

Contents lists available at ScienceDirect

Heliyon

journal homepage: www.cell.com/heliyon



The influence of food vloggers on social media users: A study from Vietnam

The-Bao Luong a,b, Ching-Hua Ho a,*

- ^a Graduate Institute of Tourism Management, National Kaohsiung University of Hospitality & Tourism, Kaohsiung City, Taiwan, ROC
- ^b Faculty of Fashion and Tourism, Ho Chi Minh City University of Technology and Education, Ho Chi Minh City, Viet Nam

ARTICLE INFO

Keywords: Food vlogger Advertising content value Influencer credibility Viewer's attitude Social commerce intention

ABSTRACT

Influencer marketing has become an outstanding method that entrepreneurs use to enhance their value by collaborating with popular social media users. Numerous researchers have explained that influencer marketing's success relates to consumers' strong perception of information credibility and advertisement. The researchers conducted an online survey of 328 Vietnamese social media users to investigate how food vloggers impact their followers. The major practical technique for data analysis was structural equation modeling (Smart PLS-SEM), and eight key hypotheses were tested. The findings indicate that advertising content value positively impacts viewers' attitudes. Influencers' attractiveness affects viewers' attitudes toward videos, and influencers' expertise and similarity impact viewers' attitudes toward the featured brand. Viewers' attitudes positively influence their social commerce intentions. This study shapes the performance of food vloggers in advertising content value and information credibility, providing an in-depth analysis of the impact of food vloggers on their followers. The results of this study provide advertisers and marketers with insights into the performance of food vloggers.

1. Introduction

Vietnamese people use social media platforms heavily for entertainment and information, with a large percentage actively using them. According to a report on digital trends, with a population of 97.75 million in 2021, the high percentage of social media users indicates that a significant portion of the population in Vietnam is actively engaged on social media. Approximately 73.65% of the Vietnamese population, or about 70.3% of those with internet access, actively use social media [1]. This trend has given rise to social commerce as a new delivery platform that leverages social media to perform various business operations. Social media influencers have emerged as a powerful tool for businesses, particularly in the food and beverage industry. However, research on Vietnamese social media influencers, specifically food vloggers, is limited, and little is known about their impact on audience attitudes and intentions toward social commerce.

Previous studies have examined the impact of social media influencers on viewers and customers in general [2–4]. However, few studies have focused on specific influencers and their content. For instance, previous studies explored the characteristics that influence influencer marketing credibility [4] and how advertising and credibility of social media influencers impact their attitudes [2]. However, they did not concentrate on a particular influencer. Similarly, while the effect of social media influencers on purchasing intention has been studied, social media influencers were only mentioned generally [3]. However, the different video content posted

E-mail addresses: c0812006@stu.nkuht.edu.tw, ltb@hcmute.edu.vn (T.-B. Luong), chh436@mail.nkuht.edu.tw (C.-H. Ho).

https://doi.org/10.1016/j.heliyon.2023.e18259

Received 14 April 2023; Received in revised form 7 July 2023; Accepted 12 July 2023 Available online 13 July 2023

2405-8440/© 2023 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

^{*} Corresponding author.

by influencers on specific topics may affect customers differently. Therefore, this study focused on food-related content posted by social media influencers to analyze the impact of food influencers on social media users.

On the other hand, the study applies the social cognitive theory to understand social media users' behavior [5–7]. According to this theory, individuals learn through observing others, especially those they perceive as having expertise or authority in a particular domain [5]. Food vloggers can be seen as experts in the field of food and cooking, and their followers may learn and adopt their attitudes and behaviors related to food and brand preferences. Social cognitive theory can help explain the mechanism behind how food vloggers influence their followers and how this influence leads to social commerce intentions [8].

Vietnam's burgeoning social media and social commerce phenomenon has garnered considerable attention in recent years. However, the intricate nuances of how food vloggers wield their influence over their audiences remain shrouded in mystery. Against this backdrop, the present study endeavors to bridge this knowledge gap by delving into the multifaceted impact of Vietnamese food vloggers' videos on audience attitudes and social commerce intentions. Using this research, marketers seeking to create effective social media campaigns in the food industry can gain valuable insights into the factors that contribute to the success of food influencer marketing in Vietnam. With this in mind, the study has three specific objectives: firstly, to investigate the impact of Vietnamese food vloggers' videos on audience attitudes toward food products; secondly, to identify whether Vietnamese food vloggers' videos have a discernible impact on their audience's social commerce intentions; and finally, to analyze the extent to which the audience's attitude toward food influencer marketing influences their social commerce intention.

2. Literature review

2.1. Social cognitive theory

With the proliferation of social media in contemporary society, the need to comprehend the intricacies of user behavior has become more pressing than ever. Enter social cognitive theory (SCT), a widely adopted framework that posits individuals learn by observing others, particularly those who possess expertise or authority in a given domain, and subsequently assimilating their attitudes and behaviors into their repertoire [5]. Among the various arenas where SCT has proven useful is the study of social media influencers, particularly those specializing in the culinary arts [5]. Their followers' perceptions and actions are profoundly influenced by these food vloggers' knowledge and experience [8]. Many of their disciples mimic their food preferences, brands, and cooking techniques, among other things. SCT provides an invaluable tool for understanding the elusive complexities of social media behavior by elucidating the mechanisms that govern food vloggers' influence. In SCT, individuals are more likely to follow those whom they perceive to be knowledgeable or authoritative [5,7]. Furthermore, individuals tend to adopt behaviors and attitudes consistent with those around them in what is referred to as social norms [6]. Hence, followers of food vloggers are more likely to adopt their attitudes and behaviors related to food and brand preferences due to the perception of the vloggers as experts in the field.

2.2. Food vloggers

A vlogger, or video blogger, creates and shares videos regularly on a video-sharing platform such as YouTube [4,9]. A food vlogger creates videos about food, including recipes, restaurant reviews, and food-related travel content [10,11]. Content creators are the driving force behind influencer marketing in the food industry. The gastronomy and photography passions of account owners are appreciated by brands [12]. Personal preferences regarding colors, brands, and preferred e-commerce sites affect Vietnamese users' e-commerce choices [13]. In addition to blogging and vlogging about food on social media or their websites, food influencers use videos to present recipes and food ideas [10]. Through social media platforms, food influencers can share food and beverage brands on their accounts as advertising campaigns where other users can like, share, and comment [14]. On the other hand, a food influencer refers to a celebrity who regularly communicates about food on social media to attract wider audiences and gain popularity [11].

