

The effect of social media influencer attributes towards pro-environmental intention

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Abstract: The advertising preferences have changed, putting massive pressure on marketers to bring forward impactful advertising sources. In a previous study, the endorsers such as social media influencers were found to be the most effective strategy at this time. Relatively, the endorsers' attributes, namely source credibility and source attractiveness, increase the advertisement's success rate by influencing people's attitudes and intentions. The millennial is reported as the most relevant generation to embrace the more substantial concern of interacting with social media, which is also seen as a generic group that emphasizes the environmental issue. According to Google's report, the internet searches for 'How to live a sustainable lifestyle' have increased 4,550 per cent in the first quarter of 2020. This study is aimed to scrutinize the effect of social media influencer attributes towards attitude and pro-environmental intention. The data collection method was distributed using a purposive convenience sampling of 300 datasets and analyzed using IBM SPSS 25 and Smart PLS 3.0. The result of this study confirmed the attitude to mediate between exogenous and endogenous variables. An in-depth review of the implications, limitations, and future study are further discussed.

Keywords: Social Media Influencer (SMI), Endorser Attributes, Pro-Environment, Source Credibility, Source Attractiveness, Malaysia.

1. Background

Environmental issues have become a crucial concern to be discussed globally. It is reported that around 2.01 billion waste is generated annually by the world-population and is projected to lead to a 33 per cent rise by 2050 (Kaza et al., 2018). The major environmental issue is related to waste mismanagement, consequently contributing to the climate problem, damaging human health and local habitats. Accordingly, waste management has become a critical issue in Malaysia because of population growth (Bashir et al., 2017; Bashir et al., 2018). The total number of Malaysia waste production is around 30,000 tons daily, and only 15% of the waste is recycled (Bashir et al., 2107). In this respect, Malaysia's production of waste increased more than Malaysia's utilities can accommodate and the total waste production statistically increased by 91 per cent from 2003 to 2013 (Samsudin & Don, 2103). This alarming situation on waste management encouraged the Malaysian Government to consider the 6th Malaysia Plan (M.P.) environmental issues for 1991-1995 until the 11th Malaysian Plan 2016-2020. The Malaysian Government focused explicitly on solving the environmental issue to educate and increase the society's propensity to become more concerned about the well-being of nature and the environment. Consequently, one way to effectively create change is to position learning programmed on environmental issues in society, especially to the young age group that reflects the future generation (Bashir et al., 2017). This will then mean promoting new prospects such is social media influencer marketing to draw interest for communities to be more dedicated and concerned about these crucial issues.

1.1. Social media influencer

The endorsement is one of the most popular marketing methods that has gained significant attentions in the marketing literature and business promotion (Keel & Natarajan, 2012; Schimmelpfennig, 2018; Twose, 2013). With social media today even more than before, endorsers like social media influencer can have an extreme impact on the ads (Keel & Natarajan, 2012, Lu

& Seah, 2017). Influencers include celebrities, brand community members, bloggers, and experts specialized in specific topics (Puah et al., 2018; Kim et al., 2014; Lee & Watkins, 2016), sharing the contents on social media and often posting their experience in the events hosted by a brand to promote its products. They also work as spokespersons by endorsing the product, raising awareness campaigns, and increasing brand awareness and consumer engagement (Nordqvist, 2018). Hence, the relationship duration with followers, the relative share of posts, and network size are essential for influencer qualities that create a larger effect on marketing communication (Chatterjee, 2011).

The study's developments regarding social media influencer (SMI) have seen increased attention as the advertising preferences have inclined towards a fast and convenient method (Freberg et al., 2011). This is mainly caused by the rapid enhancement of technology adoption and the modification of people's communication preferences. The social media influencer is also seen as one of the most influential endorsement strategies that can denote people's attraction to online traffic and establish effective outreach strategies (Booth & Matic, 2011; Freberg et al., 2011). Thus, it is observed an acceptance and increasing awareness of the crucial role that social media influencer plays in ensuring the business's profitability growth (Lim et al., 2017). Therefore, understanding how social media influencers play their role to achieve market competitiveness is critical to ensure business survival. However, some scholars agree that the studies pertaining the social media influencer are still scant, particularly the study on another prospect in non-profits marketing for instance the awareness campaign (Nawi, 2018).

