1%; 95.6%]) indicated the effect is considerably heterogeneous, so moderator analysis should be taken into account. Egger's regression test (*z* =-0.421, *p*=0.6733) and the rank-correlation test (*tau*=-1.0000, *p*=1.0000) confirmed symmetry, which means that there is no publication bias. For this reason, the trim-and-fill method was not needed further for reanalysing. In addition, the Fail-safe *N* is 223 (*k*=2) confirmed that the model results were robust.

Followed by credibility, usefulness showed substantially high effects on purchase intention (FE=0.642, p<.0001; RE=0.632, p=0.0291). The I^2 98.9% [97.9%; 99.5%] identified the need for moderator analysis, but as there were only two studies examined, the analysis cannot be implemented. In addition, usefulness was highly correlated with opinion leadership (FE=0.632, p<.0001, RE=0.636, p=0.0291), while expertise was moderately correlated with usefulness (FE=0.422, p<0.0001, RE=0.353, p=0.360). This may show that useful contents allow audiences to perceive that SMIs are opinion leaders as experts; and the more they are opinion leaders, the more useful their contents are. Between the two studies linked usefulness to opinion leadership, publication bias was detected. As well, among the studies that examined the correlation between usefulness and purchase intention and expert, publication bias was identified as Egger's regression test (*z*=-4.616, *p*<.0001; *z*=-8.602, *p*<.0001) and the rank-correlation test (*tau*=-0.333, *p*=1.0000; *tau*=1.0000, *p*=1.0000) concluded that the asymmetry existed in each funnel plot. For this reason, to verify the severity, the trim-and-fill method should be used for reanalysing. Through the method, for the correlation between usefulness and purchase intention, no missing study was identified. In addition, the Fail-safe *N* (93, *k*=2) confirmed the robustness of the model results. Meanwhile, for the correlation between usefulness and expertise, one missing study on the right side was detected. After filling one effect size to the right of the funnel plot, the corrected estimate was

0.6490 (95% CI: 0.5844-0.7136), which was statistically significant. After conducting the method, Egger's regression test concluded that asymmetry existed in the funnel plot (z=19.697, df=2, p<.0001). In addition, the Fail-safe N (55, k = 2) explained the model results were robust. Including the most noticeable variables, mentioned above, Table 3 explained the extent to which variable impacts each outcome in more detail.

