The Study of Para-Social Interaction
With E-Word-of-Mouth for Influencer
Marketing by Complex Computing

Yu-Hsi Yuan, Chinese Culture University, Taiwan
Yi-Cheng Yeh, Jiangsu University of Technology, China
Chia-Huei Wu, Minghsin University of Science and Technology, Taiwan
Cheng-Yong Liu, Jimei University, China
Hsin-Hao Chen, Southern Taiwan University of Science and Technology, Taiwan
Chien-Wen Chen, Yuanpei University of Medical Technology, Taiwan

ABSTRACT

The purpose of this study was focused on exploring the relationship among the fans’ preferences, fans’ para-social interaction, and fans’ word-of-mouth. A survey consisted of 21 items based on the literature review and developed by this study. An online survey was distributed to the users of YouTube in Taiwan. A total of 606 valid samples was collected by the survey. The instrument passed the reliability and validity test. Further, the data process applied the PLS (partial least squares) regression analysis methodology. The result shows that the ‘attractive’ impacted ‘para-social interaction’, ‘e-word-of-mouth’, and ‘preferences of fans’ positively. In addition, the para-social interaction plays an important role as a mediator between influencer’s attractiveness, e-word-of-mouth, and preferences of fans. Some suggestions were provided for social media influence-related studies as references.

KEYWORDS

INTRODUCTION

In the era of influencers’ marketing as a mainstream of economic, the influencers’ effect will enhance the impact on marketing dramatically. The influencers can play the spokesperson role of business, politician, commodity, or charitable activities to raise those peoples’ influence and reputation, meanwhile, the influencers could gain the benefit or promote them-self from those activities (Guerreiro, Viegas, & Guerreiro, 2019). Thus, the internet platform and social media become important channels for influencers to self-promotion and raise online personal branding (Altenburger, De, Frazier, Avteniev, & Hamilton, 2017; Khedher, 2013). Further, those channels presenting an innovative implementation of influencers’ marketing and extending the type or style of social media functions. Many social media were developing and generating from the internet such as YouTube, Facebook,
LinkedIn, Twitter, Instagram, or Weibo, etc. Those social media provide a useful platform for influencers to show their talents of artistic or capacity that can promote them widely and get famous faster (Glucksman, 2017). Therefore, the influencers’ marketing was pushing economic growth in a new way and become more competitive.

The YouTuber launched in February 2005 and some of the influence stars from related social media’s early days helped to make the platform as an essential part of internet economic (Stone & Webb, 2019). The original influencers were communicated with audiences mainly by text without a business model at the beginning (Ignatidou, 2019; Pilgrim & Bohnet-Joschko, 2019). Meanwhile, the affective force of influencers was generated via e-word-of-mouth (Anastasiei & Dospinescu, 2019). Relay on the development tendency of social media and the influencers, the influencer economy has driven e-commerce growth start from (Pilgrim & Bohnet-Joschko, 2019).

In recent years, influencers become more professional and skilled people due to the advantage of information and communication technology (ICT) and portable devices (Larios-Hernández & Reyes-Mercado, 2018). The new generation influencers can catch more attention depends on those performances, hence, enterprises will promote their commodities by influencers’ reputation, attraction, and popularity (Magno & Cassia, 2018). Therefore, the internet economy was driven by influencers’ marketing and a new business model was emerged.

The business profit earning model of influencers’ economy was distinguished as e-commerce, live broadcast (Ma, Zhang, Harris, Chen, & Xu, 2016; Tsai, 2016), advertising (Evans, Phua, Lim, & Jun, 2017), gaming endorsement (Alim, 2017), entertainment circles (ITA, 2016), and brand image (Verhoef, 2020). The global Instagram influencer market size growing significantly from 0.8 to 2.3 billion since 2017 to 2020 (Statista, 2019). It demonstrated that the influencer market has dramatic development and driven the growth of internet economy.

Askitas and Zimmermann (2009) agreed that the data retrieved form internet with real-time and rich information was better than the government statistic report. Matsumoto, Matsumura and Shiraki (2013) point out that the prediction of economy issue relay on past data. However, the accuracy and validity of prediction will be affected by delayed information. Thus, Internet search data become a powerful potential index of prediction. Further, Vosen and Schmidt (2012) applied big-data from Google Search Engine to predict citizens’ consuming trend and they found those data were more reliable than the traditional prediction index. Therefore, apply the big-data from internet was advantage method to do prediction and survey.