1.2. Endorser in non-profit settings

Past research on endorsement literature discusses the role of the endorsers as effective communication between the target audience and campaign in non-profit settings (Annuar et al., 2018; Park & Cho, 2015). The non-profit organizations have most frequently been using the endorser's effectiveness, such as celebrity endorsement to benefit the campaign's success rate (Samman et al., 2009; Wheeler, 2009; Matti, 2018). Consequently, some scholars have proposed that an organization start disseminating valuable and educational information via social media (Feng et al., 2017; Waters et al., 2009). This information will increase the value of awareness behaviour intention by encouraging a person to become acquainted with the mechanism and outcomes of the charitable cause, social issue and to be inspired by the experiences of individuals who have been supported (Feng et al., 2017).

2. Literature review and hypothesis development

Several research studies in advertising/ promotional confirmed that the endorsers' attributes could profoundly affect the target audience's attitude (Seno & Lukas, 2007; **Fleck et al., 2012; Wang, 2017**). In advertising endorsement strategy, there was growing development of the study focusing on the influencers' attributes, e.g. (source credibility and source attractiveness) and their potential contributions to the success of a campaign (Kahle & Homer, 1985; Ohanian, 1990, Amos et al., 2008; Muda et al., 2014). Hence, this study examines the effectiveness of social media influencer attributes (source credibility and source attractiveness) as the campaign's endorsers to influence the attitude and pro-environmental intention of the target audience. The current study also provides the valuable understandings to assist the marketing practitioner in designing their promotional strategy.

2.1. Source credibility

When a source portrays itself as credible, people or receivers are more likely to be convinced (Hovland et al., 1963). Source credibility is substantially used to evaluate the effectiveness of the advertising endorsement, which contains two elements that are generally discussed expertise and trustworthiness (Hovland & Weiss 1951; Ohanian, 1990). The endorser's credibility towards advertisement positively affects reviewer perception (Goldsmith et al., 2000). Till & Busler (2000) explained that expertise positively influences both attitude and intention in determining behaviour.

The endorser who is viewed as an expert and is trusted tend to be more persuasive (Kaikati 1987) and can generate a change in the consumer's attitude creating intention towards the advertisement motive (Ohanian 1990). Thus, the information exposed by a credible source (e.g., social media influencers) can affect consumer beliefs, attitudes, and behaviours (Wang et al., 2017).

H1a Source credibility of social media influencer has a significant effect on attitude

2.2. Source attractiveness

Previous research has shown that physically attractive individuals more effectively facilitate attitude change (Chaiken, 1979). The attractiveness construct of a message sender is not limited to physical attractiveness related to their elegance and class, but it also encompasses other attributes, such as similarity, familiarity, and likeability (McGuire, 1985). Effective advertising may well rely on the spokesperson's influential power due to admiration and their status as role models (Bower & Landreth, 2001; Raven et al., 1998). A literature review on the attractiveness of a source indicates that attractiveness is a significant attribute in determining a celebrity endorser's effectiveness towards the attitude and intention (Chao et al., 2005). Accordingly, Erdogan (1999) concluded irrefutably that attractive endorsers enrich consumer attitudes toward both advertising and brands.

H1b Source attractiveness of social media influencer has a significant effect on attitude

2.3. Attitude

An individual's attitude toward a certain behaviour is the degree to which the individual has a favourable or unfavourable behavioural assessment. Ajzen & Fishbein (1980, 2000) claimed that attitude was an amount of each behavioural conviction compounded by each consequence's assessment. The attitude in marketing perspective is an individual's internal assessment of a related topic advertisement, campaign, products, brands and has been an essential concept to determine behavioural intention in marketing research since the 1960s (Wahid & Ahmed, 2011). The attitude towards social media influencers is associated with the source that the endorser attributes to the messages communicated by the social media influencer, enabling customers to accept them and identify with them until they display changes in their attitude and intention (Lim et al., 2017).