2.3. Social media influencer value

2.3.1. Advertising content value

The social media influencer value model (SMIV) is a framework for measuring influencers' performance by combining the value of their advertising content with their credibility [2]. The SMIV is based on advertising value, defined as a subjective judgment of the relative worth or efficiency of marketing and advertising [15]. Advertising value is generated and transferred during marketing campaigns, and it is proposed that marketing offerings may meet customers' demands [16]. The three most important elements of online advertising value are advertising informativeness, entertainment, and irritation (Ducoffe, 1996). Furthermore, three factors influence customers' perceptions of advertising value: social media advertising's entertainment, informativeness, and credibility [18]. In addition, influencer-generated content has both informative and entertainment value [2].

2.3.2. Influencer credibility

Source credibility is a characteristic that affects people's perceptions of the persuasiveness of a speaker [19]. The concept of source credibility includes two key elements: expertise and trustworthiness [20]. Furthermore, expertise, trustworthiness, and attractiveness are all components of source credibility [21]. Credibility transfer positively affects consumer attitudes [22]. Social media influencer performance (expertise, trust, likability, and homophily) positively affects source credibility [4]. Moreover, the four-dimensional source credibility model includes expertise, attractiveness, trustworthiness, and similarity [2,23].

2.4. Viewer's attitude

Attitude strongly predicts future performance [24]. Marketing researchers pay close attention to consumers' attitudes because this knowledge is essential for successful marketing campaigns [25]. Many influencers evaluate products in their videos and recommend products and brands they want to purchase [2]. Attitude toward influencers has been measured by video attitude and brand attitude [4]. Customers' attitudes toward advertising models have shown that advertisers and the credibility of advertisements have a positive impact on customer attitudes [22,26]. Attitude toward a brand is a tendency to respond favorably or unfavorably to a particular brand after exposure to a marketing stimulus [27].

People who have viewed posts shared by influencers are influenced by their attitudes toward videos and brands. Influencers' information credibility favorably impacts viewers' views about videos and attitudes toward companies [4]. Additionally, consumers' opinions of advertising value influence their attitudes toward internet advertising [17]. Influencer advertising on social media has enhanced customers' attitudes toward a product [28]. In addition, social media influencers serve as dynamic third-party endorsers, spreading a company's message to their audience and influencing its consumers' brand perceptions and attitudes. Social media advertising targets consumers with a positive view of social media's credibility [29]. Based on these findings, the following hypotheses were proposed:

- H1a. Food vloggers' informative value will positively influence viewers' attitudes toward the videos.
- H1b. Food vloggers' informative value will positively influence viewers' attitudes toward the featured brand.
- H2a. Food vloggers' entertainment value will positively influence viewers' attitudes toward the videos.
- H2b. Food vloggers' entertainment value will positively influence viewers' attitudes toward the featured brand.

Source credibility and attractiveness have a positive influence on consumer attitude [3]. Consumer attitudes about advertisements and their attitudes toward brands are influenced by the credibility of the source [23,30]. Influencer marketing source credibility mediates social media influencers' ability to impact brand image attitudes [31]. A political endorser's attractiveness and closeness influence social media participation, but focusing on the political endorser's expertise has a little effect [32]. Fashion vloggers' expertise, attractiveness, and trustworthiness positively impact attitudes toward the products [33]. Based on these findings, the following hypotheses were proposed:

- H3a. Food vloggers' expertise will positively influence viewers' attitudes toward the videos.
- H3b. Food vloggers' expertise will positively influence viewers' attitudes toward the featured brand.
- H4a. Food vloggers' trustworthiness will positively influence viewers' attitudes toward the videos.
- H4b. Food vloggers' trustworthiness will positively influence viewers' attitudes toward the featured brand.
- H5a. Food influencers' attractiveness will positively influence viewers' attitudes toward the videos.
- H5b. Food influencers' attractiveness will positively influence viewers' attitudes toward the featured brand.
- H6a. The similarity between food vloggers and viewers will positively influence viewers' attitudes toward the videos.
- H6b. The similarity between food vloggers will positively influence viewers' attitudes toward the featured brand.

2.5. Social commerce intention

In social commerce, an online platform is a place where users can connect with others. Online friends can give consumers useful product suggestions or share their experiences [34]. Social commerce can enhance social connections and user content production, and it can be seen as a combination of social and economic activities [35]. Social commerce goes beyond word-of-mouth by promoting consumer contact and participation in ways that can benefit businesses, such as securing real purchases [36]. In addition, intention is a popular metric used by behavioral researchers to predict future human actions [37].

Several studies have identified a significant correlation between behavioral intention and actual behavior [36,38]. In some of these studies, the intention to conduct social commerce was used as the dependent variable [34,35,37], with social purchasing and sharing intentions serving as measures of social commerce [34]. Additionally, research has shown that viewers' attitudes toward fashion influencers and brand attitudes have a positive impact on their purchase intention on social media users [39], while their attitude toward web advertising positively influences their intention to engage in social commerce [22]. Furthermore, the attitude toward a product significantly affects content sharing and purchase intention [33]. Based on these research findings, the following hypotheses were proposed:

- H7a. Viewers' video attitude will positively influence their social shopping intention.
- H7b. Viewers' video attitude will positively influence their social sharing intention.
- **H8a.** Viewers' brand attitude will positively influence their social shopping intention.
- H8b. Viewers' brand attitude will positively influence their social sharing intention.

3. Methodology

3.1. Sample and data collection

To ensure that the participants had the relevant experiences required for the study, a criterion was set only to include those with experience watching food vloggers. To recruit participants for the study, a screening process was implemented to ensure that only those with prior exposure to food vloggers were included. In the introduction, participants were asked, "Have you ever seen food vloggers on social media platforms such as YouTube, Instagram, or Facebook?" If they responded negatively, they were instantly removed from the survey, leaving a selection of applicants who were knowledgeable on the subject. Employing a purposive sampling technique, the researchers handpicked a select cohort of Vietnamese social media users who frequented Facebook, Instagram, and Zalo, in order to investigate the influence of food vloggers on their attitudes and behaviors. The researchers sent questionnaires to this group of users to collect data on their attitudes or behaviors related to the study's topic.

Prior to conducting the survey, all participants were provided with clear information about the nature of the study, including its purpose, duration, and data protection measures. Informed consent was obtained from all participants, and they were assured that their personal information would be kept confidential and that they would not be identified by name or other characteristics in any publication resulting from this research. Participants were also informed that they had the right to withdraw from the study at any time without consequences. Ultimately, 328 useable samples from participants met the criterion of having experience in watching food vloggers.

