

Does Personalized Advertisement Influence Behavioral Intention and Customer Engagement? Study in Gen-Z Instagram Users

Rifelly Dewi Astuti, Luthfan Fadhila Henryanto Putra
Faculty of Economics and Business, Universitas Indonesia
Corresponding email: rifelly.dewi@ui.ac.id

Abstract: There is an increasing study on the effect of personalized advertising from the traditional approach, but few studies have examined the effect of social media advertising, especially Instagram. Using the partial least structural equation modeling (PLS-SEM) method, this study examines the effects of personalized advertising perceived by consumers (consisting of perceived personalization, ad credibility, ad skepticism, and ad avoidance) on Instagram toward the reaction of consumers' attitudes and behavior. This present study involved 421 sample data of Gen-Z Instagram users who had used the social media application in recent weeks during the study. The findings of the study prove that personalized advertising can increase positive responses of consumers (e.g., increase the credibility and attitude of advertisements) and reduce their negative responses to advertisements (e.g., advertising skepticism and advertising avoidance). This positive response is proven to increase the likelihood of consumers buying and their involvement in personalized advertising. The implication and recommendation are also provided in this paper.

Keywords: Personalized advertising, Ad credibility, Ad skepticism, Ad avoidance, Attitude towards advertising, Instagram, Gen-Z

INTRODUCTION

Nowadays, social media platform (e.g., Instagram) is integrated into advertisements strategy that is more attractive to their customers by adjusting advertisements related to their online activities. Through the involvement of social media, marketers can determine a specific target audience or be more personalized. Personalized advertising is the popular strategy used by many brands using social media to enable tailor consumers to be more specific (Tran et al., 2021). Moreover, personalization is a marketing concept that utilizes technology to create special stimuli for customers and is utilized by online advertisers to attract customers to purchase impulsively (Dawson & Kim, 2010). Through the personalized ad, customers can find more products or services that are suitable for them.

A preliminary study reported several vital benefits associated with the personalized ad, which aims to increase the likelihood of customers buying (Chakraborty et al., 2003). When the response is given by the customer positively, it can increase the likelihood of other beneficial actions, such as behavioral intention and customer engagement. However, the impact of personalized advertising on social media should be investigated in relation to its effect on customer engagement, not from a behavioral intention lens only (Tran, 2017). This underlies this research to be able to fill the gaps or shortcomings of previous research by adding other important dependent variables: customer engagement (e.g., likes and comments), that are relevant to current managerial practices (Tran et al., 2021).

The personalized ad has a robust relationship to the consumer database. It combines individual information such as demographic information, browsing history, and brand preferences (Bang & Wojdyski, 2016). A brand can adopt a personalized ads strategy by combining consumer data and advertising technology through the Internet (Tong et al., 2020). Therefore, it can deliver messages to consumers better because the ads are more personalized and more innovative, so consumers will be interested in the message offered by the brand (Chen & Hsieh, 2012). Later, Jung (2017) asserted that personalized advertisements are designed with the aim of providing information to targeted users; and, therefore, influence consumer responses when exposed to an advertisement—responses that are measured by ad credibility, ad avoidance, ad skepticism, and attitude toward the ad.

According to the literature, advertising credibility is the extent to which consumers consider the message or claim offered by a brand in advertising to be a true and credible claim (MacKenzie & Lutz, 1989; Tucker et al., 2012). In short, advertising credibility is the customer's evaluation of the truth and trust in advertising content (Tran, 2017). Credibility is considered one of the essential components of persuasive messages that change the results of messages (Choi & Rifon, 2002). If the advertising message is considered more credible, the audience will tend to be easier to be convinced that the claim is true (Cotte et al., 2005) and therefore, the attitude toward ad will increase and affect behavioral intention (Tran, 2017). That way, this positive response can provide a beneficial impact on marketers. Whereas ads that are not credible lead to negative responses such as ad avoidance and skepticism.

The advertising avoidance refers to responses that are generated by users and their actions to prevent the exposure of advertisements to themselves (Speck & Elliott, 1997). At the same time, ad skepticism has been considered as the tendency of customers not to trust the contents or messages of an advertisement delivered by a brand (Obermiller & Spangenberg, 1998). Knowles and Linn (2004) claimed that customer distrust of messages originating from skepticism is likely to produce a high level of resistance. When a customer is skeptical, they will be less interested in advertising and less dependent on advertising and will be more likely to avoid advertising (Speck & Elliott, 1997). In contrast to ad skepticism, ad credibility has a positive influence on attitudes toward advertising, and it can influence consumer purchase intentions (MacKenzie & Lutz, 1989).