The marketing managers and social medial platform operators were trying to find a critical factor that will impact the business performance in the e-commerce environment. Some studies argued that the consumers’ purchase intention will be affected by some factors such as physical attractiveness, social attractiveness, and para-social interaction (Lin, Crowe, Pierre, & Lee, 2021; Sokolova & Kefi, 2020). This argument indicates a new direction for marketing research and points out the importance of Internet celebrities in this field (Geng, Wang, & Chen, 2019). Furthermore, the growth force of influencer economy to be driven by the influencers’ fans obviously. In addition, fans were stimulated to loyal to the influence depends on their psychological identification and virtualize the relationships with influencer, this symptom was called ‘para-social’ (Shtern, Hill, & Chan, 2019). Therefore, enterprises were cooperating with influencers closely to create vary marketing styles and still keeping extending the scope of the influencer economy. For example, the ‘click-through rate’ (CTR) were using instead of product endorsement and reward of money (Yang, Lin, Carlson, & Jr. Ross, 2016). In general, the goal of this study was aimed to explore the cause-effect relationships between para-social interaction with preferences and e-word-of-mouth, and attempt to distinguish the model of influencer marketing as well.
BACKGROUND

Characteristic of Social Media Influence

The huge shaking on entertainment in recent years due to the rising trends of smartphone and microfilm, meanwhile, the influencers were the main drive of this trend. Thus, more fresh stars join the social media as influencers and their fans were growing bigger both the range and quantity. For instance, the age of fans were extending from adolescence, early adulthood, midlife, ever mature adulthood (Leskin, 2018). The marketers gained remarkable opportunities to reach consumers by social media platform, therefore, social media marketing actions become part of the promotional strategy (Godey et al., 2016; Kelly, Kerr, & Drennan, 2010). The characteristic of social media influence can be distinguished as ‘fashion’, ‘charm’, ‘script design’, and ‘affinity’. The essential of influencers integrated of the fashion senses such as aesthetic, insight, sensitive, learning, and thinking; their charms as face, trait, savor, belief, and living style; the ability of script design including team work, material and facility match, style build, feeling and artistic inter-professional groups, and the comprehensive ability to shape beauty; lastly, the affinity distinguished as relationships with friends or girlfriends; facilitate communications, interactions, coordination, living site and social network (Chen, 2018; Pallien, 2019). Therefore, all of the influencers were keeping their influence via social media platforms as the fundamental of influences marketing.

Influencer Attractive

Many companies have successfully used the influence of online influencers to target the target customer market. At the same time, through the creative marketing methods of online influencers, they have established brand and customer dependency and strengthened customers’ awareness and trust of brand products (Cocker & Cronin, 2017; France, Vaghefi, & Zhao, 2016). This point affect influencers notice their attractive was the powerful force to enhance them gain more fans. Different from the traditional mode of passively receiving advertising information for consumers, the marketing method of Internet celebrities was to actively recommend products or share product experience to consumers through online platforms, and the recommendation form was no longer limited to blogs. The entire article has evolved into the use of social media posts or live audio and video sharing, increasing interaction with the audience and audiovisual experience, and more creative content, and leaving consumers with a deep impression (Smith, Fischer, & Chen, 2012; Trivedi, 2018). Because consumers have a stickiness for the videos taken by their favorite online celebrities, online celebrities present the product information of advertising sponsors by means of embedded marketing, which will be more convincing and penetrating than traditional advertising media (Cocker & Cronin, 2017). The influence of online celebrity marketing on its rapid spread was due to the image characteristics of the online celebrity itself, which has built the loyalty of viewers and attracted them to regularly and actively watch its productions (Hanna, Rohm, & Crittenden, 2011). The influence of online influences on consumers’ image was important for transmitting advertising messages and establishing product identity. Therefore, the influencers’ attraction was the essential factor to drive influencer marketing growth and motivate influencers to promote their unique traits.