H2a the attitude has a significant effect on intention towards the pro-environment intention

2.4. Mediating effect of attitude

Environment intention is known as individuals' emotional engagement with various environmental issues, which interests the individual about the environment because of the importance of affection and anxious feelings it carries for the self (Yeung, 2004). Environmental attitude is a dynamic mental state that involves beliefs and principles about how to act in an environmentally friendly manner, and it taps into the consumer's cognitive judgement regarding the relevance of environmental conservation and green living (Lee, 2009). Hence, for this study, consumer attitudes towards social media influencers are related to both favourable and unfavourable beliefs delivered by the endorsers (Phelps and Hoy, 1996). Source credibility is one of the sufficient attributes in altering the consumer attitude, thus motivating the intention in the advertising campaign (Brinol et al., 2004). The degree of intention is relatively high if the potential consumer bonding positive attitude to the endorser, consequently, have been proven in (Chan et al., 2013). The source credibility of expertise and trustworthiness has been discussed as an essential construct in endorsement literature (Ohanian, 1990). Liu et al., 2007) claimed that these constructs positively influence the attitude will relatively influence the intention, which means more likely to positively affect the endorsers' advertising (Metzger & Flanagin, 2013).

H3a Attitude mediates the relationship between credibility and intention towards the pro-environmental intention

Source attractiveness also is one of the most effective attributes to persuade the potential and existing consumer to concern about the advertisement endorse by the endorser (Ohanian, 1990). This attribute could positively enhance attitude and intention (Ahmad et al., 2019; Liu et al., 2007). Wang & Scheinbaum (2017) asserted that an advertisement promoted by an attribute might lead to a change in customer attitudes and intention. For that reason, these occurrences aspire to be tested in this study as the individual's attitude can positively influence the influencer's attractiveness.

H3b Attitude mediates the relationship between source attractiveness and intention

3. Research model

The S-O-R theory has been discussed in the literature, which describes the three components, i.e., Stimulus (cognition), organism (effect) and response (action) in consumer behaviour and marketing research (Jacoby, 2002; Rajaguru, 2014). This theory assumes that environmental factors employ as internal state stimuli, which then form the optimal stimulus-response. In the endorsement study, people interested in the endorser are expected to pay attention to the endorser's advertisements (Peng & Kim, 2014). Individuals, therefore, usually choose stimuli that they believe are related to their interest (Wu & Li, 2017). Influencers in social media today seem to manipulate people to participate in online promotional activities and lead to changing perceptions and intentions, allowing them to easily trigger memories that would encourage better exposure as the endorser (Goi et al., 2014).

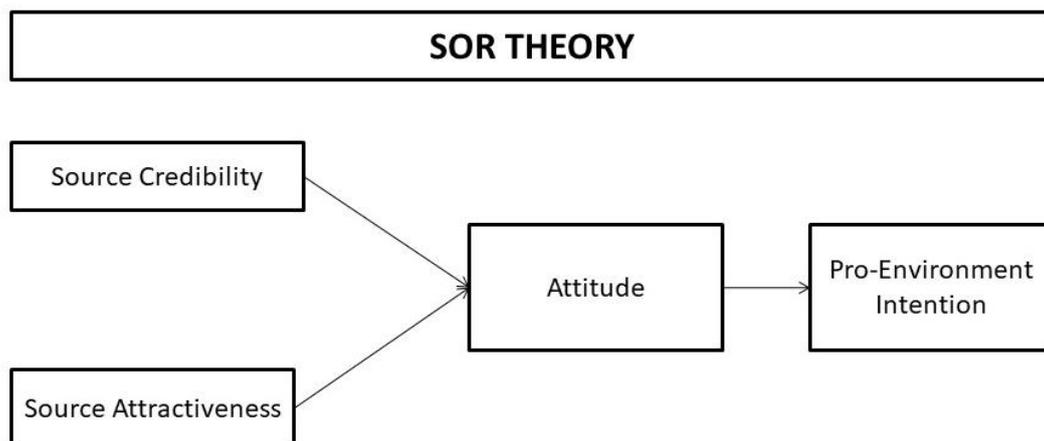


Figure 1. Conceptual framework

4. Methodology

4.1. Sampling and Data Collection

The data collection of this study employed 300 survey questionnaires using purposive convenience sampling. The target population are the millennial in Kota Kinabalu, Sabah, Malaysia. The minimum sample was calculated using G-Power for the minimum sample size (Faul et al. 2007).