Instagram is a mobile photo and video capture and sharing service that has emerged recently and is quickly becoming popular as a new social media platform. Statistically, Instagram is a social media platform that is ideal for use in advertising activities. Previous data reported that active users of Instagram in Indonesia reached over 61,610,000 and were the fourth most Instagram users in the world until the end of 2019. Moreover, Instagram is a favorite social media platform for young people aged 17-24 (We Are Social, 2020). Additionally, based on a survey conducted by Business Insider (2020), Gen Z was born after 1995 and remarked that Facebook is no longer the social media platform of their choice.

We selected Gen Z consumers as the respondents because they are potential consumers in the future. Television, the internet, and radio are the three primary media consumed by them (Nielsen, 2016). According to a survey conducted by Nielsen in October 2016, Generation Z is a consumer who is always connected to the

Internet: 93 percent of children and 97 percent of teenagers state that they access the internet through their mobile devices. Some of the activities most favored by Gen Z with the internet include interacting through social media, surfing the internet, playing games, and listening to music. In other words, Gen Z consumers are easily reached by companies through social media or access through the internet.

It is therefore, this study aims to analyze the perceived personalization ads as a stimulus followed by the process of ad credibility, ad skepticism, ad avoidance, and attitude towards ad as organism, influencing the behavioral intention and customer engagement as the response. This current research involved the stimulus-organism-response (SOR) theory as a framework for explaining the relationship between variables (Mehrabian & Russell, 1974). Thus, the study provides a contribution to enhance customer engagement as the impact of personalized ads besides behavioral intention, as suggested by Tran (2017). The rest of the paper presents methodology, results and discussion, and conclusions.

METHODS

Research Design

This is a descriptive quantitative study with a survey method. The data were collected through an online self-administered survey using Google Forms and distributed through social media. The research model in this study is in Figure 1. Furthermore, based on this framework, the hypothesis is presented as follows.

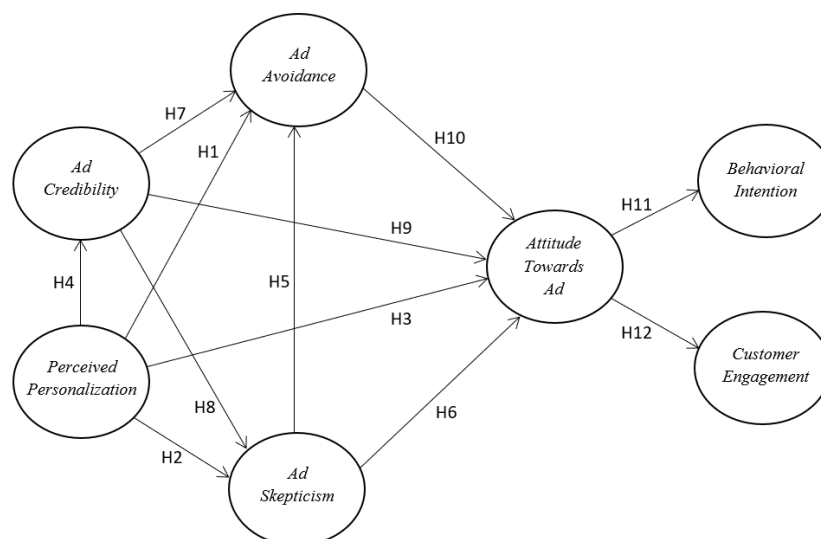


Figure 1. Research Model

- H1: Perceived personalized ads have a significant negative effect on ad avoidance.
- H2: Perceived personalized ads have a significant negative effect on ad skepticism.
- H3: Perceived personalized ads have a significant positive effect on attitude towards ad.
- H4: Perceived personalized ads have a significant positive effect on ad credibility.
- H5: Ad skepticism has a significant positive effect on ad avoidance.
- H6: Ad skepticism has a significant negative effect on attitude towards ad.