3.2. Measures

The questionnaire was first written in English and then translated into Vietnamese. Before distribution, two native-speaking experts checked the Vietnamese version (Appendix A) for correctness. Before the study, the questionnaire was pilot-tested with a panel of tourism experts and academics to guarantee consistency and understandability and confirm the construct validity.

Sociodemographic variables include gender, marital status, age, education, and social media platforms used. All constructs are presented in Fig. 1. Advertising content value was adapted from a ten-item scale used by previous studies [2,40]. Advertising content was composed of two subscales assessing the content value construct: informative value (five items) and entertainment value (five items). Influencer credibility was adapted from a 15-item scale used by previous studies [2,23]. Influencer credibility was composed of four subscales assessing the influencer credibility construct, comprising: expertise (four items), trustworthiness (four items), attractiveness (five items), and similarity (three items). The viewer's attitude was adapted from a 10-item scale used by previous studies [4,40,41]. The viewer's attitude comprises two subscales assessing the viewer's attitude construct: video attitude (five items) and brand attitude (five items). Social commerce intention was adapted from a six-item scale used by previous studies [34,37]. Social commerce intention comprised two subscales assessing the viewer's attitude construct: social shopping intention (three items) and social sharing intention (three items). Responses range from (5) strongly agree to (1) strongly disagree with these measures.

3.3. Data analysis

Previous research has determined that a sample size of 100 is sufficient for the partial least squares structural equation modeling (PLS-SEM) [42]. As a result, the sample size in this study is sufficient for PLS analysis. Nevertheless, sample size concerns should still be considered, with recommending a minimum sample size of ten times the maximum number of pathways leading to a structural model construct [43]. Statistical power is another method for estimating the more limited minimum sample size required for PLS-SEM analysis [44]. In all situations, it is reasonable to infer that 328 is an adequate sample size for the research model.

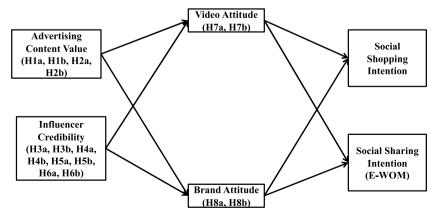


Fig. 1. Conceptual model.

4. Results

4.1. Sample profile

A sample profile was created to analyze the demographic characteristics of the respondents, and the results are presented in Table 1. Out of the total sample of 328 social media users, 41.5% were male, and 58.5% were female, all located in Vietnam. Regarding marital status, 12.2% were married, while 87.8% were single. Regarding age, 90.2% were between 18 and 29, while 9.8% were between 30 and 40. The distribution of education levels was as follows: 7.3% had less than a bachelor's degree, 58.5% had a bachelor's degree, and 34.2% had a post-graduate degree. Furthermore, 100% of the respondents used YouTube, 97.6% used Facebook, 80.5% used Instagram, 65.9% used Zalo, and 58.5% used TikTok.

4.2. PLS-SEM results

This study utilized Cronbach's alpha and composite reliability (CR) to assess the construct reliability [45]. The obtained values for both measures were higher than 0.7, indicating a high level of reliability (Table 2). The convergent validity was also established through substantial factor loadings of all items except for T4, FA1, and SS3, which were over 0.7 [46]. The AVE scores were greater than 0.50, supporting the convergent validity (Table 2). In addition, discriminant validity was confirmed through inter-construct correlations lower than the square root of the AVE scores (Table 3) [45].

The pathways' significance was assessed using regression weights and t-statistics to produce the associated p-values, which were calculated using a bootstrapping approach easily available in Smart-PLS 3.3.3 (Fig. 2). Except for H3a, H4b, H5b, and H6a, all study hypotheses have been verified at a significance level of at least 0.05, as demonstrated by the path loadings and related significance levels (Table 4). The findings revealed that the informative value of food vloggers positively affected both video attitude ($\beta = 0.439$, t= 5.922, p < .001) and brand attitude ($\beta = 0.214$, t = 4.036, p < .001), thus supporting H1a and H1b. Food vloggers' entertainment value positively influenced both video attitude ($\beta = 0.471$, t = 7.499, p < .001) and brand attitude ($\beta = 0.120$, t = 2.06, p < .05), thus supporting H2a and H2b. Food vloggers' expertise only positively influenced brand attitude ($\beta = 0.202$, t = 2.905, p < .001), while it did not influence video attitude ($\beta = -0.109$, t = 1.917, p = .056), thus only supporting H3b. Food vloggers' trustworthiness did not influence video attitude ($\beta = -0.252$, t = 2.911, p < .001) and brand attitude ($\beta = 0.065$, t = 1.004, p = .316), thus not supporting H4a, and H4b. Food vloggers' attractiveness positively influenced video attitude ($\beta = 0.153, t = 2.081, p < .05$), while having no influence on brand attitude ($\beta = -0.002$, t = 0.079, p = .937), thus only supporting H5a. Food vloggers' similarity positively influenced brand attitude ($\beta = 0.452$, t = 9.223, p < .001) without influencing video attitude ($\beta = 0.083$, t = 1.377, p = .168), thus only supporting H6b. Moreover, the result showed that viewers' video attitude positively influenced both their social shopping intention ($\beta = 0.613$, t =16.79, p < .001) and social sharing intention ($\beta = 0.326$, t = 5.080, p < .001), thus supporting H7a and H7b. Furthermore, the result also indicates that viewers' brand attitude positively influenced their social shopping intention ($\beta = 0.216$, t = 5.235, p < .001) and social sharing intention ($\beta = 0.172$, t = 3.077, p < .001), thus supporting H8a and H8b.

The suggested model provides a reasonable level of predictive ability (Table 5). Squared multiple correlations (R^2) values of 0.01, 0.09, and 0.25, respectively, imply minor, medium, and substantial impacts in behavioral sciences [47]. In this study, the model explained 0.630 or 63.0% of the variation in video attitude, 0.731% of the variation in brand attitude, 0.577 or 57.7% of the variance in social shopping intention, and 0.205 or 20.5% of the variation in social sharing intention latent factor. Predictive relevance (Q^2) values are also significant for measuring the structural model's predictive capabilities. The blindfolding procedure for performing the Stone-Geisser test with an omission distance of D = 7 revealed that the proposed model is of high quality, implying high predictive relevance for all endogenous constructs; Q^2 values were 0.478, 0.512, 0.430, and 0.174 for video attitude, brand attitude, social shopping intention, and social sharing intention, respectively, conforming to the criterion of $Q^2 > 0$.