4.2. Questionnaire and Measurements

The structured questionnaires positioned the demographic profile in the initial section. The next section represents the variables employed for this study. All the latent variables were measured based on previously validated measurements. Source credibility (trustworthiness and expertise) are measured by adapting from Ohanian (1990), attractiveness measured by adapting Ohanian (1990), attitude measured adapting by Goldsmith (2000) and intention measured by

adapting Kumar (2010). All the exogenous and endogenous variables are measured using a 5-point Likert scale. The highest value designates the greater support.

5. Analysis & findings

The frequency of respondents' profile shown in Table 1. Respondents in this study was comprised of 57.7% males and 42.3% females, predominantly millennial whose ages were between 23-27 years old. In terms of education level, 55.7% of students in diploma level, 36.7% of the respondents possessed a basic degree, 5.3% with a master qualification, and 2.3% currently had PhD qualifications. 77.7% of the respondent are the student, 11% is currently working in the government sector, 7.7% are currently working in the private sector, 2.3% are unemployed, and 1.3% self-employed.

Table 1. Descriptive analysis

Demographic Variables	Categories	Frequency	Per cent	Cumulative Percent
Gender	Male	173	57.7	57.7
	female	127	42.3	100
	Total	300	100	
Age	23-27 years	222	74	74
	28-32 years	45	15	89
	33-38 yeas	33	11	100
	Total	300	100	
Education	Diploma	167	55.7	55.7
	Basic Degree	110	36.7	92.3
	Master	16	5.3	97.7
	PhD	7	2.3	100
	Total	300	100	
Working Field	Student	233	77.7	77.7
	Government Sector	33	11.0	88.7
	Private Sector	23	7.7	96.3
	Self-employed	4	1.3	97.7
	Unemployed	7	2.3	100.0
	Total	300	100.0	

According to the analysis, the reflective construct consists of source attractiveness, attitude, and intention have fulfilled the threshold value requirement for the formative measurement model (refer to Table 2). The analysis shows that all the loadings exceeded the recommended value of 0.708 for composite reliability (CR.). AVEs (Average Variance Exacted) was greater than 0.5 (Hair et al., 2017). Therefore, all constructs met the reliability and convergent validity requirements. Discriminant validity was evaluated using the Heterotrait-Monotrait (HTMT) ratio of correlations technique (Henseler et al., 2014). As shown in Table 3, all values for reflective constructs passed the threshold value of HTMT <0.85 (Kline, 2010) and HTMT <0.90 (Gold et al. 2001), thereby indicating the discriminate validity of the measurement model was ascertained.

Table 2. Reflective measurement models

Construct	Item	Loadings	AVE	CR	Cronbach's Alpha
Attractiveness	SATTR1	0.818	0.676	0.926	0.904
	SACLA2	0.839			
	SAELE3	0.827			
	SASIM4	0.806			
	SAFAM5	0.857			
	SALIK6	0.784			
Attitude	ATTCON	0.800	0.620	0.891	0.846
	ATTUND	0.801			
	ATTPER	0.749			
	ATTCOP	0.765			
	ATTPRO	0.820			
Intention	INTPE1	0.757	0.565	0.839	0.743
	INTPE2	0.742			
	INTPE3	0.747			
	INTPE4	0.761			

Table 3. HTMT criterion

	Attitude	Attractiveness	Intention
Attitude			
Attractiveness	0.692 [0.586, 0.783]		
Intention	0.875 [0.796, 0.936]	0.547 [0.424, 0.649]	