- H7: Ad credibility has a significant negative effect on ad avoidance.
H8: Ad credibility has a significant negative effect on ad skepticism.
H9: Ad credibility has a significant positive effect on attitude towards ad.
H10: Ad avoidance has a significant negative effect on attitude towards ad.
H11: Attitude towards ads has a significant positive influence on behavioral intention.
H12: Attitude towards ads has a significant positive effect on customer engagement.

Measurement

This study has a total of 34 indicators with seven latent variables and used 7-Likert scales with 1 “Strongly disagree” and 7 “Strongly agree”. All the indicators in variables were adapted from the study of Tran (2017), except for indicators of customer engagement were adapted from Kabadayi and Price (2014). To obtain a better result for this research, we made some adjustments in the language context, considering the respondents are Indonesian Instagram users.

Population and Sample

The respondent is those who are generation Z (born 1995–2010), who has been actively involved in social media in the past week before receiving a research questionnaire, having a personal Instagram account, and having seen advertisements appearing on their Instagram account. In total, we received 430 responses from Google Forms, and we found 421 valid responses to involve in this survey.

Data Analysis

The data was analyzed by Partial Least Square Structural Equation Modelling (PLS-SEM). The PLS-SEM type is used to estimate the path coefficient based on available data to minimize the term error for endogenous variables. This method can be used with small sample sizes in complex models, and PLS-SEM is not bound by normal data distribution assumptions (Haenlein & Kaplan, 2004). Structural measurement was checked with internal consistency measure (CR), convergent validity measure (outer loadings and AVE), discriminant validity measure (Fornell-Larcker and cross-loadings), and measurement model was checked with collinearity, R^2 , Q^2 , FQ, and SRMR. For hypotheses testing, we measure with beta, T-value, and P-value using 5000 subsamples of bootstrapping.

RESULTS AND DISCUSSION

Validity and Reliability of measurement

Internal consistency and convergent validity test results are presented in Table 1. It shows that all variables have a high level of reliability and validity because all these variables have CR values above 0.7 and AVE values above 0.5. However, there were four items with outer loadings measurements below 0.7 (PER4, AVOID1, SKEP1, and SKEP2). However, Hair et al. (2014) stated that items that have outer loadings values between 0.4 - 0.7 can be analyzed further to see their impact on the reflective measurement model, so it needs to analyze further in the discriminant validity stage.

Table 1. Internal Consistency and Convergent Validity

Items	CR	Outer Loadings	AVE
Perceived Personalization	0.884		0.609
PER1 - The ad on Instagram recommends products that fit my needs.		0.841 0.802	
PER2 - Advertising on Instagram allows me to order products that suit me.		0.782	
PER3 - Overall, the adverts on Instagram are adjusted to my situation.		0.593	
PER4 - These Instagram ads make me feel that I am a unique customer.		0.854	
PER5 - I believe that the Ads on Instagram have been adjusted to my needs.			
Ad Avoidance	0.888		0.615
AVOID1 - I deliberately ignored the ads that appeared on my Instagram timeline.		0.655	
AVOID2 - I hate ads that appear on my Instagram.		0.814	
AVOID3 - It would be better if there were no ads on my Instagram.		0.848	
AVOID4 - I have tried to set my account to avoid ads that appear on my Instagram.		0.840	
AVOID5 - I have asked for help to prevent me from receiving ads that appear on my Instagram timeline.		0.746	
Ad Skepticism	0.926		0.578
SKEP1 - I can count on Instagram sponsored ads. (R)		0.616	
SKEP2 - The purpose of advertising on Instagram is to provide information to Instagram users. (R)		0.625	
SKEP3 - I believe the ads that appear on Instagram are informative. (R)		0.719 0.746	
SKEP4 - Ads on Instagram are generally honest. (R)		0.848	
SKEP5 - Ads on Instagram are a reliable source of information regarding product quality and performance. (R)		0.847 0.778	
SKEP6 - Ads displayed on Instagram are honest. (R)			
SKEP7 - In general, advertisements on Instagram present a true picture of the product that being advertised. (R)		0.845 0.777	
SKEP8 - I feel I have gotten accurate information after seeing most of the advertisements on Instagram. (R)			
SKEP9 - Most advertisements on Instagram give consumers important information. (R)			
Ad Credibility	0.901		0.753
CRE1 - I use adverts on Instagram as a reference for purchases.		0.738 0.938	
CRE2 - I believe in ads on Instagram.		0.914	
CRE3 - The contents of advertisements on Instagram can be trusted.			
Attitude Towards Ad	0.935		0.829
ATTD1 - I like the idea of using ads on Instagram.		0.888	

