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Mediating Role of Parasocial Relationships on Social Media Influencers' Reputation Signals and Purchase Intention of Beauty Products

Abstract

Social media influencer has become an important component of marketing communication. Hence, this research aims to determine the facets of social media influencers' reputation signals (communication skills, influence, perceived authenticity, and perceived expertise) that contribute to the customers' purchase intention of X beauty products, mediates by the parasocial relationship. The study applied the Stimulus-Organism-Response (S-O-R) model and used a survey design. The results showed that the communication skills and expertise of the social media influencers have a significant relationship with parasocial relationships, and the parasocial relationship has a significant relationship with purchase intention. In addition, the parasocial relationship was found to mediate the relationship between the expertise of social media influencers and purchase intention. The study provides valuable insights to public relations and marketing practitioners of the beauty industry to be used in building a successful social media marketing strategy.

Keywords: Social media influencers' reputation signals, parasocial relationships, purchase intentions, beauty industry, promotional persuasive communication

Introduction

In recent years, the collaboration between organizations and influencers to reach their social media target audiences has increased significantly (Jiménez-Castillo & Sánchez-Fernández, 2019). Influencers are seen as the modern era's opinion leaders, and they regularly promote products on social media (Sokolova & Kefi, 2020). Many organizations have employed social media influencers (SMIs) as a marketing communication strategy to extend their engagement with customers. Millennials, the first all-digital generation, prefer to con-

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nect over mobile messages and social network sites, and the usage of SMI as a marketing strategy has grown significantly (Wielki, 2020; Nafees et al., 2021).

Since January 2021, over 4.66 billion Internet users were active on social media of which over 4.2 billion were active users (We Are Social, 2021). Social media growth has changed the way retailers operate their business. For instance, of 100 socially traded customers, 87% visit the website of the brand, 78% advise family or friends, and 67% spend on social brands (Barnhart, 2019). Mobile technology developments in the previous few decades have boosted the use of social media. More than 3.6 billion social media users were active by the year 2021 (Statista, 2021). Therefore, brands must make use of social media networks to increase their visibility and improve brand connections with their target customers (Kemp, 2020).

The beauty industry is particularly intriguing when it comes to social media advertising. This sector has grown in line with improvements in advertising and marketing communication. The industry's revenue has risen from \$30.79 billion in 2003 to \$511 billion in 2021, and the sector is expected to increase by 4.75 percent every year (Statista, 2021). Successive SMIs may be viewed as influential communicators who can influence others people's attitudes and behaviors toward a certain brand or product (Godey et al., 2016).

Beauty vloggers or beauty influencers are the new role models in the beauty sector. They are considered people who exchange beauty-related information and knowledge (Hassan, Teo, Ramayah, & Al-Kumaim, 2021). Companies are now employing SMIs to market their cosmetics goods due to the popularity of beauty gurus, particularly among young girls. For example, L'Oréal, MAC, Estée Lauder, NYX, Glossier, Lush, Becca, Milk Makeup, Kylie Cosmetics, and Melt Cosmetics are among the top companies that frequently employ SMIs as part of their marketing communication strategy (CrowdMedia, 2019).

Furthermore, studies show that Malaysians spend more time on social media platforms watching videos (Wong, 2017). According to Ngu (2018), marketers and company owners are increasingly using influencer marketing in their firms, and customers rely on influencers for guidance and suggestions before making a purchase. Social networking sites have recently enabled customers with real-time access to influencer content and broad information, making the evaluation of individuals and organizations easier than ever for consumers.

Although there are many studies on celebrity endorsements (McCormick, 2016; Lim, et al., 2017; Abbas et al., 2018), few focus on social media influencers. Research on eWOM and bloggers (Erkan & Evans, 2016; Zhou et al., 2021) has been particularly flourishing. Relevant studies have focused on countries such as, the United States (Davis, 2016), Indonesia (Ananda & Wandebori, 2016; Rahmi, Sekarasih, & Sjabadhyni, 2016), Saudi Arabia (Konstantopoulou et al., 2018), Sweden (Linnér, Taha, & Carlsson, 2018), and Macau (Liu, Kei, Liu, & Tseng, 2018). To the best of our knowledge, there has been no similar study conducted in the Malaysian setting, particularly focusing on the SMI's reputation signals, where Ryu and Han (2021), have urged to reexamine it in a different setting.

Other researchers examined the effect of followers' traits on their parasocial relationships (PSR) with the influencers. According to Lee and Watkins (2016), more research should be done with diverse cultures in mind. Several studies have been conducted on celebrity product placement in traditional media such as television (Deller, 2016), as well as the influence of celebrity endorsements on companies in traditional media (Djafarova & Rushworth, 2017). Despite being acknowledged as one of the most widely utilized promotional communication strategies, social media influencer marketing has received little attention in academic research, where the focus is mostly on conventional celebrity endorsements (Ki & Kim, 2019).

Previous research indicates a significant connection between SMIs and purchasing intentions (McCormick, 2016; Onofrei, Filieri, & Kennedy, 2022). However, when tested on blog content, Johansen and Guldvik's (2017) findings did not show a significant effect of influencer marketing on purchase intention. Previous studies have shown that this can have a variety of effects on consumers' behavior (Wong et al., 2020). Users can, however, continue to purchase and be influenced by the opinions of influencers online, such as on social media sites (e.g., Instagram, YouTube, and Facebook) (Glucksman, 2017).