E-Word-of-Mouth

The media and the ministry do not use specific media or influential people in the community, and use their influence to stimulate the desire of potential consumers. Invite famous customers to recommend products on the Internet. This can be considered as part of word-of-mouth sales (Törmälä & Saraniemi, 2018). The reason why media and department sales can occupy an important position in online sales was that consumers were exposed to online sales promotion every day, which makes them no longer have a trust in advertising, and it was worthy of being reliable. It was the sharing of experience after being used by personal clients, internet celebrities, or others (Hackley & Hackley, 2015; Noam, 2018). Word of mouth was the main source of information for consumers when making consumer...
decisions. The characteristics of Internet communication make word-of-mouth communication more limited to interpersonal communication. And with the popularity of social networking sites. Word-of-mouth reputation has gradually become a key factor in whether a product was selling well (Serrano & Ramjaun, 2018). Further, the word-of-mouth means that potential, current, or ever-consumed customers use the Internet to deliver positive and negative product reviews (Cocker & Cronin, 2017; Serrano & Ramjaun, 2018). In addition, Serrano & Ramjaun (2018) found the clue of connection between influencers’ attractive and e-word-of-mouth, thus, a formulated the hypotheses concerning the relationship as follows:

**H1:** There was a positive relationship between influencers’ attractive and e-word-of-mouth.

**Para-Social Interaction**

The definition of para-social interaction was that Internet users will tend to meet personal social needs through online multimedia applications (Lee, Eden, Ewoldsen, Beyea, & Lee, 2019). When individuals were misunderstood or attacked by scandals and lose the supply of social demand, people will turn to Internet multimedia applications through the Internet to divert their attention or find the feeling of concern (Hu, Zhang, & Wang, 2017). When Internet celebrity fans watch online celebrities’ short films, articles or works, the more times they will gradually feel intimate with the Internet celebrities, and subjectively regard the Internet celebrities as their close friends, but in fact, the Internet celebrities will not know all of the fan (Kim, Ko, & Kim, 2015; McDonnell & Wheeler, 2019). Therefore, para-social interaction can also be regarded as a strategy to guide the audience through the media and establish a virtual unequal relationship. This kind of behavior was called para-social interaction (Alizadeh, 2019). The para-social interaction was mainly through the use of multimedia applications to enable fans to communicate or communicate in one direction, and use this one-way communication method to communicate with specific people. This kind of behavior can lead people to think that they have entered the way of communication between people (Huang, 2012). Yet, Delafrooz, Rahmati and Abdi (2019) argued that a strong relationship appeared between e-word-of-mouth and influencers’ attractive. Moreover, Hwang and Zhang (2018) supported that the e-word-of-mouth and para-social interaction have positive connection and it was the drive of influencer marketing as well. Obviously, the para-social plays an important role in influencer marketing, thus, a formulated the hypotheses concerning the relationship as follows:

**H2:** There was a positive relationship between influencers’ attractive and para-social interaction.

**H3:** There was a positive relationship between e-word-of-mouth and para-social interaction.

**Preferences of Fans**

The effect of Internet celebrity marketing comes from the entertainment enjoyment of Internet celebrity movie content, which tests the creative level of advertising. Meanwhile, the recent researchers found that the creativity and surprise of online advertising was an important key to characterize consumer impressions. And word of mouth was not only a factor for effectively conveying the message, but also allows the content of the message to stay in the minds of consumers for longer (Anastasiei & Dospinescu, 2019; Belanche, Flavián, & Pérez–Rueda, 2017; France, Vaghefi, & Zhao, 2016; Smith, Chen, & Yang, 2008). It demonstrated that the e-word-of-mouth regarding influencer’s on the internet will impacted the preferences of fans. Internet celebrities have public influence and Internet visibility, but they were different from well-known artists or public figures’ distance to the general public (Jin & Ryu, 2018). The main reason was the process of transforming the online red calendar from an amateur. It has a high sense of closeness to the general public, and the content of its creative videos was more likely to resonate (Gannon & Prothero, 2018). Further, the influencer promotes the establishment of identity through the diffusion power of community communication (Hackley,
Hackley, & Bassiouni, 2018). The appeal of an influencer includes easy remembered name, physical identity, cuteness, friendliness, physical fitness, and social and professional relationships (Cocker & Cronin, 2017; France, Vaghefi, & Zhao, 2016; Trivedi, 2018). The most important criterion was easy identification, cuteness and friendliness of fans’ preference (Anastasiei & Dospinescu, 2019; Hackley, Hackley, & Bassiouni, 2018; Frey, 2018). Moreover, the influencer need not be familiar with the general public, but must be recognized by the target audience or fans (Alizadeh, 2019; Delafrooz, Rahmati, & Abdi, 2019; Hwang & Zhang, 2018). In general, the preferences of Fans force influencers’ progress and drove influencers marketing development dramatically. Thus, a formulated the hypotheses concerning the relationship as follows:

H4: There was a positive relationship between e-word-of-mouth and preferences of fans.
H5: There was a positive relationship between para-social interaction and preferences of fans.
H6: There was a positive relationship between influencers’ attractive and preferences of fans.

RESEARCH DESIGN

Participants and Procedures
The Simple Random Sampling was used for data collection in this study due to its equal probability and independent probability suit for statistical analysis (Frey, 2018). The questionnaire was produced as online survey instrument by Google Doc. Online survey was conducted from September 2019 to December, 2019. The survey delivered to 1,000 internet users and 680 returned with 68% return rate. The collected data was reviewed and selected, then a total of 606 valid samples were put into statistical process. Indeed, a sample size higher than 500 will reflected a large effect size (Bujang, Sa’at, & Bakar, 2018). Thus, the sample size of this study will present its’ representative accordantly.

Instrument
Development
The survey tool was developed by researchers and the items were generated from literature review. There were four factors to be distinguished depends on the purpose of this study as ‘influencer’s attractive’ (Casalóa, Flaviánb, & Ibáñez-Sánchez, 2018; Glucksman, 2017), ‘para-social interaction’ (Hwang & Zhang, 2018; Lim, Radzol, Cheah, & Wong, 2017), ‘e-word-of-mouth’ (Casalóa, Flaviánb, & Ibáñez-Sánchez, 2018; Hwang & Zhang, 2018), and ‘preferences of fans’ (Lim, Radzol, Cheah, & Wong, 2017; Hwang & Zhang, 2018) and related source and factors were summarized as Table 1.

Reliability and Validity
Expert review was applied to valid instrument. Total 8 scholars and experts were invited to review the developed instrument. The items were revised depend on expert’s comments. The Cronbach’s α was used for reliability test and result shows on Table 2. All factors’ α Value were higher than 0.70. Thus, the developed instrument was passed the test of reliability and validity.

Table 1. The sources of factors summary

<table>
<thead>
<tr>
<th>Factors</th>
<th>Items</th>
<th>The source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influencer’s Attractive</td>
<td>7</td>
<td>Glucksman (2017); Casalóa, Flaviánb, &amp; Ibáñez-Sánchez (2018).</td>
</tr>
<tr>
<td>Preferences of Fans</td>
<td>5</td>
<td>Lim, Radzol, Cheah, &amp; Wong (2017); Hwang &amp; Zhang (2018).</td>
</tr>
</tbody>
</table>
The independent variable was ‘influencer’s attractive’ that will affect ‘e-word-of-mouth’, ‘para-social interaction’, and ‘preferences of fans’ respectively. Further, the ‘e-word-of-mouth’ will affect ‘para-social interaction’, and ‘preferences of fans’ respectively.

RESULTS

Reflective Model

The reflective model was examined by PLS (partial least square) that consisted of convergent validity and internal consistence. The items to be checked via factor loading (> .70) (Hair, 2016, 2017), AVE (average variance extracted, > .50) (Hair, 2016, 2017), Cronbach’s α (> .70) (Hair, 2016, 2017), and composite reliability (> .70) (Becker, Klein, & Wetzels, 2012; Colman, Devinney, Midgley, & Veniak, 2008). Result shows in Table 3 that all items and factors were passed the standard and it
demonstrated the survey tool reached good convergent validity and internal consistence. Moreover, to test the data normal distribution, the skewness should not excess 2.00, and the kurtosis should less than 7.00 (Kline, 2005). Result shows in the Table 3, the skewness coefficient of each item ranged from -0.628 to 0.543, the kurtosis coefficient ranged from -0.546 to 0.370. All coefficients were passed the standard and it demonstrated the normality of each item.