Items	CR	Outer Loadings	AVE
ATTD2 - Advertising with ads on Instagram is a good idea.		0.916	
ATTD3 - Advertising with ads on Instagram is a wise idea.		0.926	
Behavioral Intention	0.900		0.751
INT1 - I will enjoy / see / read the ad on Instagram whenever I have the chance.		0.852	
INT2 - I intend to use the ad on Instagram to find more information about the product being advertised.		0.877	
INT3 - I hope the ad on Instagram can help me make a purchase.		0.871	
Customer Engagement	0.924		0.672
ENG1 - I enjoy liking ads on Instagram.		0.882	
ENG2 - I regularly like ads on Instagram.		0.906	
ENG3 - Giving likes on Instagram ads is something I often do.		0.904	
ENG4 - I enjoy leaving comments on Instagram ads.			
ENG5 - I used to leave comments on Instagram ads.		0.758	
ENG6 - Leaving comments on Instagram ads is something I often do.		0.740	
		0.704	

Note. (R) indicates reversed coded item.

Table 2 and Table 3 show that all items are valid following the Fornell – Larcker criterion and Cross Loadings discriminant validity. Meanwhile, Cross Loadings measurement shows that all indicator values of each construct are higher than indicators found in other constructs based on its layout, both viewed vertically and horizontally. Thus, data testing can proceed to the next stage.

Table 2. Discriminant Validity: Fornell–Larcker

	ATTD	AVOID	CRE	ENG	INT	PER	SKEP
ATTD	0.910						
AVOID	-0.472	0.784					
CRE	0.620	-0.479	0.868				
ENG	0.326	-0.176	0.375	0.820			
INT	0.578	-0.477	0.593	0.443	0.867		
PER	0.523	-0.376	0.518	0.314	0.465	0.780	
SKEP	-0.602	0.425	-0.796	-0.396	-0.558	-0.526	0.760

Table 3. Discriminant Validity: Cross Loadings

	ATTD	AVOID	CRE	ENG	INT	PER	SKEP
ATTD1	0.888	-0.47	0.586	0.327	0.526	0.517	-0.565
ATTD2	0.916	-0.407	0.545	0.255	0.526	0.455	-0.518
ATTD3	0.926	-0.410	0.559	0.306	0.525	0.451	-0.559
AVOID1	-0.221	0.655	-0.292	-0.195	-0.322	-0.240	0.243
AVOID2	-0.38	0.814	-0.414	-0.181	-0.437	-0.249	0.344
AVOID3	-0.472	0.848	-0.473	-0.262	-0.474	-0.378	0.442
AVOID4	-0.400	0.840	-0.355	-0.048	-0.336	-0.332	0.324
AVOID5	-0.320	0.746	-0.304	0.030	-0.263	-0.245	0.266

	ATTD	AVOID	CRE	ENG	INT	PER	SKEP
CRE1	0.476	-0.325	0.738	0.300	0.508	0.394	-0.503
CRE2	0.570	-0.473	0.938	0.354	0.537	0.506	-0.76
CRE3	0.564	-0.436	0.914	0.324	0.51	0.446	-0.777
ENG1	0.353	-0.253	0.371	0.882	0.463	0.292	-0.387
ENG2	0.313	-0.235	0.329	0.906	0.43	0.294	-0.355
ENG3	0.316	-0.207	0.335	0.904	0.393	0.306	-0.345
ENG4	0.195	0.011	0.271	0.758	0.281	0.205	-0.291
ENG5	0.161	0.029	0.266	0.74	0.266	0.213	-0.277
ENG6	0.148	0.01	0.235	0.704	0.235	0.184	-0.255
INT1	0.469	-0.393	0.491	0.394	0.852	0.383	-0.479
INT2	0.475	-0.411	0.494	0.400	0.877	0.383	-0.432
INT3	0.551	-0.434	0.551	0.363	0.871	0.438	-0.532
PER1	0.391	-0.351	0.419	0.265	0.369	0.841	-0.420
PER2	0.464	-0.319	0.462	0.263	0.423	0.802	-0.455
PER3	0.343	-0.291	0.377	0.158	0.340	0.782	-0.366
PER4	0.364	-0.154	0.325	0.331	0.302	0.593	-0.369
PER5	0.459	-0.323	0.421	0.220	0.367	0.854	-0.432
SKEP1	-0.466	0.348	-0.609	-0.303	-0.465	-0.455	0.616
SKEP2	-0.484	0.360	-0.446	-0.188	-0.479	-0.340	0.625
SKEP3	-0.518	0.402	-0.534	-0.262	-0.441	-0.399	0.719
SKEP4	-0.378	0.298	-0.548	-0.248	-0.325	-0.289	0.746
SKEP5	-0.442	0.287	-0.664	-0.346	-0.433	-0.383	0.848
SKEP6	-0.422	0.284	-0.662	-0.325	-0.389	-0.398	0.847
SKEP7	-0.388	0.255	-0.616	-0.296	-0.333	-0.367	0.778
SKEP8	-0.448	0.316	-0.669	-0.336	-0.44	-0.463	0.845
SKEP9	-0.540	0.341	-0.647	-0.37	-0.476	-0.460	0.777