Outcome Variables	Influencing Variables	Data sets	Effect Sizes				Heterogenity					Trim-and-Fill				Fail-safe N
			Fixed Effects	p	Random Effects	p	tau^2	I^2	Q	df	p	Estimated (Corrected)	95% CI Lower	95% CI Upper	Q	
Attitude toward																
Content	***Attributes for Influencer***															
	Trust	2	0.504	< 0.0001	0.470	< 0.0001	0.0167	76.8% [0.0%; 94.7%]	4.3	1	0.0379					89
	Expertise	3	0.380	< 0.0001	0.388	< 0.0001	0.0094 [0.0000; 0.4862]	73.3% [10.5%; 92.0%]	7.5	2	0.0235					108
	Para-social Relationship	3	0.410	< 0.0001	0.384	0.0046	0.0147	83.9% [33.4%; 96.1%]	6.2	1	0.0128					165
	Homophily	2	0.258	< 0.0001	0.274	< 0.0001	0.004	44.50%	1.8	1	0.1796					28
	Influencer Familiarity	3	0.126	< 0.0001	0.108	0.3005	0 [0.0000; 0.0677]	0.0% [0.0%; 89.6%]	0.8	2	0.6707					0
	Brand related Attributes															
	Brand Congruence	5	0.431	< 0.0001	0.414	< 0.0001	0.0217 [0.0059; 0.2009]	90.1% [79.8%; 95.2%]	40	4	< 0.0001					164
	Brand Trust	2	0.144	< 0.0001	0.144	< 0.0001	0	0%	0	1	1					15
Influencer	***Attributes for Influencer***															
	Credibility	2	0.765	< 0.0001	0.765	< 0.0001	0	0%	1	1	0.322					223
	Content Attributes															
	Ad Recognition	2	-0.304	< 0.0001	-0.238	0.3515	0.1317	97.0% [92.1%; 98.8%]	33	1	< 0.0001	-0.463	-0.536	-0.390	89.625	24
Product	***Attributes for Influencer***															
	Trust	2	0.570	< 0.0001	0.521	< 0.0001	0.0354	87.6% [51.6%; 96.8%]	8	1	0.0046	0.611	0.537	0.685	11.381	112
	Expertise	2	0.465	< 0.0001	0.465	< 0.0001	0	0%	0.1	1	0.715					82
	Congruence	2	0.457	< 0.0001	0.458	< 0.0001	< 0.0001	1.80%	1	1	0.313					371
	Para-social Relationship	2	0.299	< 0.0001	0.336	0.0004	0.0146	74.4% [0.0%; 94.2%]	3.9	1	0.048					38
	Homophily	2	0.272	< 0.0001	0.349	0.0318	0.0527	91.3% [69.2%; 97.5%]	11	1	0.0007	0.200	0.126	0.274	22.637	34
	Influencer Familiarity	2	0.076	0.0698	0.121	0.2505	0.0178	77.9% [3.7%; 94.9%]	4.5	1	0.0333	0.028	-0.046	0.102	11.358	3
Brand	***Attributes for Influencer***															
	Trust	2	0.554	< 0.0001	0.554	< 0.0001	0	0%	0.1	1	0.7045					94
	Expertise	2	0.531	< 0.0001	0.531	< 0.0001	0	0%	0.5	1	0.4707					164
	Attractiveness	2	0.497	< 0.0001	0.513	< 0.0001	0.0306	91.6% [70.8%; 97.6%]	12	1	0.0005					963
Behavioural Intention																
Purchase	***Attributes for Influencer***															
Intention	Trust	6	0.476	< 0.0001	0.483	0.0132	0.0194 [0.0053; 0.1375]	84.6% [68.2%; 92.5%]	32	5	< 0.0001					1211
	Credibility	3	0.643	< 0.0001	0.633	< 0.0001	0.0180 [0.0035; 0.9316]	87.6% [65.1%; 95.6%]	16	2	0.0003					888
	Expertise	5	0.390	< 0.0001	0.392	< 0.0001	0.0142 [0.0024; 0.1266]	83.0% [61.3%; 92.6%]	24	4	< 0.0001					697
	Congruence	4	-0.045	0.0956	0.012	0.9645	0.3005 [0.0967; 4.5166]	99.0% [98.5%; 99.3%]	297	3	< 0.0001	0.313	-0.050	0.676	407.121	478
	Para-social Relationship	6	0.523	< 0.0001	0.472	< 0.0001	0.0302 [0.0072; 0.1599]	92.6% [86.6%; 95.9%]	67	5	< 0.0001					2985
	Attractiveness	4	0.389	< 0.0001	0.393	< 0.0001	0.0379 [0.0097; 0.5578]	92.5% [84.1%; 96.5%]	40	3	< 0.0001					487
	Homophily	5	0.515	< 0.0001	0.491	< 0.0001	0.0498 [0.0171; 0.5035]	94.6% [90.1%; 97.0%]	74	4	< 0.0001					818
	Influencer Familiarity	2	0.051	0.2263	0.066	0.2916	0.0037	42.40%	1.7	1	0.1878					0
	Opinion Leadership	2	0.267	< 0.0001	0.270	0.1932	0.088	97.2% [92.9%; 98.9%]	36	1	< 0.0001					38
	Content Attributes															
	Usefulness	2	0.632	< 0.0001	0.636	0.0291	0.2347	98.9% [97.9%; 99.5%]	95	1	< 0.0001					206
	Brand related Attributes															
	Brand Congruence	3	0.141	< 0.0001	0.141	0.1517	0.0275 [0.0061; 1.1579]	93.7% [85.1%; 97.4%]	32	2	< 0.0001					32
	Brand Trust	4	0.440	< 0.0001	0.453	< 0.0001	0.0289 [0.0077; 0.4271]	93.2% [85.8%; 96.7%]	44	3	< 0.0001					548
Engagement	***Attributes for Influencer***															
	Para-social Relationship	2	-0.335	< 0.0001	-0.280	0.2233	0.1092	97.6% [94.2%; 99.0%]	42	1	< 0.0001					49
	Content Attributes															
	Ad Recognition	2	-0.215	< 0.0001	-0.168	0.3631	0.0654	94.1% [81.3%; 98.1%]	17	1	< 0.0001	-0.339	-0.412	-0.266	49.503	12