The discriminate validity was checked via HTMT (heterotrait-monotrait ratio of correlations) and the C.I. (confidence interval) value exclude 1.0. Result shows in Table 4 and it supports that the survey tool reached acceptable discriminate validity.

**Formative Model**

The formative model was examined through VIF (variance inflation factor) (<10.0) (Hair, 2016, 2017), weighting, and p value (Hair, 2016, 2017). Result shows in Table 5, and the VIF of all items from 1.164 to 2.962 that were not excess 10.0. Meanwhile, the weighting from 0.0.166 to 0.658, the p value was less than 0.50. It demonstrated that the formative model was stable.
The examination result supported that the SRMR (standardized root mean square residual) was 0.049 that smaller than 0.50 (Hair, 2016, 2017). The standardized path coefficients from ‘influencers attractive’ to ‘e-word-of-mouth’ (β=.705, p<.001), ‘para-social interaction’ (β=.375, p<.001), and ‘preferences of fans’ (β=.319, p<.001) reached the significant level. Further, the ‘e-word-of-mouth’ to

### Table 4. The discriminate validity coefficients summary (n=606)

<table>
<thead>
<tr>
<th>Factors</th>
<th>HTMT (C.I. exclude 1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Influencer’s Attractive</td>
</tr>
<tr>
<td>ATT</td>
<td>0.717</td>
</tr>
<tr>
<td>PSI</td>
<td>0.667</td>
</tr>
<tr>
<td>PR</td>
<td>0.773</td>
</tr>
<tr>
<td>eWM</td>
<td>0.705</td>
</tr>
</tbody>
</table>

Note: ATT=Influencer’s Attractive; PSI=Para-Social Interaction; PR=Preferences of Fans; eWM=e-Word-of-Mouth

### Table 5. The formative model tested coefficients summary (n=606)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Items</th>
<th>VIF &lt;10.0</th>
<th>Weighting</th>
<th>p Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influencer’s Attractive</td>
<td>ATT01</td>
<td>2.427</td>
<td>0.201</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>ATT 02</td>
<td>2.273</td>
<td>0.216</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>ATT 03</td>
<td>1.912</td>
<td>0.183</td>
<td>0.003</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>ATT 04</td>
<td>1.747</td>
<td>0.166</td>
<td>0.008</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>ATT 05</td>
<td>2.083</td>
<td>0.195</td>
<td>0.002</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>ATT 06</td>
<td>1.738</td>
<td>0.238</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>ATT 07</td>
<td>1.497</td>
<td>0.196</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Para-Social Interaction</td>
<td>PSI01</td>
<td>1.429</td>
<td>0.658</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>PSI02</td>
<td>1.601</td>
<td>0.371</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>PSI03</td>
<td>1.310</td>
<td>0.023</td>
<td>0.048</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>PSI04</td>
<td>1.164</td>
<td>0.255</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>Preferences of Fans</td>
<td>PR01</td>
<td>2.359</td>
<td>0.279</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>PR02</td>
<td>1.918</td>
<td>0.249</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>PR03</td>
<td>2.164</td>
<td>0.243</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>PR04</td>
<td>1.786</td>
<td>0.218</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>PR05</td>
<td>2.094</td>
<td>0.268</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>e-Word-of- Mouth</td>
<td>EWM01</td>
<td>3.619</td>
<td>0.258</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>EWM02</td>
<td>1.750</td>
<td>0.243</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>EWM03</td>
<td>2.962</td>
<td>0.244</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>EWM04</td>
<td>1.818</td>
<td>0.248</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>EWM05</td>
<td>2.204</td>
<td>0.213</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

### Structural Model

The coefficients are summarized in Table 6.
‘para-social interaction’ ($\beta = .414, p<.001$) was reached the significant level as well. The least path from ‘e-word-of-mouth’ ($\beta = .451, p<.001$), and ‘para-social interaction’ ($\beta = .203, p<.001$) to ‘preferences of fans’ reached the significant level. In general, the ‘para-social interaction’ plays essential role of mediation among ‘influencers attractive’, and ‘e-word-of-mouth’ to ‘preferences of fans’.