Then in the R^2 and Q^2 tables, the SKEP variable has the largest R^2 value of 0.659 in adjusted R^2 . However, this variable is still classified as moderate because it is below the value of 0.75 which is a substantial classification of R^2 values according to Hair et al. (2017). Then in the same table, all endogenous variables meet the predictive relevance criteria because they have a value greater than 0 in the Q^2 column (Hair et al., 2017). Furthermore, in the F^2 column, the effect of the biggest changes in R^2 are on ATTD to INT of 0.502, PER to CRE of 0.368, and CRE to SKEP of 1.071. This means that these three F^2 values be classified as large because they have values above 0.35 which are classified as large changes in R^2 (Hair et al., 2017).

Table 4. R^2 , Q^2 , and F^2

	Adjusted R^2	Q^2	F^2						
			ATTD	AVOID	CRE	ENG	INT	PER	SKEP
ATTD	0.476	0.389				0.119	0.502		
AVOID	0.248	0.149	0.047						
CRE	0.267	0.199	0.042	0.055					1.071
ENG	0.104	0.064							
INT	0.333	0.246							
PER			0.058	0.025	0.368				0.051
SKEP	0.659	0.367	0.030	0.002					

Respondents Profile

From the sample of 430 responses collected from Google Forms, 421 completed observations that met requirements. Demographical information presented in Table 5 showed that more than half of the respondents were between 21 to 25 years old (65.5%), there were more females than males (female: 71.9%; male: 28%), the majority of respondents were still students, most of them spent from 1 to 3 hours on Instagram a day (46.7%), 50.3% respondents admitted they have expenses per month under 1 million rupiah, and the most living place is in around Jakarta and greater.

Table 5. Respondents Profile

Category	Total	Percentage
Gender		
Male	118	28%
Female	303	71.9%
Age		
<18	30	7.1%
18 – 20	115	27.3%
21 – 25	276	65.5%
Job		
Student	268	63.6%
Non-student	153	36.3%
Time of using Instagram per day		
<1 hour	49	11.6%
1 – 3 hours	197	46.7%
3 – 5 hours	109	25.8%
5 – 7 hours	52	12.3%
>7 hours	14	3.3%
Expenses per month (IDR)		
<1 million	145	34.4%
1 – 3 million	212	50.3%
3 – 5 million	47	11.1%
>5 million	17	4%
Living place		
Jakarta and greater (Jabodetabek)	235	55.8%
Outside Jabodetabek	186	44.2%

Hypotheses Testing

Using 5000 subsamples of bootstrapping (Figure 2), Table 6 shows that there is one insignificant relationship out of 12 relationships: SKEP relationship to AVOID (T-value <1.64). Then in the mediation test in Table 7, all mediation variables (AVOID, CRE, and SKEP) succeeded in mediating the relationship between PER and ATTD. The three mediation relationships are classified as partial mediation because both direct effects and indirect effects have significant results. In addition, we conducted a feasibility test to see SRMR value. From the results of the feasibility test, this research model can be said to be feasible because it has the SRMR value of ≤ 0.8 .