Table 1Demographic characteristics of respondents.

Variables	Items	Frequency	Percentage (%)
Gender	Male	136	41.5
	Female	192	58.5
Marital status	Married	40	12.2
	Single	288	87.8
Age	18–29	296	90.2
_	30–40	32	9.8
Education	High School	24	7.3
	Undergraduate	192	58.5
	Graduate	112	34.2
Social media users	YouTube	328	100.0
	Facebook	320	97.6
	Instagram	264	80.5
	Zalo	216	65.9
	Tiktok	192	58.5

 Table 2

 The results of the measurement model and descriptive analysis.

Constructs/items*	Factor Loading	Cronbach's Alpha	AVE	CR	Mean	SD
Informative value		0.907	0.728	0.930		
IV1	0.873				3.878	0.889
IV2	0.860				3.732	0.856
IV3	0.794				3.805	1.087
IV4	0.906				3.854	0.952
IV5	0.831				3.659	1.027
Entertainment value		0.902	0.718	0.927		
EV1	0.796				4.049	1.058
EV2	0.876				3.927	0.973
EV3	0.922				3.878	0.889
EV4	0.833				3.805	0.968
EV5	0.802				3.951	0.987
Expertise		0.932	0.831	0.951		
E1	0.886				3.976	0.841
E2	0.928				3.756	1.054
E3	0.937				3.366	1.184
E4	0.894				3.756	0.957
Trustworthiness		0.887	0.753	0.923		
T1	0.931				3.39	1.187
T2	0.910				3.463	1.106
T3	0.921				3.537	0.94
Attractiveness		0.849	0.691	0.899		
A1	0.846				3.951	0.882
A2	0.846				4.024	0.897
A3	0.748				3.854	0.926
A4	0.880				3.537	1.014
Similarity		0.857	0.775	0.912		
S1	0.922				3.634	1.099
S2	0.846				3.366	1.321
S3	0.872				3.512	1.039
Video attitude		0.923	0.767	0.943		
VA1	0.903				4.146	0.843
VA2	0.903				4.22	0.841
VA3	0.947				4.195	0.803
VA4	0.784				4.293	0.672
VA5	0.833				4.122	0.889
Brand attitude		0.863	0.646	0.900		
FA2	0.858				3.976	0.749
FA3	0.764				3.951	0.697
FA4	0.865				4.000	0.733
FA5	0.854				3.951	0.661
Social shopping intention		0.727	0.643	0.843		
SS1	0.853				4.415	0.662
SS2	0.846				3.976	1.000
Social sharing intention		0.927	0.873	0.954		
SI1	0.904				4.195	0.917
SI2	0.941				4.122	0.942
SI3	0.957				4.268	0.938

Note: *: Appendix A; AVE: Average Variance Extracted; CR: Composite Reliability; SD: Standard deviation.

 Table 3

 Discriminant validity of the measurement model.

	Constructs	1	2	3	4	5	6	7	8	9	10
1	Attractiveness	0.831									
2	Brand attitude	0.692	0.804								
3	Entertainment value	0.472	0.561	0.847							
4	Expertise	0.785	0.717	0.584	0.911						
5	Informative value	0.619	0.664	0.76	0.584	0.853					
6	Similarity	0.704	0.718	0.262	0.645	0.433	0.88				
7	Social sharing intention	0.202	0.355	0.445	0.034	0.501	0.175	0.934			
8	Social shopping intention	0.613	0.662	0.564	0.579	0.644	0.509	0.607	0.802		
9	Trustworthiness	0.819	0.658	0.522	0.825	0.566	0.646	0.056	0.485	0.868	
10	Video attitude	0.406	0.612	0.717	0.383	0.731	0.264	0.421	0.649	0.308	0.87

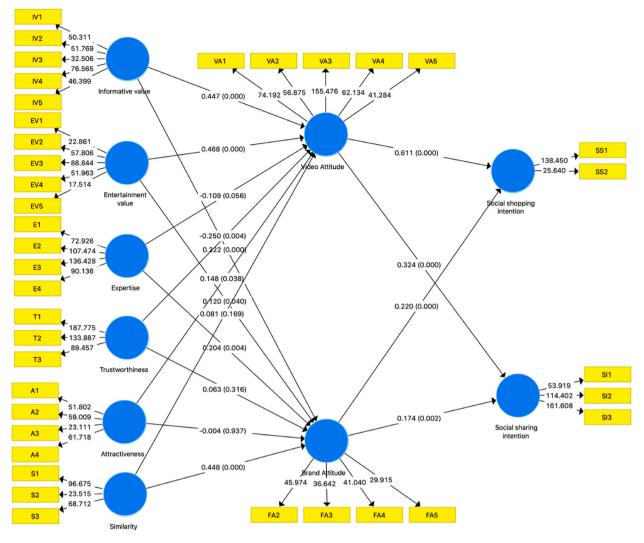


Fig. 2. PLS-SEM Output of assessment of measurement model.

Table 4 Results of the structural model.

Hypothesis	Relationship	Beta	Std dev	t-value	Decision
H1a	Informative value → Video attitude	0.439	0.076	5.922**	Supported
H1b	Informative value → Brand attitude	0.214	0.055	4.036**	Supported
H2a	Entertainment value → Video attitude	0.471	0.062	7.499**	Supported
H2b	Entertainment value → Brand attitude	0.120	0.058	2.06*	Supported
НЗа	Expertise → Video attitude	-0.109	0.057	1.917	Not supported
H3b	Expertise → Brand attitude	0.202	0.07	2.905**	Supported
H4a	Trustworthiness → Video attitude	-0.252	0.086	2.911	Not supported
H4b	Trustworthiness → Brand attitude	0.065	0.063	1.004	Not supported
H5a	Attractiveness → Video attitude	0.153	0.071	2.081*	Supported
H5b	Attractiveness → Brand attitude	-0.002	0.056	0.079	Not supported
Н6а	Similarity → Video attitude	0.083	0.059	1.377	Not supported
H6b	Similarity → Brand attitude	0.452	0.049	9.223**	Supported
H7a	Video attitude → Social shopping intention	0.613	0.036	16.79**	Supported
H7b	Video attitude → Social sharing intention	0.326	0.064	5.08**	Supported
H8a	Brand attitude → Social shopping intention	0.216	0.042	5.235**	Supported
H8b	Brand attitude → Social sharing intention	0.172	0.057	3.077**	Supported

^{*}p < .05, **p < .01.