PSR is a crucial influence on consumers' information adoption and decision-making processes; specifically, they have a significant impact on brand equity, such as brand attitude and purchase intention (Chung & Cho, 2017). The notion of PSR has revealed the formation and process of how consumers' decisions are impacted and shaped; nevertheless, additional research is required to further ascertain the role that PSR plays in how consumers acquire information and make decisions. Most importantly, even though the nature of consumer relationships has shifted from linear to interactive, little research has been undertaken on the role of PSR and its use in the communication field (Chung & Cho, 2017; Escalas & Bettman, 2017, Tengku Mohd Azzman Shariffadeen & Manaf, 2020). Although PSR has been proven to have a favorable influence on brand attitudes and future purchasing intentions, it is still unclear what characteristics of the influencers will form the relationship, which makes the findings inconsistent (Chung & Cho, 2017).

Besides, the influencer-follower emotional attachment which focuses primarily on the importance of pseudo-connections (i.e., parasocial relationships) in understanding promotion effectiveness remains under-researched (Aw & Labrecque, 2020; Moraes, Gountas, Gountas, & Sharma, 2019). Given the empirical gaps, this study aims to examine social media influencers' reputation signals on the purchase intentions of X customers with PSR as a mediator in a Malaysian beauty company.

Parasocial Relationships, Social Media Influencers' Reputation Signals and the S-O-R Model

The theoretical underpinning of this study is based on Mehrabian and Russell's (1974) application of the Stimulus-Organism-Response (S-O-R) model, where the external stimuli from the environment (Stimulus) produce internal feelings (Organism), which result in behavior, (Response). In this study, the stimuli (S) are the SMIs' reputation signals (communication skills, influence, authenticity, and expertise), the organism (O) is the PSR, and the response is purchase intentions (R). Several empirical studies have revealed that various contextual signals can predict and impact customers' real online impulsive purchase behavior (Kim & Lennon, 2013; Ariningsih, Nainggolan, & Sandy, 2018).

Furthermore, Djafarova and Bowes (2021), used this model to explore how Instagram can increase consumer impulsive purchase behavior in the fashion industry. Influencers, promotional ads, and user-generated materials, can elicit positive customer feelings and impulse purchases. Prior findings support the use of the S-O-R paradigm to investigate how SMIs' eWOM developed using various narrative strategies influences consumer reactions. Leong, Jaafar and Ainin (2018) used the S-O-R model to explain the positive effects of Facebook marketing stimuli on impulsive purchase intentions. Zheng et al., (2019) investigated the urge to buy impulsively as a behavioral reaction, in the context of mobile commerce, and conclud-

ed that aesthetic appeal and accessibility had an impact on impulse purchase behavior. Besides, Barros et al., (2019) revealed that retail environment characteristics such as layout and music had a positive impact on customer impulse buying behavior in an offline scenario. Casalo, Flavián and Ibáñez-Sánchez (2020) effectively applied the S–O–R model to Instagram, with brand publications serving as the stimulus, creativity and good feelings serving as the organism, and emotional commitment and engagement intents serving as the response. This study draws on the S-O-R model to examine the SMIs impact on people's purchase intention of beauty products in Malaysia.

Parasocial relationship

Parasocial relationship (PSR) refers to a one-sided and long-term intimate relationship that an audience has with a media personality or celebrity as a result of frequent interactions with them via a mediated reality (Dibble, Hartmann, & Rosaen, 2015). The concept of parasocial relationships can explain consumer-celebrity relationships formed through social media exchanges (Chung & Cho, 2017). Previous studies in this area suggested that consumer-endorsers ties are a strong predictor of endorsement effectiveness as well as influencers' capacity to convince the customers (Aw & Labrecque, 2020; Carlson et al., 2020; Wellman et al., 2020).

Communication skills of SMIs and parasocial relationships

Yuksel and Labrecque (2016) demonstrated that social media has made it easy for influencers to share lifestyle insights with their followers, and this form of participatory behavior can increase PSR. Furthermore, communication openness and connection attempts can facilitate the creation of PSR on social media. PSR, as demonstrated by Labrecque (2014), can be developed through social media message content indicators (i.e., perceived interactivity and openness in communication). Furthermore, Bond (2016) discovered that social contacts with an influencer on social media, such as retweets or Twitter comments, enhanced PSR and were more important in the development of a relationship with the SMIs. Open and engaging communications may generate emotions of familiarity with the SMIs, which can enhance the follower's ability to relate to the SMIs. We hypothesize that:

H1: There is a positive relationship between the communication skills of SMIs and parasocial relationships.

SMIs Influence and parasocial relationships

Consumers are influenced cognitively, emotionally, and behaviorally by PSR relationships (Yuksel & Labrecque, 2016; Sokolova & Kefi, 2020). Influence happens in the form of consumer attitudes, interests, attention allocation, and relationship formation, whereas emotional influence can impact the mood and create emotional reactions or inspiration. SMIs purposefully use influence to create a sense of closeness and togetherness and build a relationship (i.e., PSR) (Ferchaud et al., 2018; Yuksel & Labrecque, 2016). This influence attempts to serve as meaning indicators that consumers use to meet their needs and define emotional attachment with SMIs.