Note: CI = confidence interval.

Table 3. Descriptive Statistics and Results of Meta-Analysis

3.2.3 Moderator analysis

We hypothesized that the reported effects would vary by type of social media, geography, as well as methodological diversity. As several correlations were found in which moderator effects should be taken into account through the meta-analysis, Table 4 included the correlations that can be examined, having more than two samples. Most noticeably, type of social media, geographic region and study setting moderated between brand congruence and attitude toward content at 0.452; as followed, the type of social media and study setting moderated between expertise and attitude toward content at 0.417. In addition, brand trust and

purchase intention were moderated by the type of social media and the geographical region at 0.445. Meanwhile, apart from them, there was no noticeable finding; and, overall, due to the small sample size, there were limitations on moderator analysis to see more precisely.

Outcome Variables	Influencing Variables	Moderators		Estimate	SE	z	p	Cl.lb	Ci.ub	Q	df	p
Attitude toward												
Content	***Attributes for Influencer***											
	Expertise	Type of Social Media		0.417	0.038	10.873	<.0001	0.342	0.493	2.127	2	0.345
		Geographical Region		0.068	0.135	0.503	0.615	-0.197	0.332	0.253	1	0.615
		Study Setting		0.417	0.038	10.873	<.0001	0.342	0.493	2.127	2	0.345
	Brand related Attributes											
	Brand Congruence	Type of Social Media		0.452	0.030	14.959	<.0001	0.392	0.511	0.000	1	1.000
		Geographical Region		0.452	0.030	14.959	<.0001	0.392	0.511	0.000	1	1.000
		Study Setting		0.452	0.030	14.959	<.0001	0.392	0.511	0.000	1	1.000
Behavioural Intent												
Purchase	***Attributes for Influencer***											
Intention	Trust	Type of Social Media		-0.117	0.067	-1.755	0.079	-0.247	0.014	3.078	1	0.079
		Geographical Region	North America	-0.084	0.150	-0.562	0.574	-0.379	0.210	0.342	2	0.843
			Europe	-0.032	0.095	-0.334	0.739	-0.218	0.155			
		Type of Social Media		0.081	0.088	0.918	0.359	-0.092	0.254	0.843	1	0.359
	Expertise	Media Platform		-0.167	0.074	-2.265	0.024	-0.311	-0.022	5.130	1	0.024
		Geographical Region	North America	0.082	0.111	0.735	0.462	-0.136	0.300	4.307	2	0.116
			Europe	0.139	0.067	2.061	0.039	0.007	0.271			
		Study Setting		0.111	0.075	1.489	0.137	-0.035	0.257	2.217	1	0.137
	Para-social Relationship	Type of Social Media		0.056	0.107	0.522	0.602	-0.154	0.266	0.272	1	0.602
		Geographical Region	North America	-0.003	0.123	-0.023	0.982	-0.244	0.239	0.540	2	0.764
			Europe	-0.125	0.176	-0.708	0.479	-0.471	0.221			
		Study Setting		0.183	0.082	2.218	0.027	0.021	0.344	4.920	1	0.027
	Attractiveness	Type of Social Media		-0.147	0.131	-1.125	0.261	-0.404	0.109	1.265	1	0.261
		Geographical Region	North America	0.163	0.177	0.920	0.358	-0.184	0.511	2.305	2	0.316
			Europe	-0.103	0.144	-0.715	0.474	-0.384	0.179			
		Study Setting		-0.115	0.142	-0.811	0.418	-0.394	0.164	0.657	1	0.418
	Homophily	Type of Social Media		0.004	0.215	0.018	0.986	-0.418	0.426	0.000	1	0.986
		Geographical Region		0.195	0.182	1.068	0.286	-0.163	0.552	1.141	1	0.286
		Study Setting		0.248	0.153	1.625	0.104	-0.051	0.548	2.641	1	0.104
	Brand related Attributes											
	Brand Trust	Type of Social Media		0.445	0.069	6.430	<.0001	0.309	0.580	NA	NA	NA
		Geographical Region		0.445	0.069	6.430	<.0001	0.309	0.580	NA	NA	NA
		Study Setting		-0.151	0.168	-0.902	0.367	-0.480	0.177	NA	NA	NA