### CONCLUSION

Based on the practical data analysis results that the instrument passed the reliability and validity test via structure-equation modeling method. It supported the survey questionnaire was reliable for academic study use. As the examination result, the Para-Social Interaction plays important mediator role among Influencers’ Attractive, Para-Social Interaction, e-Word-of-Mouth, and Preferences. The mediation effect was checked by Sobal Test (Preacher & Hayes, 2004). The Para-Social Interaction, plays important mediator role between Influencers’ Attractive and Preferences, (Sobal Test= 4.258, SE = 0.018); and e-Word-of-Mouth was plays important mediator role as well (Sobal Test = 4.749, SE = 0.067). The test result support Para-Social Interaction and e-Word-of-Mouth plays partial mediation effects in the research model.

### DISCUSSIONS AND SUGGESTIONS

**Discussions**

**Internet Celebrities Drive the Online Marketing**

Internet celebrity micro movies or online videos have become an important corporate marketing method as a marketing medium. The public image of the influencer was an important key to influence consumer perception and product identity, and the social media influencers/ Internet celebrities as a key role in marketing by introducing products or services to affect their audiences’ attitude or purchase intention. Those points complied with related studies result (Cocker & Cronin, 2017; Lin, Crowe, Pierre, & Lee, 2021; Sokolova & Kefi, 2020). In the product advertisements endorsed by each influencer or Internet star, the Internet celebrities also use the image emitted by the charisma given by themselves as an element of the advertisement. Thereby, creating consumer resonance and positive feelings about marketing content, it complies with Koo, Ruihley, and Dittmore (2012) research finding. It reflected that the new marketing was triggered by social media influencers and their motion, behavior, speech, or intention will impact their followers or listeners dramatically, thus, those social media influencers or Internet stars were the leaders of the marketing in the modern social media network era.
The Glamour Image Decided Internet Celebrity’s Behavior

Different from the traditional mode of passively receiving advertising information for consumers, the marketing method of Internet celebrities was to actively recommend products or share product experience to consumers through online platforms, and the recommendation form was no longer limited to blogs. The entire article has evolved into the use of social media posts or live audio and video sharing, increasing interaction with the audience and audiovisual experience, and more creative content, and leaving consumers with a deep impression, further, inspiring their desire of tangible materials or intangible services (Geng, Wang, & Chen, 2019; Ignatidou, 2019). The construction of the glamour image of the Internet celebrity was an important factor that attracts consumers’ continuous attention and an important driving force for forming a fan community, and these market concerns form a resource with marketing value (Cocker & Cronin, 2017). Further, the effect of red marketing comes from the entertainment enjoyment of online celebrity movie content to consumers, which tests the creative level of advertising (Ki & Kim, 2019). Upon above perspective and practical findings, the influencer marketing was important trend for modern economy development. According to the research finding, the influencers could enhance their influence and promote their reputation via attraction increasing, affect the positive e-word-of-mouth related them-self, and value their imagination to gain more fans’ preferences as well.

Para-social Interaction Plays an Important Mediating Role

It was supported that the para-social interaction was a consumer’s perception of influencers by this study. The para-social interaction can improve the positive feeling and identity by calibrating the consumer’s emotional factors and depth of impression, even as an antecedent of the purchase intention (Hwang & Zhang, 2018; Sokolova & Kefi, 2020). The marketing model of product advertisements through internet celebrity videos has the characteristics of viral marketing. Due to the highly entertaining and interesting influencer movies, they can quickly spread through social media (Alizadeh, 2019). In this study that the influencers’ attractive could impact the e-word-of-mouth, para-social interaction, and the preferences of Fans directly and strongly according to data analysis result. The highlight contribution of this study was to verify a hypothesized model and proofed the cause-effect relationships between influencer’s attractiveness, para-social interaction, e-word-of-mouth, and preferences of fans. In addition, enhancing the preferences of fans will affect fans’ purchase intention or behavior, and will rise the preferences of fans to the influencers via para-social interaction consequently.