Note: Heterotrait -Monotrait ratio of correlations (HTMT)= 0.85 (Kline, 2011), 0.90 (Gold et al., 2011)

Table 4. Formative measurement model

Construct Level		Convergent Validity	Weight	VIF	t-value weights	Sig	
HOC	LOC						
Source Credibilit	SCKNO1	0.793	0.804	3.785	17.325	0.000	**
	SCEXP2		0.779	3.895	13.121	0.000	**
	SCINT3		0.846	3.748	16.765	0.000	**
	SCHON4		0.914	3.257	32.515	0.000	**
	SCBEL5		0.925	3.237	42.863	0.000	**
	SCDEP6		0.877	3.378	17.364	0.000	**

The formative construct is measured according to the suggestion by Chin (1988) to evaluate the redundancy analysis. Table 4 indicated the formative construct yield the path coefficient of 0.793 greater than 0.70, thus supporting the formatively measured and has sufficient convergent validity degrees. Besides, all the formative indicators for multicollinearity satisfy the VIF value, which is consistently lower than 5 (Heir et al., 2017). To conclude, the outer weight's significance and relevance show that all the formative indicators are significant. Table 5 present the lateral collinearity assessment. The result indicated that all the inner VIF values consist of the independent variable (source credibility and source attractiveness) >5 , thus meeting the requirement of the threshold value suggested by (Hair et al., 2017). Therefore, there are no multicollinearity issues of concern for this study.

Table 5. Lateral collinearity assessment

	ATTITUDE	INTENTION
ATTITUDE		1.000
ATTRACTIVENESS	2.464	
CREDIBILITY	2.126	

In this study, three direct hypotheses have been tested based on the constructed framework. Table 6 indicated the result of the path coefficient assessment. According to the analysis using PLS 3.0 bootstrapping, the significance level, t-value, has been generated. The result of the analysis path coefficient shows that all three-relationships were significant. The predictor source credibility ($\beta=0.251$, $t=3.179$, $p<0.05$), source attractiveness ($\beta=0.155$, $t=1.727$, $p<0.05$), attitude ($\beta=0.696$, $t=19.133$, $p<0.05$). In conclusion, H1a, H1b and H2a are supported.

Table 6. Path coefficient assessment

Hypothesis		Std Beta	Std Error	T-Value	P-value	Decision
H1a	Credibility -> Attitude	0.251	0.073	3.179**	0.001	Significant
H1b	Attractiveness -> Attitude	0.155	0.096	1.727**	0.042	Significant
H2a	Attitude -> Intention	0.696	0.036	19.133**	0.000	Significant

The bootstrapping analysis was performed to examine the mediation effect (Preacher & Hayes, 2008). Table 7 demonstrates that both indirect effects H3a and H3b were supported. The result from the analysis $\beta=0.196$ and $\beta=0.178$ with the t-value of 2.738 and 1.938, respectively. The 95% bootstrap confident interval results did not straddle the value of 0 between upper and lower intervals (Preacher & Hayes). The result for confident interval shows H3a [LL=0.088, UL=0.331] and H3b [LL=0.001, UL=0.314], 0 was not straddled between and specified the mediation exist in H3a and H3b and consequently support H3 and H3b.

Table 7. Indirect Relationship (Mediating Effect)

Hypotheses	Relationship	Std. Beta	Std. Error	T- Value	Confident Interval		Decision
					5.00 %	95.0%	
H3a	Credibility Attitude -> Intention	-> 0.196	0.072	2.738**	0.088	0.331	Mediation
H3b	Attractiveness Attitude -> Intention	-> 0.178	0.093	1.938*	0.001	0.314	Mediation

The next assessment was R^2 (Coefficient of determination). R^2 is also stated to as in-sample predictive power (Rigdon, 2012). The R^2 ranges from 0 to 1, with higher values indicating a greater explanatory power. The result for this study indicates that the predictor for attitude has a 52.20% (0.522) explanation of the variances in attitude and fulfils the suggested R^2 value guideline, R^2 values of 0.75, 0.50 and 0.25 can be considered substantial, moderate and weak (Henseler et al., 2010; Hair et al., 2014) and R^2 must be greater than 0.26 to establish a substantial model according to Cohen (1988). Besides, the R^2 value for intention is 0.484, which means that the predictor (attitude) explains that 48.40% of variances in intention and complies with Cohen's recommendation (1988). This study's effect size f^2 for this study can be observed that attitude contributes to a large effect size of 0.938 in producing R^2 for the intention.