Surveys and experiments have been utilized in previous studies to study elements impacting influencer marketing outcomes. Common outcome measurements include follower' be-

havioral intentions, such as the desire to interact, refer, and, most significantly, purchase based on an influencer's recommendation (Casaló et al., 2018; Escalas & Bettman, 2017; Ki & Kim, 2019; Lee & Watkins, 2016; Lou & Yuan, 2019; Sokolova & Kefi, 2020). Thus, our second hypothesis states that:

H2: There is a positive relationship between the SMIs' influence and parasocial relationships.

Perceived authenticity of SMIs and parasocial relationships

According to Djafarova and Rushworth (2017), micro-influencers, or content creators on YouTube, Instagram, and Facebook, exhibit higher levels of authenticity and exert a greater amount of influence. Djafarova and Rushworth (2017) further highlighted that audiences choose sources with high authenticity and see them as more trustworthy. Since PSR closely represents this mental process of interacting and building a relationship, it is suggested that authentic content not only influences the effectiveness of promotions but also creates PSR. Previous research has found that those who do not disclose personal details in their social media communications may be perceived as dishonest and unauthentic (Chung & Cho, 2017). In addition, Cohen and Tyler (2016) examined how ghost-tweeting impacts online personalities and authenticity, as well as how this influences PSR. According to their research, media figures that are seen to be authentic are perceived to be such because they communicate realistic and genuine experiences that will lead to favorable PSR. As a result, the third hypothesis of our study is formulated as follows:

H3: There is a positive relationship between the perceived authenticity of SMIs and parasocial relationships.

Perceived expertise of SMIs and parasocial relationships

The expertise of SMIs in presenting information to viewers greatly increases PSR interactions with media consumers (Xiang, Zheng, Lee, & Zhao, 2016). Expertise is one of the criteria that celebrities and public people must have to be deemed a competent recommendation (Chan, Selvakumaran, Idris, & Adzharuddin, 2021). Previous studies have connected vlogger expertise to popularity and attractiveness, PSR, purchase intentions, brand awareness, and brand attitudes (Hill, Troshani, & Chandrasekar, 2017; Kim, Kandampully, & Bilgihan, 2018; Munnukka et al., 2019; Sakib, Zolfagharian, & Yazdanparast, 2019; Ismagilova et al., 2020). Furthermore, previous research highlighted that expertise is a vital element for an influencer to form an emotional relationship with the follower, i.e. a PSR. Moreover, it was discovered that when an influencer is perceived to be an expert, followers will form PSR with them (Sakib et al., 2019). In their study, Sakib et al., (2019) describe credibility as including aspects of trust and expertise, indicating that the two influence PSR. In addition, according to Xiang et al., (2016), expertise has a significant impact on the establishment of PSR. Thus, we hypothesize that:

H4: There is a positive relationship between the perceived expertise of SMIs and parasocial relationships.

Parasocial relationship and purchase intention

According to Lee and Watkins (2016), consumers' PSR with vloggers had a positive impact on brand perception (including brand value, brand-user-imagery fit, and brand luxury perception), which affects purchase intentions, because their PSR with vloggers increased their desire to own luxury brands. In addition, greater PSR may increase brand like and purchase intentions (e.g., Hwang & Zhang, 2018; Kim, Ko, & Kim, 2015). Similarly, when items were marketed by influencers with customers who had developed PSR, consumers were found to have positive attitudes about them (Knoll et al., 2015) and high intentions to purchase them (Kim et al., 2015). Moreover, previous studies on PSR indicated that it had a beneficial influence on customer purchase intention, this is because PSR incorporates relational elements such as authenticity, expertise, and social influencing power (Hwang & Zhang, 2018). This further supported the notion of Sokolova and Kefi (2020), PSR is a component that significantly increases purchase intention. As a result, the hypothesis is formulated as follows:

H5: Parasocial relationships will have a positive relationship with purchase intentions.

Parasocial relationships mediate social media influencers' reputation signals and purchase intentions

Since SMIs provide reciprocal connections by constantly creating material and communicating with their followers, followers can form long-term social and emotional attachments to them (Bond, 2016; Chen, 2016; Kurtin, O'Brien, Roy, & Dam, 2018). The PSR has been found to mediate the relationship between consumers' social media interactions and endorser effectiveness (Chung & Cho, 2017), users' exposure to YouTube, their relationship with YouTube influencers, and consumers' brand engagement and brand loyalty (Kurtin et al., 2018).

For instance, Lou and Kim (2019) examine the role of PSR as a mediator between influencer content, credibility, parental mediation, and purchase intentions. Their findings suggest that PSR can boost purchase intentions among adolescents and mediates the relationship between those factors and purchase intentions.

In another study done by Zhou, Su, and Mou (2021) to examine PSR effects as a mediator between website logos as animated spokes characters and advertising, the results indicated that PSR affects animated spokes characters to produce advertising effectiveness. According to Gong and Li (2017), the connection between source attractiveness and celebrity endorsement effectiveness is mediated by PSR (attitude toward the advertisement and the product). The findings of their study reveal that the influence of source attractiveness on endorsement effectiveness is completely mediated by PSR.