Table 5 Predictive capability.

Construct	\mathbb{R}^2	Q ² predict
Video attitude	0.630	0.478
Brand attitude	0.731	0.512
Social shopping intention	0.577	0.430
Social sharing intention	0.205	0.174

5. Discussion and conclusion

5.1. Discussion

The study examined the impact of Vietnamese food vloggers on viewer attitudes toward the featured brands. Two factors were analyzed: advertising content value and influencer credibility, focusing on social commerce behaviors such as shopping and sharing intentions. Informative content and entertainment content were positively linked to viewers' attitudes toward both videos and brands. The study's findings paint a compelling picture of the impact of expert Vietnamese food vloggers on brand image, with a clear positive association between the vloggers' similarity with their viewers and the latter's brand attitudes. Notably, the values espoused in the vloggers' content exerted a more profound influence than the vloggers' perceived credibility.

Conversely, the attractiveness of the vloggers was found to have no discernible impact on viewers' brand attitudes. While trust-worthiness is widely regarded as a crucial component of the influencer-follower dynamic, the study unearthed a curious anomaly, with trustworthiness failing to exert a significant influence on viewers' attitudes toward influencers. That being said, the study does establish a clear link between viewers' attitudes and social commerce behavior, including shopping and sharing intentions. By shedding light on the mechanisms that underpin the influence of Vietnamese food vloggers on viewers' attitudes, the study yields valuable insights that can be leveraged to optimize marketing practices in the food industry.

The crux lies in the notion that food vloggers stand to gain from crafting content that strikes a delicate balance between entertainment and information. The study unearthed a clear preference among viewers for content that imparts value through informative and entertaining elements. This finding is in keeping with prior research [4,17,28,29,48], which has underscored the profound impact of informative and entertaining content on viewers' attitudes toward the video and the brand being promoted. As a result, food vloggers must take care to create content that both showcase their culinary skills and offers valuable information on ingredients, cooking techniques, and nutritional value. Moreover, they should add storytelling, humor, and other elements that captivate their viewers' attention and retain their interest so that their content remains engaging and entertaining. It is possible for food vloggers to cultivate a better relationship with their audience by following these guidelines, resulting in a more favorable attitude towards their content and brand.

Based on the study's findings, viewers' attitudes toward video content are influenced by food vloggers' physical appearance, which is consistent with prior research [4,32]. Nevertheless, viewers' attitudes toward video content were uncorrelated with food vloggers' expertise, trustworthiness, and similarity to the audience. According to this analysis, viewers largely evaluate video content based on other factors, such as food quality, dish presentation, and overall production value, rather than these attributes. The study found that physical appearance may significantly influence viewers' attitudes toward video content, even though these factors are vital in shaping their perceptions of food vloggers. As a result, food vloggers must prioritize making high-quality material that showcases their culinary talents and knowledge while still maintaining a physical look. Ultimately, providing high-quality content that resonates with viewers can foster greater engagement and brand loyalty, leading to increased brand awareness and revenue for the food vlogger.

This key finding underscores the importance of food vloggers showcasing their expertise and highlighting their similarities with their audience to bolster their credibility and positively impact viewers' attitudes toward their brand, in line with previous studies [23, 31,33,39]. The study also revealed no significant relationship between trustworthiness, physical attractiveness, and brand attitude. In other words, viewers' perception of the food vlogger's trustworthiness or physical attractiveness did not significantly influence their perception of the associated brand. This implies that other variables, such as food quality, dish presentation, or the videos' overall production value, may substantially impact viewers' attitudes toward the brand associated with the food vlogger. It is crucial for food vloggers to recognize these factors and aim to produce high-quality content that showcases their culinary skills and expertise while simultaneously highlighting their audience's similarities to foster greater engagement and brand loyalty.

This intriguing finding highlights the crucial role that positive attitudes toward content and associated brands play in shaping viewers' social commerce behaviors, a phenomenon that aligns with earlier research [3,34,38,39]. Simply put, food vloggers have the power to boost their sales potential and engagement levels by crafting high-quality content that resonates with their audience and positively influences their attitudes toward both the content and the brand being promoted. By doing so, they can enhance viewers' likelihood to engage in social commerce behaviors, such as sharing content with their social network, leaving positive feedback, or making a purchase. This can lead to heightened brand awareness, loyalty, and better revenue prospects for the food vlogger. Therefore, food vloggers must prioritize producing engaging, high-quality content that speaks to their audience's interests and preferences, fostering a deeper connection and driving greater social commerce engagement.

5.2. Theoretical implications

This study has important implications for food vloggers in the marketing and travel literature industries. The findings of this study contribute to the social cognitive theory [7] by providing insights into how Vietnamese food vloggers can influence viewers' attitudes toward the featured brands and their social commerce behaviors. The study highlights the importance of informative and entertaining content in positively impacting viewers' attitudes toward the videos and the promoted brands. The study suggests that future research should focus on testing influencer marketing on specific social media platforms [2], and this study specifically examines the impact of social media influencers on viewers' attitudes toward food content. The literature on the credibility of influencers is in connection with social media marketing, which also enhances our understanding of the function of influencers in social media marketing [2,4].

In addition to the previous findings, the study also reveals that the value of advertising content can significantly impact viewers' attitudes toward the video and the associated brand [49], which corroborates earlier research [4,15,22]. Moreover, the study uncovered an untested relationship between viewers' attitudes and social commerce intentions, demonstrating that their attitudes toward food vloggers can influence their likelihood of making a purchase [28,34,37,38]. These results indicate that food vloggers can reap the rewards of creating high-quality content that resonates with their audience and cultivates positive attitudes towards their brand and products. By prioritizing these factors, food vloggers can drive greater engagement, loyalty, and revenue prospects, thereby enhancing their social commerce impact and standing within the industry.

5.3. Practical implications

The study's findings hold practical implications for advertisers, food vloggers, and food companies, offering valuable insights into the impact of advertising content value and influencer credibility on viewers' attitudes and social commerce intentions, with a specific focus on food vloggers. For food vloggers, the study provides a framework for creating high-quality content that resonates with their audience and promotes quality brands, collaborating with effective advertisers and marketers to increase social commerce behaviors and brand loyalty. Building a loyal following by engaging with their audience and responding to feedback can drive engagement and social commerce behaviors, such as sharing content, leaving positive comments, or making a purchase. Monitoring and analyzing content performance and social commerce behaviors can help identify what works and what does not, allowing vloggers to adjust their strategy accordingly, continuously improving and innovating their content and approach to keep up with changing trends and audience preferences.