Table 6. Path Coefficient

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
ATTD → ENG	0.326	0.329	0.037	8.745	0
ATTD → INT	0.578	0.578	0.041	14.239	0
AVOID → ATTD	-0.181	-0.181	0.044	4.134	0
CRE → ATTD	0.256	0.251	0.084	3.008	0.001
CRE → AVOID	-0.34	-0.338	0.064	5.178	0
CRE → SKEP	-0.715	-0.716	0.034	21.207	0
PER → ATTD	0.211	0.213	0.054	3.880	0
PER → AVOID	-0.163	-0.164	0.055	2.976	0.002
PER → CRE	0.518	0.52	0.045	11.881	0
PER → SKEP	-0.155	-0.155	0.042	3.673	0
SKEP → ATTD	-0.211	-0.214	0.072	2.896	0.002
SKEP → AVOID	0.069	0.071	0.069	0.986	0.16

Table 7. Specific Indirect Effect Mediation Testing

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
PER → AVOID → ATTD	0.03	0.029	0.012	2.461	0.007
PER → CRE → ATTD	0.133	0.13	0.043	3.094	0.001
PER → SKEP → ATTD	0.033	0.033	0.014	2.311	0.01

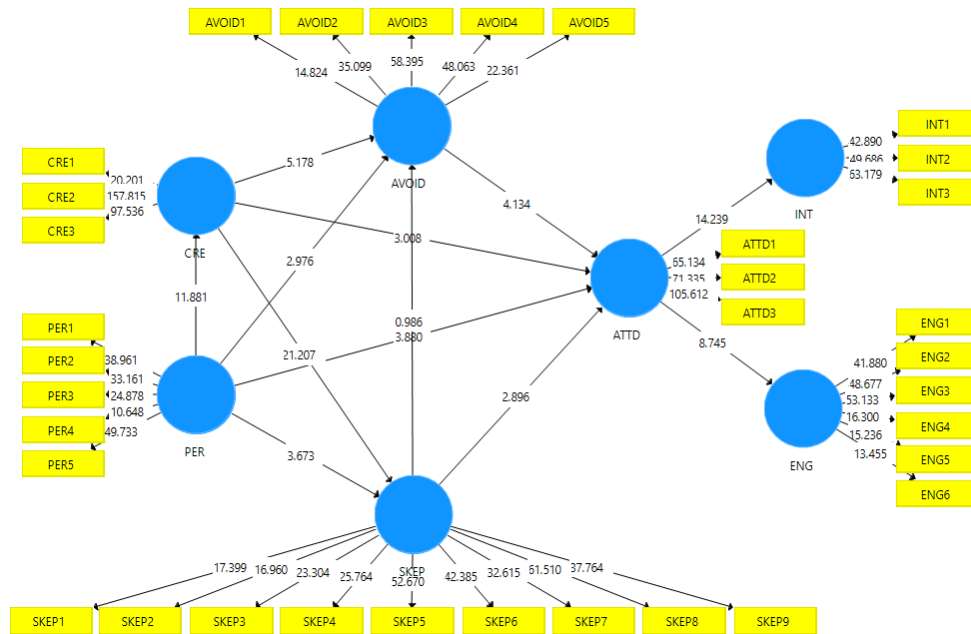


Figure 2. Bootstrapping Result of Model

Discussion

This study adopts a more comprehensive model in capturing the relationship between personalized advertisements on Instagram to their responses to these

advertisements based on previous research conducted by Tran (2017). By adding the customer engagement variable according to Tran's recommendation (2017), the results of this study can be said to be more extensive because it does not only measure in terms of behavioral intention.

Perceived personalized advertisements can increase positive responses (increase advertising credibility and advertising attitudes) and decrease consumers' negative responses to advertising (reduce ad skepticism and advertising avoidance). Through online survey data collection, the results of this study indicate that almost all hypotheses are supported except for the effect of ad skepticism or advertising skepticism on ad avoidance on the fifth hypothesis. The previous study also found this insignificant result (Tran, 2017). However, the results of this study show different things from the research of Baek and Marimoto (2012). Further, Tran (2017) explained why the hypothesis has insignificant results: (1) Even though customers are skeptical of advertising content, they are not immediately inclined to avoid or ignore the ad, which is the nature of the personalization, and (2) the presence of bias originating from previously selected advertisements (e.g., shoes, clothes, and smartphones) that may not be suitable to be associated with all users.