In addition, a study was conducted to examine the impact of PSR in mediating the attributes of followers and social media influencers' characteristics and behavioral intents. The findings also indicated that PSR mediates the relationship between the qualities and behavioral intentions of followers and social media influencers (Al Sulaiti, 2020; Masuda, Han, & Lee, 2022). Additionally, the mediating role of PSR in the relationship between source credibility and travel intention was investigated. It was found that the trustworthiness and expertise sub-dimensions of source credibility significantly impacted travel intention and PSR played a significant mediating role between the trustworthiness and expertise sub-dimensions and travel intention (Yilmazdogan, Dogan & Altıntaş, 2021).

Sokolova and Kefi (2020) discovered that PSR provides a connection between expertise and purchase intention. PSR has a strong beneficial effect on followers' purchase intention. In addition, PSR was also found to mediate the association between source attractiveness and celebrity endorsement efficacy (attitude toward the advertisement and the product) and their results showed that the influence of source attractiveness on endorsement effectiveness is significantly mediated by PSR (Gong & Li, 2017). Drawing on research on PSR as a mediator, our study proposes the following hypotheses:

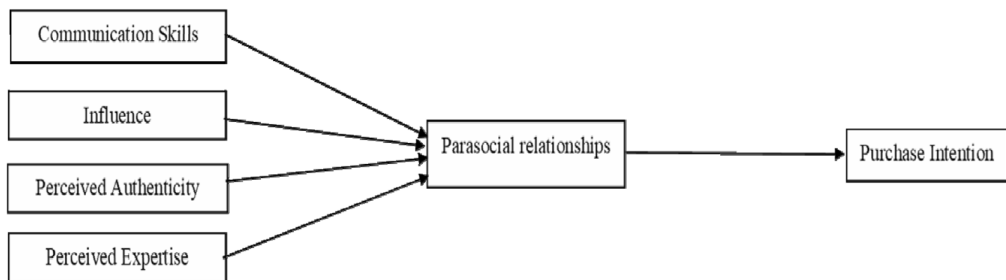
H6a: Parasocial relationships mediate the relationship between the communication skills of SMIs and purchase intentions.

H6b: Parasocial relationships mediate the relationship between SMIs' influence and purchase intentions.

H6c: Parasocial relationships mediate the relationship between the perceived authenticity of SMIs and purchase intentions.

H6d: Parasocial relationships mediate the relationship between the perceived expertise of SMIs and purchase intentions.

Figure 1. Proposed Conceptual framework



Methodology

Research Design

To test the hypotheses, the study used a quantitative design with an online survey questionnaire. According to Sekaran and Bougie (2016), the survey is the common method of quantitative data collection. The deductive paradigm is associated with the positivism paradigm (Gray, 2014) as the research begins with a theory/model about reality, then hypotheses (assumptions) are produced and tested empirically (Johnson, 2012). The purpose of deductive research is to explain the relationship between variables.

Sampling procedure

For this research, a purposive sampling technique was used, the researchers determine beforehand whether the respondents know the social media influencers who endorse X beauty products. Based on Saunders, Lewis, and Thornhill's (2019) requirement, a minimum of 150 sample sizes are needed. The target respondents of the study were customers of X and were followers of X social media influencers. A total number of 230 responses were received, but after an initial screening, 190 responses were valid to be used.

For identifying the required sample size, G*Power software was used. After calculating the effect size of 0.15, and the power of 0.95, with 4 predictors, the minimum sample size required is 129 responses. Hence, 190 valid responses were sufficient to use for data analysis.

Measurement

The survey includes four main components, namely the respondents' demographic data, SMIs' reputation signals, PSR, and purchase intentions. Section A is a demographic section that consists of six questions. The first six questions are the demographic profile of the respondents namely, gender, age, race, the highest level of education, income, and lastly a screening question on whether the respondent knows the X brand social media influencers, to filter the valid responses. Section B contained 34 questions on the SMIs' reputation signals. The items measured on the four exogenous variables, namely communication skills, influence, authenticity, and expertise were adapted from Ryu and Han (2021). Section C has a total of 4 questions on purchase intention, where the items were adapted from Coyle and Thorson (2001). Lastly, Section D consists of 5 questions on PSR adapted from Perse and Rubin (1988). A five-point Likert-type scale ranging from (1) strongly disagree (2) disagree (3) somewhat agree (4) agree, and (5) strongly agree, was implemented to measure each item in Sections B, C, and D.

Data collection procedure

The self-administered questionnaire was distributed to the customers through various social media platforms including email and WhatsApp. As this study is focusing on the SMIs' reputation signals, the respondents were asked the survey questionnaire whether they know or follow any social media influencers that endorse X beauty products (screening question). If the answer is "No", then the respondents can stop answering the remaining of the survey items.

In the online survey, respondents were conveniently approached and were requested for voluntary participation. In addition, confidentiality and anonymity were guaranteed for respondents. The survey instrument was, therefore, self-explanatory to prevent ambiguity. The online survey questionnaire was conducted in Malaysia between October 6th to November 8th, 2021.