For advertisers and marketers, the study's insights can be used to identify the most effective influencers for promoting their products, evaluating advertising content value and credibility to collaborate with influencers who positively impact viewers' attitudes and intentions. When selecting food bloggers as brand spokespersons, the content of their videos, the influencer's expertise, and their similarity to your target audience should be considered. A multichannel influencer marketing strategy, which uses vloggers and companies to promote products on multiple social media platforms, is suggested. Increased reach will grow the effectiveness and impact of influencer marketing campaigns, which will raise their likelihood of reaching target audiences.

Food companies can recognize effectual influencers for stimulating their products by analyzing advertising content value and influencing credibility system of measurement. Collaboration with food vloggers and influencers with high advertising content value can increase social commerce behaviors and brand awareness. A multichannel approach to influencer marketing, which involves promoting products on multiple social media platforms, can increase the reach and effectiveness of the campaign. In selecting food bloggers as brand spokespersons, consider the content of their videos, their expertise, and their similarity when promoting products across multiple social media platforms.

The study's findings suggest that food vloggers, advertisers, and food companies can increase their potential for social commerce behaviors and brand awareness by collaborating effectively, creating high-quality content, building a loyal following, monitoring and analyzing performance, and continuously improving and innovating their content and strategy. By adopting these recommendations, industrial players can maximize their impact and drive increased sales and revenue.

5.4. Limitations and future research

While this research provides valuable insights into the impact of food vloggers on viewer attitudes and social commerce intentions, it is important to note that the study has several limitations. One potential limitation is the generalizability of our findings to the entire concept of food influencers. The study focused solely on food vloggers and their content posted on social media platforms, so the results may not generalize to other types of food and content formats. Thus, future research can examine different content formats (such as Instagram or Facebook photographs, blog articles, and audio podcasts) or other types of food (such as vegetables, fruits, dairy, and seafood) to enhance our understanding of influencer marketing beyond food vloggers. This will provide a more comprehensive understanding of the impact of social media influencers on customer attitudes and social commerce intentions.

Another limitation is that this study did not consider the impact of different levels of celebrity influencers. Future studies should investigate possible distinctions between micro-influencers and macro-influencers and how these distinctions affect customer views. This will help provide insights into how different social media influencers impact customer attitudes and social commerce intention and how companies can utilize different levels of celebrity influencers to enhance their social media influence.

Furthermore, platform-related factors like social media users' comments can impact viewer attitudes and social commerce intentions. This study did not include these factors in the model. Therefore, future research should consider adding platform-related factors into the model and investigate how they influence viewer attitudes and social commerce intentions. This will provide more

comprehensive insights into the influence of social media on customer attitudes and behaviors and how companies can optimize their marketing strategies according to platform-related factors.

Author contribution statement

All authors listed have significantly contributed to the investigation, development and writing of this article.

Data availability statement

Data will be made available on request.

Additional information

No additional information is available for this paper.

Compliance with ethical standards

Ethics statement

National Kaohsiung University of Hospitality and Tourism does not require ethics approval for its survey study. During the survey, participants were thoroughly informed about the nature of the study and data protection. The survey can be started after the respondent agrees to the terms and clicks the consent button. If they wish to opt out, they could close the website anytime.

Declaration of competing interest

I consider food vloggers were trustworthy.I feel food vloggers were truthful.

I consider food vloggers very attractive.I consider food vloggers very stylish.

· I think food vloggers are good-looking.

· I consider food vloggers earnest.

Attractiveness

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Measurement items of the survey questionnaire

English Version Vietnamese Version Informative value Giá trị thông tin Liên quan đến các nhà tạo nội dung về ẩm thực trên mạng xã hội mà tôi đang theo dõi; Concerning food vloggers, I am following on social media; I think their social media posts/updates are" tôi nghĩ rằng các bài đăng và cập nhật truyền thông xã hội của họ là • Ineffective/Effective Không hiệu quả/Hiệu quả • Unhelpful/Helpful • Không hữu ích/Hữu ích · Not functional/Functional Không chức năng/Chức năng Không cần thiết/Cần thiết Unnecessary/Necessary Impractical/Practical Không thực tế/Thực tế Giá tri giải trí Entertainment value I am concerned that social media posts or updates of food vloggers are Tôi quan tâm rằng các bài đăng hoặc cập nhật trên mạng xã hội của những người tạo nội dung về ẩm thực là • Not fun/Fun • Không vui vẻ/Vui vẻ Nhạt nhẽo/Hẩp dẫn · Dull/Exciting • Not delightful/Delightful • Không thú vị/Thú vị Không đầy hứng thú/Đầy hứng thú · Not thrilling/Thrilling • Không thú vị/Thú vị Unenjoyable/Enjoyable Chuyên môn Tôi cảm thấy các nhà tạo nội dung về ẩm thực có kiến thức rộng về những gì họ · I feel food vloggers have a huge knowledge about what they review. · I feel food vloggers are competent in making affirmations about the đánh giá. Tôi cảm thấy các nhà tạo nội dung về ẩm thực đủ năng lực để đưa ra những khẳng product. I consider food vloggers experts on the product. định về sản phẩm. I consider food influencers sufficiently experienced to make assertions • Tôi coi các nhà tao nôi dung về ẩm thực là chuyên gia về sản phẩm đó. about the product. Tôi coi các chuyên gia về ẩm thực có đủ kinh nghiệm để đưa ra các khẳng định về sản phẩm. Trustworthiness Đáng tin cây • Tôi cảm thấy các nhà tạo nội dung về ẩm thực rất trung thực. · I feel food vloggers were honest.

(continued on next page)

• Tôi cho rằng các nhà tạo nội dung về ẩm thực đáng tin cậy.

Tôi cảm thẩy các nhà tạo nội dung về ẩm thực rẫt chân thật.
Tôi coi các nhà tạo nội dung về ẩm thực chân thành.

• Tôi cho rằng các nhà tạo nội dung về ẩm thực rắt hắp dẫn.

Tôi cho rằng các nhà tạo nội dung về ẩm thực rắt thời trang.

Tôi nghĩ rằng các nhà tạo nội dung về ẩm thực đẹp trai/đẹp gái.

(continued)

English Version

· I think food vloggers are sexy.

Similarity

- Food vloggers and I have a lot in general.
- Food vloggers and I are a lot comparable.
- I can quickly identify with food vloggers.