6. Discussion

This study discovers the effects of source credibility and source attractiveness towards the attitude. Independent variables consist of source credibility, and the attractiveness of social media influencers has had a significant effect on attitudes and intentions in the advertising campaign. Consequently, H1a and H1b are accepted. The encouragement of the source credibility and source attractiveness on the personal attitude alteration was acknowledged at the same time by some scholars (Petty et al., 1981; Kahle & Homer, 1985; Kamins, 1990; Ohanian, 1990; Djafarova and Rushworth, 2017). Since influencers usually cultivate credible and appealing online personas, it is not surprising to observe that influencers' perceived trustworthiness and attractiveness can affect their followers' trust in their social media content. Moreover, followers tend to follow influencers with whom they identify, and thus followers' perceived similarity to influencers positively affects their trust in influencer-generated branded posts.

The second significant finding was the analysis of the path coefficient for determinant the effect of attitude and intention towards pro-environmental intention. The results of this analysis indicated that attitude has a positive and significant effect on pro-environmental intention. Thus, H2a is accepted. According to Grafström et al., (2018), millennial attitudes are influenced by social media influencer for several factors, such as the coordination of advertisements presented by the influencer and the credibility of the messages and the attraction the physical attractiveness of the influencer.

The third significant finding answered the examination of H3a and 3b. It was found that the attitude of the respondent demonstrated to have a substantial effect as the mediator. Thus, the result of this study confirmed the attitude to mediate between exogenous and endogenous. Therefore, H3a

and H3b is supported. Environmental research has claimed that a person's attitude towards pro-environmental can be a strong predictor of intention and behaviour in an environmental study (Staats, 2003). Consequently, according to Ajzen (2005), the attitude is usually can influence new information or circumstances.

6.1. The implication of the study

The review of social media influencers in commercial marketing is comprehensive. However, social media influencers' effects on non-profit marketing were only addressed in limited studies, particularly in the environmental campaign. This research adds to the body of knowledge by exploring social media influencers' effect on environmental awareness campaigns by measuring credibility and attractiveness. In determining the attitude and intention towards pro-environmental intentions, these two variables claimed as an imperative structure. In addition, to the extent of theoretical implication, the SOR model was employed in this study to understand the effect of social media influencers on pro-environmental intention. This study provides social marketing researchers with perspectives on social media influencers' attributes on corporate social performance. Besides, this paper serves as a reference for social marketers and relevant authorities in enhancing their social media awareness campaigns, especially on environmental issues.

6.2. Limitations and future research

As the review of social media influencer is still limited, specifically in bringing the endorsement in a non-profit context, this study still needs to be reviewed further as communication preference has been affected by the technology. As this study focuses only on the millennials, it is more important to recognize other generation cohorts' views to achieve a generalization result.

As social media influencer's effect on the environmental issue has been validated, future research should consider different issues apart from the environmental aspect. Public awareness is significant to increase enthusiasm and support, promote self-mobilization and action, and mobilize local knowledge and resources. To identify the problem and establish a key solution in the policy adaptation process, raising awareness of several issues is vital for policymakers and politicians. Awareness-raising requires strategies for effective communication. The 'awareness-raising campaign' can be broadly described as combining these communication strategies for a targeted audience for a given period. According to each context, the goal of awareness-raising campaigns generally includes increasing concern, informing the target audience, creating a positive image, and changing their behaviour. While in the first stages of the adaptation process, awareness-raising is often considered significant, research shows that awareness levels fluctuate over time under external variables' influence.

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