There are two different hypotheses from Tran (2017), including H1 and H6. The factor that may be the basis of this difference is in terms of the STP of each platform so that it makes a difference in the characteristics of its users. Facebook divides the demographic segment of its users by targeting older users, and there is no maximum age range, while Instagram targets younger users compared to Facebook. In addition, the positioning strategy is also different. If Facebook offers many interactive features such as creating statuses, reading news, Facebook wall features, games, and stories, while Instagram offers a simpler service, which is sharing photos, videos, and stories.

The results of this study indicate the fact that advertising can increase the credibility of advertising and increase the ability to influence positive advertising, and ultimately can increase purchase interest and engage customers in advertising. In line with the statements of Aaker et al. (2000) that targeted advertising results in favorable rates for marketers, such as increasing spending to buy (Chakraborty et al., 2003) and increasing the ads (Sahoo & Pillai, (2017), such as likes and comments (Algesheimer et al., 2010). Tran (2017) further emphasized the importance of advertising credibility in this personalized advertisement. The results of this finding indicate that the effect that advertising credibility has significant results on advertising avoidance, advertising skepticism, and attitude toward advertising. Similar to traditional media, consumer confidence in personalized advertising on social media supports the help of users eliminating their skepticism about advertising, reducing their avoidance responses to advertising, and developing favorable attitudes towards advertising (e.g., the possibility of buying and customer engagement), specifically for personalized ads on Instagram.

Then from the mediation effect test, all mediations proved to be significant both direct and indirect effects. This is an interesting result because these results indicate that indirectly or directly, both positive (ad credibility) and negative (ad skepticism and ad avoidance) responses can influence the way Instagram users respond to advertisements exposed to them. The indirect effect is used as a measurement of the effect of the regression coefficient that connects the perceived

personalization and attitude towards ad. The attitude towards ad shown positively by the consumer is the result of positive feelings towards the advertisement mediated by the user's trust towards the ad (ad credibility).

Then, negative attitudes of consumers are the result of personalized advertisements that are felt negatively; mediated by skepticism and avoidance responses. This means that if a personalized advertisement is perceived positively, it will increase the positive attitude towards the advertisement, and vice versa. However, the direct effect has not captured the overall relationship as to what causes consumers to behave positively or negatively. From the mediation effect test results, the indirect effect is considered to have a more important role because it presents the whole picture of what causes the attitude shown by consumers to be positive due to advertising credibility responses or negative attitudes as a result of skeptical responses to advertisements and avoidance of advertisements.

CONCLUSION

Consumer perception of personalization advertisement can increase ad credibility and positive attitude towards the ad. Perceived personalization is proven to reduce responses to feelings of skepticism about advertising and feelings to avoid advertising. However, perceived personalization was not found to influence ad avoidance. This difference in results is caused by differences in the case of the two studies. Furthermore, ad credibility is also proven to increase a positive attitude towards advertising and, therefore, can reduce the skepticism of consumers towards advertising and avoidance of advertising. The attitude of consumers towards advertising (attitude towards ad) positively has a good influence on purchase behavioral intention and consumer engagement, such as likes and comments on the advertisement

The study proves that attitudes toward Instagram advertisements significantly increase the consumer intention to use the advertisement as information for product purchases and also the consumer engagement toward advertisements by giving likes and comments. Furthermore, this positive attitude is significantly enhanced by personalized advertising, both directly and indirectly mediated by credibility. This implies that marketers need to create effective personalized advertisements which are tailored to the conditions and needs of consumers. The ad credibility, ad skepticism, and ad avoidance each proved to significantly mediate the effect of perceived personalization ad on the attitude toward the ad. All mediation-effect relationships (ad credibility, ad skepticism, and ad avoidance) can be concluded as partial mediation because both direct and indirect effects have shown significant results. This means that in a direct effect, perceived personalization is proven to have a significant effect on attitudes towards advertisement.

However, this study still has limitations. Firstly, customer engagement measurement of social media advertising, which is used subjective measurements only from likes and comments. Further studies can use more objective measurements with other engagement measures such as views, shares, and saves besides likes and comments. Thus, the content analysis method using big data from

social media will be more valid. Secondly, this study only measured the perceived intention and engagement toward advertisement. Further studies need to add other dependent variables to measure consumer perceptions toward brand, such as brand equity to obtain broader data results. Lastly, future research needs to add experimental design methods.

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