Video Attitude

How would you describe your attitude towards the food videos that feature food brands?

- Fun
- Exciting
- Delightful
- Thrifting
- Enjoyable

Brand Attitude

How would you describe your attitude towards food brands based on the food videos you have seen?

- Appealing
- Good
- Pleasant
- Favorable
- Likable

Social shopping intention

- I will consider the shopping experiences of food vloggers on social media when I want to try that food.
- I will ask food vloggers to provide suggestions before I go for food.
- I am willing to buy the foods recommended by food vloggers.

Social sharing intention

- I am willing to provide my experiences and suggestions when other users on social media want my advice on buying something.
- I am willing to share my eating experience with other users on social media.
- I am willing to recommend foods worth trying to other users on social media.

Vietnamese Version

- Tôi nghĩ rằng các nhà tạo nội dung về ẩm thực quyến rũ.
 Tương đồng
- Nhà tạo nội dung về ẩm thực và tôi có rất nhiều điểm chung.
- Nhà tạo nội dung về ẩm thực và tôi rất giống nhau.
- Tôi có thể nhanh chóng đồng cảm với nhà tạo nội dung về ẩm thực.
 Thái đô đối với video

Bạn sẽ mô tả thái độ của mình như thế nào đối với các video về đồ ăn giới thiệu các thương hiệu đồ ăn?

- Vui vẻ
- Hẩp dẫn
- Đầy hứng thú
- · Hào hứng
- Thú vị

Thái độ với thương hiệu

Bạn sẽ mô tả thái độ của mình đối với các thương hiệu thực phẩm như thế nào dựa trên các video về thực phẩm mà bạn đã xem?

- Hẩp dẫn
- Tốt
- Dễ chịu
- Thuận lợi
- Dễ thích

Ý định mua sắm

- Tôi sẽ xem xét trải nghiệm mua sắm của những sản phẩm mà các nhà tạo nội dung đã review trước đó.
- Tôi sẽ nhờ những nhà tạo nội dung về ẩm thực cung cấp các gợi ý trước khi tôi đi mua thực phẩm.
- Tôi sẵn sàng mua các loại thực phẩm được nhà tạo nội dung về ẩm thực giới thiệu. Ý đinh chia sẻ
- Tôi sẵn sàng chia sẻ kinh nghiệm và gợi ý của mình khi người dùng khác trên mạng xã hội muốn tôi tư vẩn về việc mua một sản phẩm.
- Tôi sẵn sàng chia sẻ trải nghiệm ăn uống của mình với người dùng khác trên mạng xã hội.
- Tôi sẵn sàng giới thiệu các sản phẩm thực phẩm đáng thử cho người dùng khác trên mạng xã hội.

References

- [1] Datareportal, DIGITAL 2021: VIETNAM [Internet], Datareportal, 2021 [cited 2021 Nov 3]. Available from: https://datareportal.com/reports/digital-2021-vietnam.
- [2] C. Lou, S. Yuan, Influencer marketing: how message value and credibility affect consumer trust of branded content on social media [Internet], J. Inter. AdverT. 19 (1) (2019 Jan 2) 58–73, https://doi.org/10.1080/15252019.2018.1533501. Available from:.
- [3] L. Jean, A. Rozaini, M. Radzol, C. Hwa, M. Wong, The impact of social media influencers on purchase intention and the mediation effect of customer attitude, vol. 7, 2019 Jan 25, pp. 19–36.
- [4] M. Xiao, R. Wang, S. Chan-Olmsted, Factors affecting YouTube influencer marketing credibility: a heuristic-systematic model [Internet], J. Media Bus. Stud. 15 (3) (2018 Jul 3) 188–213, https://doi.org/10.1080/16522354.2018.1501146. Available from:.
- [5] S. Fu, H. Li, Understanding social media discontinuance from social cognitive perspective: evidence from Facebook users, J. Inf. Sci. 48 (4) (2022) 544–560.
- [6] Y. Sun, Y. Zhang, A review of theories and models applied in studies of social media addiction and implications for future research, Addict. Behav. 114 (2021), 106699.
- [7] A. Bandura, Social cognitive theory: an agentic perspective, Annu. Rev. Psychol. 52 (2001) 1-26.
- [8] A.U. Zafar, J. Qiu, Y. Li, J. Wang, M. Shahzad, The impact of social media celebrities' posts and contextual interactions on impulse buying in social commerce, Comput. Hum. Behav. (2021) 115.
- [9] J.E. Lee, B. Watkins, YouTube vloggers' influence on consumer luxury brand perceptions and intentions, J. Bus. Res. 69 (12) (2016 Jun 1) 5753-5760.
- [10] M.K. Goodman, S. Jaworska, Mapping digital foodscapes: digital food influencers and the grammars of good food [Internet], Geoforum (2020), 117:183–193. Available from: https://www.sciencedirect.com/science/article/pii/S0016718520302463.
- [11] J. Johnston, M.K. Goodman, Spectacular foodscapes: food celebrities and the politics of lifestyle mediation in an age of inequality [Internet], Food Cult. Soc. 18 (2) (2015 Apr 1) 205–222, https://doi.org/10.2752/175174415X14180391604369. Available from:.
- [12] A. Abell, D. Biswas, Digital engagement on social media: how food image content influences social media and influencer marketing outcomes [Internet], J. Interact Mark 58 (1) (2022 Oct 19) 1–15, https://doi.org/10.1177/10949968221128556. Available from:.
- [13] H. Pham, Factors affecting consumer goods buyers' choice in E-commerce sites: evidence from Vietnam, J. Asi. Finan. Econ. Bus. 7 (2020 Nov 30) 947–953.
- [14] L. Buchanan, B. Kelly, H. Yeatman, K. Kariippanon, The effects of digital marketing of unhealthy commodities on young people: a systematic review, Nutrients 10 (2018 Jan 29) 148.
- [15] R.H. Ducoffe, How consumers assess the value of advertising [Internet], J. Curr. Issues Res. Advert 17 (1) (1995 Mar 1) 1–18, https://doi.org/10.1080/10641734.1995.10505022. Available from:.
- [16] J.N. Sheth, C. Uslay, Implications of the revised definition of marketing: from exchange to value creation, J. Publ. Pol. Market. 26 (2) (2007) 302-307.
- [17] R.H. Ducoffe, Advertising value and advertising on the Web, J. Advert. Res. 36 (5) (1996) 21–35.
- [18] W.V.T. Dao, A. Nhat Hann Le, J. Ming-Sung Cheng, D. Chao Chen, Social media advertising value [Internet], Int. J. Adver. 33 (2) (2014 Jan 1) 271–294, https://doi.org/10.2501/IJA-33-2-271-294. Available from:.
- [19] M.J. Metzger, A.J. Flanagin, K. Eyal, D.R. Lemus, R.M. Mccann, Credibility for the 21st century: integrating perspectives on source, message, and media credibility in the contemporary media environment, Ann. Int. Commun. Assoc. 27 (1) (2003 Jan) 293–335.
- [20] C.I. Hovland, I.L. Janis, H.H. Kelley, Communication and Persuasion; Psychological Studies of Opinion Change, Yale University Press, New Haven, 1953.