Common Method Variance

The current study's response data was self-reported, and the identical questionnaire was administered at a single point. As a result, of this study utilizing Harman's single factor (statistical method) and procedural approach, the data were evaluated for common method variance (CMV) (Podsakoff et al., 2003). To test the CMV, SPSS version 26 was used. The results showed that the first component explained 35.267% of the overall variations. As a result, the single component explains less than half of the entire variation. As a result, no obvious CMV related issues were identified in this study.

Results

Majority of the respondents 73.2% were females, while 26.8% were males. There were 13.7% of respondents aged <21 and 63.2% of respondents aged between 21-25 and 20.5%

of respondents aged between 26-30, while only 1.6% were aged 31-35, and 1.0% were >35. This forecasts Gen Z being more familiar with the concept of social media influencers and searching for beauty-related information on social media. For the type of customers, more than half (57.9%) of the respondents were international, while 42.1% were locals. As for the level of education, it shows that the majority of the respondents are educated and have a Bachelor's degree (83.7%) whereas only 4.2% are STPM/ foundation/ diploma and 12.1 % are Master's degree holders which shows that the respondents are educated and able to make a wise choice. In terms of monthly income, more than half (54.7%) of the respondents had an average income between RM2001 and RM3000, indicating most of the respondents were secured with jobs and had purchasing power.

Table 1. Demographic profile of respondent (n=190)

Demographic	<i>f</i>	%
Gender		
Male	51	26.8
Female	139	73.2
Type of Customer		
Local / Malaysian	80	42.1
International	110	57.9
Age		
<21	26	13.7
21- 25	120	63.2
26-30	3	1.6
>35	2	1.0
Race		
Malay	27	14.2
Chinese	44	23.2
Indian	7	3.7
Others	112	58.9
Education		
STPM/Foundation/Diploma	8	4.2
Bachelor's degree	159	83.7
Master's degree	23	12.1
Income		
<RM2000	64	33.7
RM 2001- RM3000	104	54.7
RM 3001 – RM 4000	15	7.9
>RM 4000	7	3.7

Measurement model assessment

Since all measurement items of the research variables are reflective, evaluating the reliability and validity is critical. The construct reliability may be determined using factor loading and composite reliability (CR) (Hair et al., 2014; Henseler, Ringle, & Sinkovics, 2009).

As shown in Table 2, the loading of all elements in their respective constructions is greater than 0.6 which was suggested by Byrne (2016). Cronbach alpha for each construct exceeded the 0.7 threshold value established by Robinson et al., 1991). Furthermore, the estimated CR values of all constructs surpassed 0.70 (Hair et al., 2014). Following that, convergent validity was computed using the Average Variance Extraction (AVE) (Hair et al., 2010; Hair et al., 2014). For verifying convergent validity, the AVE of each construct in the study model must be more than 0.50 as proposed by (Hair et al., 2014). As seen in Table 2, the AVE values for all constructs above the threshold value of 0.5, hence, convergent validity is established.

Table 2. Assessment of measurement model

Construct	<i>Items</i>	<i>Loading</i>	<i>Cronbach's Alpha</i>	<i>CR</i>	<i>AVE</i>
Communication skills (CS)	CS1	0.797	0.846	0.890	0.619
	CS2	0.779			
	CS3	0.800			
	CS4	0.817			
	CS5	0.740			
Influence (IN)	IN2	0.717	0.794	0.854	0.541
	IN3	0.737			
	IN4	0.813			
	IN5	0.637			
	IN6	0.762			
Authenticity (Au)	Au1	0.703	0.806	0.852	0.535
	Au2	0.740			
	Au3	0.757			
	Au4	0.697			
	Au5	0.759			
Expertise (Ex)	EX1	0.723	0.909	0.947	0.646
	EX2	0.786			
	EX3	0.763			
	EX4	0.854			
	EX5	0.834			
	EX6	0.840			

	EX7	0.818			
Parasocial relationships (PSR)	PSR1	0.769	0.929	0.872	0.630
	PSR2	0.746			
	PSR3	0.839			
	PSR4	0.824			
	PSR5	0.785			
Purchase Intentions (PI)	PI1	0.883	0.779	0.872	0.824
	PI2	0.915			
	PI3	0.922			
	PI4	0.911			

Note: CR= Composite reliability, AVE = Average Variance Extraction

Discriminant validity is demonstrated if all the Heterotrait-Monotrait (HTMT) values obtained are less than the required threshold of HTMT.90, as proposed by Gold, Malhorta, and Segars (2001). As demonstrated in Table 3, the HTMT values less than the threshold value of HTMT 0.90 indicated that discriminant validity is established.

Table 3. HTMT Ratio

Constructs	Au	CS	Ex	IN	PI	PSR
Au						
CS	0.691					
Ex	0.815	0.612				
IN	0.635	0.575	0.757			
PI	0.409	0.622	0.404	0.320		
PSR	0.364	0.465	0.491	0.375	0.568	

Structural model assessment

To examine and assess the structural model, the bootstrapping approach with 5000 samples as suggested by (Preacher & Hayes, 2008) was utilized. The significant level of route coefficient and coefficient of determination (R^2) may be used to measure the structural model's dependability (Hair et al., 2014). As a result, the PLS Algorithm and bootstrapping techniques were used to create route coefficients, t values, and coefficients of determination (R^2).