SUGGESTIONS

For Internet Celebrities

Based on the results of this study, Internet celebrities can enhance their influence by promoting para-social interaction with fans directly. And from the perspective of the literature review, the situation of value and influence power of Internet celebrities was still rising. Hence, to keep the health of the internet markets and marketing, the ethical code of conduct and legal behavior should be followed by the Internet celebrities. Otherwise, the fans will lose adore for their favorite influencers, and social media management will decrease or limit the chance of influencers’ works or published their opinions. Further, the Internet celebrities should become a model that followed and learned by the fans or audiences. Therefore, an orderly marketing environment and honest business activities will be presented naturally.

For Fans

Fans should stand on a rational perspective to face the values and behaviors of Internet Celebrities. Yet, the study result shows the para-social interaction will mediate the relationships between fans
and Internet celebrities. Therefore, the fans should have critical thinking to judge the behavior and published works comply with the ethical standards or not. In addition, keep a reasonable distance from Internet celebrities and observe their interaction with fans’ behavior to avoid harassment and abuse, or irrational consumption.

For Social Media Managers

Internet celebrities were the important driver of high internet traffic and it brings large business for social media platforms significantly. However, the quality of Internet celebrities should be monitoring and selecting to keep the transaction order on the platform and stable operation of the social media. To observe those internet celebrities, the e-word-of-mouth and online para-social interaction between fans and Internet celebrities could be assessment indicators to provide useful information and early warning signs to the social media managers.

For Marketing Managers

According to the analysis result of this study, the factor e-word-of-mouth and para-social interaction will impact the preferences of fans toward their favorite Internet celebrities positively. This result demonstrated the potential business opportunity to promote Internet celebrities. Behind this opportunity were the marketing power and business development. This result provides a useful channel to enhance the business. However, as mentioned, the quality of Internet celebrities to be the risk of the marketing. Thus, the marketing managers should cooperate with the social media managers to observe their contracted Internet celebrities’ behaviors, concepts, and works to avoid negative potential risks. Further, the marketing manager should educate their Internet celebrities to follow the ethical requirements and business regulations accordingly.

For Researchers

It was suggested that the research samples should be involve more regions and countries to test the research model, and the reliability and validity of instrument. Meanwhile, due to the cyber culture was highly homogeneity, therefore, the social culture perspective and theory should be considered to involve in the study topic.

ACKNOWLEDGMENT

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.
REFERENCES


Hair, J. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE Publications.


Yu-Hsi Yuan received his PhD from the Department of Industrial Education, National Taiwan Normal University in 2012. Now he serves as an Associate Professor in the Department of Labor and Human Resources, Chinese Culture University, Taipei, Taiwan. His research interest in management, e-commerce study, marketing strategy, human resources, and data mining.

Yi-Chen Yeh received his PhD from the Graduate Institute of Business Administration, Edinburgh Napier University in 2014. Now he serves as a Professor in the Department of International Economics and Trade, Jiangsu University of Technology, Changzhou 213001, Jiangsu, China. His research interest in cost analysis, international trading, business administration consultant.

Chia-Huei Wu received her PhD from the Ph.D. Program of Technology Management, Chung Hua University in 2011. Now she serves as an Associate Professor in the Department of Hotel Management and Culinary Creativity, Minghsin University of Science and Technology, Hsinchu, Taiwan. Her research interest in business administration strategy, technology management and strategy, and culinary art study.

Cheng-Yong Liu serves as an Associate Professor in the School of Marine Culture and Law, Jimei University, Xiamen, Fujian, China, Jimei District, Xiamen, China. His research interests include business law, corporate governance, and management.

Hsin-Hao Chen received his Ph.D. from the Department of Education, National University of Tainan in 2017. Now he serves as an Assistant Professor in the Graduate Institute of Educational Leadership and Evaluation, Southern Taiwan University of Science and Technology, Tainan City, Taiwan. His research interest in educational issues, and management data analysis.

Chien-Wen Chen receives his master’s degree from the Institute of Business Administration, Yuanpei University of Medical Technology, Hsinchu in 2018. Now he serves as a lecturer in the Department of Food and Beverage, Yuanpei University of Medical Technology.