[21] R. Ohanian, Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness [Internet], J. Adver. 19 (3) (1990 Oct 1) 39–52, https://doi.org/10.1080/00913367.1990.10673191. Available from:.

- [22] X. Zha, J. Li, Y. Yan, Advertising value and credibility transfer: attitude towards web advertising and online information acquisition, Behav. Inf. Technol. 34 (5) (2015 May 4) 520–532.
- [23] J. Munnukka, O. Uusitalo, H. Toivonen, Credibility of a peer endorser and advertising effectiveness, J. Consum, Market, 33 (2016 May 9) 182–192.
- [24] I. Ajzen, M. Fishbein, Attitude-behavior relations: a theoretical analysis and review of empirical research, Psychol. Bull. 84 (1977 Sep 1) 888–918.
- [25] M. Solomon, G. Bamossy, S. Askegaard, Consumer Behaviour: A European Perspective, Edinburgh Gate Pearson Educ Ltd, 2002 Jan 1, pp. 36-49.
- [26] S. MacKenzie, R. Lutz, An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context, J. Market. 53 (1989 Apr 1) 48–65.
- [27] J.E. Phelps, M.G. Hoy, The Aad-Ab-PI relationship in children: the impact of brand familiarity and measurement timing, vol. 13, Psychology & Marketing. US: John Wiley & Sons, 1996, pp. 77–105.
- [28] D.Y. Kim, H.Y. Kim, Influencer advertising on social media: the multiple inference model on influencer-product congruence and sponsorship disclosure, J. Bus. Res. 130 (2021 Jun 1) 405–415.
- [29] R.C. Jaitly, O. Gautam, Impact of social media influencers on customer engagement and brand perception, Int. J. Internet Market Advert. 15 (2) (2021 Jan) 220–242.
- [30] Y. Lee, J. Koo, Athlete endorsement, attitudes, and purchase intention: the interaction effect between athlete endorser-product congruence and endorser credibility, J. Sport Manag. 29 (2015 Jan) 523–538.
- [31] L. Nafees, C.M. Cook, J.E. Stoddard, The impact of the social media influencer power on consumer attitudes toward the brand: the mediating/moderating role of social media influencer source credibility, in: Soc Media Mark Best Conf., 34, Worthy, 2020.
- [32] Z. Li, Y. Yin, Attractiveness, expertise and closeness: the effect of source credibility of the first lady as political endorser on social media in China, Glob. Media China 3 (4) (2018) 297–315.
- [33] W. Choi, Y. Lee, Effects of fashion vlogger attributes on product attitude and content sharing, Fash Text 6 (1) (2019) 1-18.
- [34] J. Chen, X.L. Shen, Consumers' decisions in social commerce context: an empirical investigation [Internet], Decis Support Sys. 79 (2015) 55–64. Available from: https://www.sciencedirect.com/science/article/pii/S016792361500144X.
- [35] T.P. Liang, E. Turban, Introduction to the special issue social commerce: a research framework for social commerce, Int. J. Electron. Commer. 16 (2011 Dec 1) 5–13.
- [36] D.H. Shin, User experience in social commerce: in friends we trust [Internet], Behav. Inf. Tech. 32 (1) (2013 Jan 1) 52–67, https://doi.org/10.1080/0144929X.2012.692167. Available from:.
- [37] T.P. Liang, Y.T. Ho, Y.W. Li, E. Turban, What drives social commerce: the role of social support and relationship quality, Int. J. Electron. Commer. 16 (2011 Dec 1) 69–90.
- [38] Z. Sheikh, L. Yezheng, T. Islam, Z. Hameed, I.U. Khan, Impact of social commerce constructs and social support on social commerce intentions, Inf. Technol. People 32 (1) (2019 Jan 8) 68–93.
- [39] Y. Chetioui, H. Benlafqih, H. Lebdaoui, How fashion influencers contribute to consumers' purchase intention, J. Fash. Mark. Manag. An. Int. J. 24 (3) (2020 Jan) 361–380.
- [40] K. Voss, E. Spangenberg, B. Grohmann, Measuring the hedonic and utilitarian dimensions of consumer attitude, J. Mark. Res.- J Mark RES-CHICAGO 40 (2003 Aug) 310–320.
- [41] N. Spears, S. Singh, Measuring attitude toward the brand and purchase intentions, J. Curr. Issues Res. Advert. 26 (2004 Sep) 53-66.
- [42] W. Reinartz, M. Haenlein, J. Henseler, An empirical comparison of the efficacy of covariance-based and variance-based SEM, Int. J. Res. Market. 26 (4) (2009) 332–344.
- [43] J.F. Hair, C.M. Ringle, M. Sarstedt, PLS-SEM: indeed a silver bullet, J. Market. Theor. Pract. 19 (2) (2011) 139-152.
- [44] J.F. Hair, J.J. Risher, M. Sarstedt, C.M. Ringle, When to use and how to report the results of PLS-SEM, Eur. Bus. Rev. 31 (1) (2019) 2-24.
- [45] J.F. Hair, M. Page, N. Brunsveld, Basic data analysis for qualitative research, in: Essentials of Business Research Methods, Routledge, 2019, pp. 305–325.
- [46] J. Hair, W. Black, B. Babin, R. Anderson, Multivariate data analysis, in: Multivariate Data Analysis: A Global Perspective, seventh ed., 2010.
- [47] J. Cohen, Statistical Power Analysis for the Behavioural Sciences, Lawrence Earlbaum Associates, Hillside. NJ, 1988.
- [48] M. Sallam, A. Fahad, Algammash, The effect of attitude toward advertisement on attitude toward brand and purchase intention, Int. J. Econ. Commer. Manag. 5 (2) (2016 Mar 1) 509–520.
- [49] K. Sokolova, H. Kefi, Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions, J. Retailing Consum. Serv. 53 (1) (2019 Jan), 10742.