As illustrated in Table 4, Communication skills ($\hat{a} = 0.311$, $t = 2.312$, $p = 0.021$) exerted a positive significant effect on PSR. In addition, the study showed that the expertise of SMIs has a positive impact on PSR ($\hat{a} = 0.326$, $t = 2.477$, $p = 0.014$) and exerted a significant positive effect on PSR. Furthermore, PSR positively affects purchase intentions ($\hat{a} = 0.513$, $t =$

7.072, $p = 0.000$). To summarize the direct relationships, it is found that H1, H4, and H5 were supported, while H2 and H3 were not supported, where the influence and authenticity of SMIs did not significantly influence the PSR.

Table 4. Structural model results of direct relationships

<i>Hypotheses</i>	<i>Path</i>	<i>Std. Beta</i>	<i>Std. Error</i>	<i>T-Value</i>	<i>P</i>	<i>CI:[LL-UL]</i>	<i>Decisions</i>	<i>R²</i>	<i>Q²</i>	<i>f²</i>	<i>VIF</i>
H1	CS->PSR	0.311	0.056	2.312**	0.021	0.073-0.385	Supported	0.249	0.129	0.038	1.644
H2	IN->PSR	0.018	-0.125	0.211	0.833	-0.114-0.181	Not Supported			0.000	2.514
H3	Au -> PSR	0.012	-0.158	0.120	0.940	0.147-0.211	Not supported			0.000	2.284
H4	Ex -> PSR	0.326	0.045	2.477**	0.014	0.078-0.519	Supported			0.058	1.790
H5	PSR -> PI	0.513	0.380	7.072	0.000	0.389-0.642	Supported	0.263	0.208	0.360	1.000

1-tailed test; CI = Confident Interval; LL = lower bound; UL = upper bound

Figure 2. Structural model

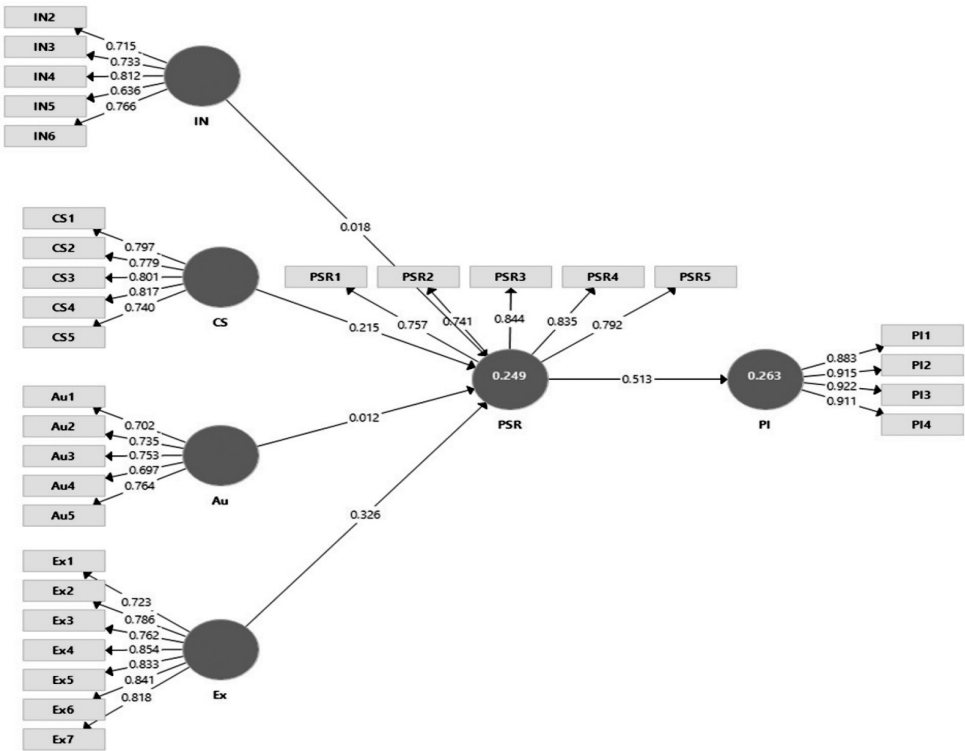


Table 5, indicates that PSR does not mediate the relationship between communication skills, influence, authenticity, and purchase intention. The findings show that PSR mediates the relationship between expertise and purchase intention of X products (H6d: $\hat{a} = 0.167$, $t = 2.673$, $p = 0.008$). To summarize the indirect effects, the results of the indirect effect suggest that H6d was supported, but H6a, H6b, and H6c were not supported.