Table 4. Descriptive Statistics and Results of Moderator Analysis

4. Discussion

Overall, a meta-analysis of bivariate correlations revealed that credibility, trust and perceived expertise are the most important characteristics of SMIs for attitudinal outcomes. Meanwhile, for behavioural intention outcomes, credibility, the strength of the para-social relationship, homophily and trust are the most important attributes. Even though content and brand characteristics are found to play a less important role on attitudinal and behavioural intention outcomes, the usefulness of content was noteworthy along with perceived expertise and opinion leadership of the SMIs characteristics.

Concerning the direct effects, the results revealed that higher credibility most significantly impacts positively on attitude toward influencer and purchase intention. Followed by credibility, the usefulness of content showed a relatively high impact on

purchase intention. In addition, given that usefulness was highly correlated with opinion leadership and moderately correlated with expertise, this may show that useful contents allow audiences to perceive that SMIs are opinion leaders as experts; and the more they are opinion leaders, the more useful their contents are. This can be in line with that an influencer's expertise, competence and leadership within the network determine if the influencer posits opinion leadership (Koohikamali et al., 2015). Moreover, even though there were conflict findings of expertise, through the meta-analysis, it could be confirmed that expertise's moderate but significantly positive effect on attitude toward content, product and brand as well as purchase intention. Last, trustworthiness was the variable impacting all outcomes apart from attitudes toward influencers and engagement. Drawing upon the credibility model (Chopra et al., 2020), it is noteworthy to see the impact of trustworthiness because attractiveness, also a source of credibility, showed weak and limited effects on outcomes.

5. Conclusions

This meta-analysis has focused on two outcomes – attitude and behavioural intention, driven by attributes for influencers, content attributes and brand-related attributes. This concluded as paying more attention to the effect of credibility on attitude toward influencer and purchase intention; usefulness of content on purchase intention and trustworthiness on all of the outcomes apart from attitudes toward influencer and engagement. Overall, credibility, trust and perceived expertise were the most important characteristics of SMIs for attitudinal outcomes; while credibility, para-social relationship, homophily and trust are the most important attributes for behavioural intentions than content and brand characteristics.

While SMIs literature has yielded many insights on main effects, as with all empirical studies, specific limitations of this study were acknowledged. These can be used to spur further research into influencer marketing. First, only those studies that provided enough statistical information to run the tests. Second, we restricted the sample to studies written in English, so there can be possible that including non-English-speaking research would have influenced the estimates. Third, although some of the effect size calculations rely on a relatively small number of effects, few studies have featured such variables. Due to those limitations, there may be additional studies that are not in the sample that could have led to significant findings for reported and unreported outcome variables.

In spite of the limitations, this meta-analytical study provided resolute answers and understanding discrepancies of inconsistent findings. In addition, as what factors affect

positively consumers' attitudes and behavioural intents in influencer marketing, marketers and influencers can take into account those factors when managing or creating content. Furthermore, aspects of SMIs as entrepreneurs can be taken into account for future research.

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