Table 5. Structural model results of indirect relationships

<i>Hypotheses</i>	<i>Path</i>	<i>Std. Beta</i>	<i>Std. Error</i>	<i>t-values</i>	<i>P</i>	<i>CI: [LL-UL]</i>	<i>Decision</i>
H6a	CS-> PSR -> PI	0.110	0.036	1.703	0.089	0.087 – 0.390	Not Supported
H6b	IN-> PSR -> PI	0.009	-0.053	0.206	0.837	0.113 – 0.159	Not Supported
H6c	Au-> PSR -> PI	0.006	-0.067	0.109	0.913	-0.150 – 0.178	Not supported
H6d	Ex -> PSR -> PI	0.167	0.057	2.673*	0.008	0.109 – 0.533	Supported

2-tailed test; CI = Confident Interval; LL = lower bound; UL = upper bound

Following that, the research looked at the coefficient of determination (R^2), which measures the explanatory ability of the model (Henseler et al., 2009). R^2 values of 0.75 are regarded as significant, 0.50 as moderate, and 0.25 as weak (Hair et al., 2014). The output of this study found that communication skills, influence, authenticity, and expertise together explain weak variance in PSR ($R^2 = 24.9\%$). Also, PSR explained the weak variance of purchase intentions ($R^2 = 26.3\%$).

Furthermore, f^2 represents the importance of the exogenous construct in explaining the variance in the endogenous construct (Hair et al., 2014), with f^2 values of 0.35 indicating a large effect size, 0.15 indicating a medium effect size, and 0.02 indicating a small effect size (Cohen, 1988). As shown in Table 4, the generated results show that influence (0.000) and authenticity (0.000) exert a weak effect on PSR, while communication skills (0.038) and expertise (0.058) indicate a large effect on PSR. Moreover, PSR (0.360) exerts a large effect on purchase intentions.

PLSpredict was used to examine the prediction capability of the model under study. The findings of the PLS-SEM model are compared to the results of the naive linear regression (LM) benchmark model in Table 6. Since all Q^2 predict values are greater than zero, the comparison of both models may proceed. The root mean squared error (RMSE) data are used to compare predictive power (PLS-SEM – LM), which has high symmetrically distributed prediction errors (Shmueli et al., 2019). When the RMSE statistical values of the PLS-SEM model are compared to the RMSE statistical values of the naive LM benchmark model, the majority of the indicators reveal that the RMSE values of the PLS-SEM are less than the RMSE values of the naive LM benchmark. Therefore, the results can be summarized according to the prediction guidelines as follows: There is (i) low predictive power for purchase intentions and (ii) moderate predictive power for PSR.

Table 6. PLS predict

Items	PLS-SEM		LM		PLS-SEM – LM		Interpretation
	RMSE	Q ² _predict	RMSE	Q ² _predict	RMSE	Q ² _predict	
PI1	0.661	0.166	0.620	0.265	0.041	-0.099	Low
PI2	0.730	0.166	0.700	0.235	0.030	-0.069	
PI3	0.718	0.193	0.689	0.258	0.029	-0.065	
PI4	0.704	0.142	0.657	0.254	0.047	-0.112	
PSR5	0.884	0.034	0.927	-0.064	-0.043	0.098	Moderate
PSR2	0.646	0.161	0.730	-0.069	-0.084	0.230	
PSR1	0.661	0.198	0.698	0.107	-0.037	0.091	
PSR4	0.935	0.032	0.932	0.038	0.003	-0.006	
PSR3	0.776	0.090	0.824	-0.028	0.048	0.118	

Discussions

The empirical results showed that communication has a positive and significant effect on PSR, which provides support for H1, which shows that the customers engaging with SMIs who have good communication skills can help form a PSR. Open and interactive communications may generate emotions of familiarity with the influencer, their style, and motives for advertisements, which may enable the follower to relate to the influencer. These findings are in line with the research conducted by Labrecque (2014) which found that communication and attempts at interaction can facilitate the creation of PSR on social media. The findings are also in line with Isyanto, Sapitri, and Sinaga (2020), who found that communication and interaction with the influencer enhanced the PSR with followers.

The findings of this research illustrated that influence of SMI does not exert a significant positive effect on PSR, thus H2 was invalidated, which is in line with previous studies (Johansen & Guldvik, 2017; Hermanda, Sumarwan, & Tinaprillia, 2019) indicating that the influence endorsement has little effect on PSR. The inconsistency can be caused by collecting data in a collectivistic country where people seem to trust traditional endorsers more.

The third hypothesis H3 indicated that the authenticity of influencers has an impact on PSR. However, the results contradicted the findings of Cornelis and Peter (2017) who found that genuine authentic material is valued. The inconsistency in this research can be explained by Audrezet, De Kerviler, and Moulard (2020), that SMIs are not questioned as authentic, but the material they share is frequently seen as unauthentic due to its commercial nature. Cohen and Tyler (2016) revealed that when followers realize that famous and influential figures' social media tweets are produced by professional writers or public relations agents (a technique known as "ghost tweeting"), their perception of the celebrity's authenticity declines, which explained authenticity of the SMI was not significantly related to PSR.

The findings of our study have demonstrated that expertise had a considerable favorable influence on PSR, thus confirming H4. According to Xiang et al., (2016), the degree of a PSR affects how individuals evaluate information expertise. This conclusion is consistent with the findings of Wright (2017) on beauty bloggers, which found that users of social media are more likely to participate in PSR if they are influencers with a higher degree of product knowledge (socially and/or physically).

PSR and purchase intentions have also showed a positive and significant relationship. This highlights the importance of PSR between social media influencers and followers for inducing purchase intention and implies that PSR is essential to the customer's intention to purchase. These findings are consistent with those of previous studies by Knoll et al. (2015) and Kim et al. (2015), who discovered that when products were promoted by SMIs actively on the social media platform, the customers will develop a PSR, where consumers who had positive opinions about the SMIs will have strong intentions to purchase the products. This study is compatible with Sokolova and Kefi (2020) who found that followers who are favorable to the influencer are more likely to purchase the evaluated items, as compared to followers who are not strongly attached to the influencer.

Furthermore, H6a to H6d suggest that the PSR mediates the relationship between SMI's reputation signals and purchase intention. In terms of the influencers' characteristics, the findings indicate that even if the influencer had the expertise, participants in this study would not demonstrate purchase intention unless they have a PSR with the influencer. Considering there are not many studies on the mediating influence of PSR, this can be considered one of the main contributions of our research to literature in the field.

Our findings are comparable to those of Sokolova and Kefi (2020) who indicated that as followers get more connected to or obsessed with the influencer, they are more likely to buy than less attached or obsessed followers. Furthermore, the findings of our study are comparable to those of Ananda and Wandebodi (2016). Soat's (2014) findings indicated that expertise is an important factor in allowing customers to trust influencers and make a purchase decision. However, the result contradicts the conclusions of Linnér et al. (2018). Followers would not necessarily like all the content presented by the influencer, or consider them authentic, but could be generally impacted by the expertise of the person, which would make them look for other posts and content. Then, the purchase intention could be affected by communication skills, influence, and authenticity of the SMI (Kulmala, Mesiranta, & Tuominen, 2013).

Conclusion

In conclusion, SMI's reputation signals, namely communication skills and expertise have a significant impact on PSR. In turn, a long-term connection of PSR may influence consumers' purchase intentions. However, in this study PSR only mediates the expertise and purchase intentions.

Academic Contributions

The research provides important theoretical contributions since it demonstrates the applicability of the S-O-R model to explain the SMIs' reputation signals on purchase intentions through the mediating role of PSR, to respond to the use of the S-O-R framework to exam-

ine the factors influencing consumer reactions to SMI-endorsed promotional activities (Djafarova & Bowes, 2021). By adopting the S-O-R framework in this research, this study used SMIs' reputation signals (communication skills, influence, perceived authenticity, and perceived expertise) as an extension of the knowledge of the S-O-R model and enhance the body of knowledge in the marketing communication literature. The inclusion of these dimensions may elucidate a great proportion of purchase intentions and in turn, show the compatibility of the model.

The application of the S-O-R model in the current study sheds new light on the existing model and opens opportunities for future researchers to investigate how these SMIs' reputation signals can be explored for future studies. This research adds to the existing body of knowledge particularly, it attempts to improve marketing communication theoretical understanding of the usage of social media and SMIs' reputation signals.

Practical Implications

In terms of managerial implications, the SMI elements and research framework are intended to give the management of the beauty industry an effective strategy and practice in marketing communication. Furthermore, the beauty industry should pay greater attention to SMI's expertise, which may lead to the establishment of PSR between SMIs and the target consumers, resulting in a high degree of purchase intentions and customer satisfaction.

Furthermore, the variety of influencers appears to be a significant factor since the features that customers associate with the influencer might affect the exposure of the product's success. Given that SMIs reflect a distinct brand personality, beauty brand managers should gather relevant information and discover the qualities of the SMIs before picking the influencers to give a clear marketing communication message to their followers.

This study has also contributed to the realm of practice in digital marketing communication by making recommendations that should be considered. This concept is important when beauty organizations intend to employ SMIs using recognized and defined frameworks to compete in the turbulent business environment.

In this digital age, many Malaysian beauty product businesses promote their goods on social media platforms, particularly those that can reach a larger target demographic. Nonetheless, because of the growing number of businesses adopting such technologies, this has become a challenge. This research is intended to support beauty product companies with insights on how they can make the most of social media platforms by collaborating with relevant beauty influencers. In addition, marketers can enhance SMI's authenticity by implementing raw video tutorials where the influencers demonstrate themselves using the products and show the results, by doing so, the followers will feel that the influencers are relatable and honest, hence forming the PSR.

Limitations and Directions for future study

Although this study has contributed to the body of knowledge in the Malaysian beauty industry and theoretical and practical implications, some limitations have been found. For instance, the sample size in this research was limited for a variety of reasons, including Covid-19 and time restraints. Furthermore, the sample respondents were drawn primarily from Klang Valley, the study's findings may not be representative of the entire beauty sector in Malaysia.

Second, this study represents an effort to examine the point of SMIs' reputation signals and purchase intentions; hence, more research is necessary to gain an in-depth grasp of this issue through a qualitative approach. In this study, four constructs were chosen to examine the association between SMI's reputation signals and purchase intention namely: communication skills, influence, perceived authenticity, and perceived expertise. However, new dimensions such as credibility and trustworthiness, which may have a greater influence on PSR as well as consumer purchase intention, can be incorporated into future studies to make the model more robust (Reinikainen et al., 2020) and contribute to the marketing communication scholarship.

Although the implementation of SMI marketing in Malaysia is relatively new, it is important to conduct similar research in different sectors, such as the health and hospitality industry. Hence, comparative research across different nations might yield intriguing results since the objectives of SMIs' reputation signals may defer those of the countries studied. In turn, it will assist in a much better understanding of the phenomena through various cultural contexts.

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