

# The Effect of Consumer Self-Confidence, Attitude Towards Paid Internet Advertising, and Continuance Search Intention on App-Purchase Decision

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## ABSTRACT

**Keywords:** self-confidence in consumers; paid internet advertising; app purchase decision.

Paid internet advertising has been widely used in various industries including the healthcare industry. The number of customers using mobile healthcare applications to buy products or services also continues to grow. One of the healthcare applications that is widely used in Indonesia is Halodoc. Purpose: This research aims to study the structural relationship of consumer self-confidence to the app-purchase decision in the Halodoc application, using indicators of attitudes towards paid internet advertising, perceived intrusiveness, and continuance search intentions on the internet. Methods: A total of 309 samples were obtained from consumers who had seen Halodoc application advertisements on the internet and had used the Halodoc application to purchase products or services provided by the application at least once. Measurements were carried out using PLS-SEM to see the structural relationship between the indicators. Results: Consumer self-confidence has a positive effect on paid internet advertising ( $t=7.614$ ,  $p=0.000$ ), continuance search intention ( $t=10.009$ ,  $p=0.000$ ), and app-purchase decision ( $t=19.972$ ,  $p=0.000$ ). Consumer self-confidence has no negative impact on perceived intrusiveness ( $t=1.564$ ,  $p=0.059$ ). Conclusion: This study shows that consumer self-confidence has a positive effect on attitudes towards paid internet advertising, continuance search intentions, and app purchase decisions on mobile applications.



## Introduction

The COVID-19 pandemic that has spread worldwide has had various effects on our lives, one of which is regarding how we utilize technology to help fulfill our daily needs. The pandemic has limited our physical contact and we were required to have long-distance interactions using laptops, tablets, and smartphones (Uribe & Feinberg, 2020). This condition has triggered very rapid growth in online sales of products or services and

has created a need to understand how consumers search and evaluate products or services when they shop online (Khanzasalwa & Nurfebiaraning, 2023).

In February 2022, the number of internet users in Indonesia reached 204.7 million users, or around 73.7% of the total population, and as many as 191.4 million are active social media users. (Crossett, Gopalakrishnan, & Purdy, 2023). This data shows that the digital market is a very attractive place for enterprises to offer their products or services. Various industries that initially did not take advantage of the use of digital marketing channels are starting to adapt to technological advances by using paid internet advertising and the provision of mobile applications to facilitate transaction processes.

In the healthcare industry, various mobile applications can be found and used as an alternative to purchase products or services, one of the applications is Halodoc. In 2021, Halodoc ranked first as a healthcare application that is at the top of mind in Indonesian society after 57.7% of 600 respondents in a survey conducted by DailySocial (2021) said so. As many as 36% also stated that Halodoc was their most frequently used application compared to other healthcare applications. This is supported by many Halodoc advertisements appearing on the internet both on search engines and social media. (Pamungkas & Nurfebiaraning, 2024).

The convenience of searching for information in search engines and social media also depends on the user's ability to select and sort out the information found. This requires the consumer's confidence in their ability to differentiate between information that is credible and those that are exaggerated by the advertisers. Based on data provided by the Indonesian Ministry of Information and Telecommunications as stated on Tempo (2022), from August 2018 to early 2022, a total of 9,546 hoax issues have been found circulating on the internet and various social media. A study conducted by (Utkarsh, Sangwan, & Agarwal, 2019), stated that one of the indicators that influence a consumer's continuance search intention towards a product or service is self-confidence in obtaining the information needed. (Utkarsh et al., 2019) Also stated that consumer self-confidence has a positive effect on consumers' information search intentions.

(M. Kang, KP Johnson, & Wu, 2014) Examining the influence of decision-making style on information-seeking behavior and attitudes towards online shopping using social networking sites, the results showed that information-seeking behavior and attitudes have an indirect relationship between purchase intentions using social networking sites. Research on consumer self-confidence, attitude towards paid internet advertising, and its influence on decisions to purchase products or services on mobile applications has currently been conducted in e-commerce and marketplace but has rarely been conducted for the healthcare industry. Therefore this research aims to study the structural relationship of consumer self-confidence to the app-purchase decision in Halodoc.

## **Method**

This research aims to analyze the influence of consumer self-confidence on app-purchase decisions for a product or service which is mediated by attitude towards paid internet advertising, perceived intrusiveness, and continuance search intentions. The

research method was quantitative using a Likert scale. The sampling method used was non-probabilistic sampling with the criteria for respondents being individuals who had seen Halodoc application advertisements on the internet and had used Halodoc mobile application to purchase products or services at least once. The data was collected using Google Forms from August 2022 to October 2022. The total valid samples obtained were 309 samples with varying age ranges from 18 to over 55 years old and dominated by ages 22 - 37 years old as many as 55% of the total sample. This sample size is by the sample criteria for multivariate statistical tests using PLS-SEM, between 160-300 valid samples (Cham, Cheah, Ting, & Memon, 2022). The relations between research variables are presented in a research model.

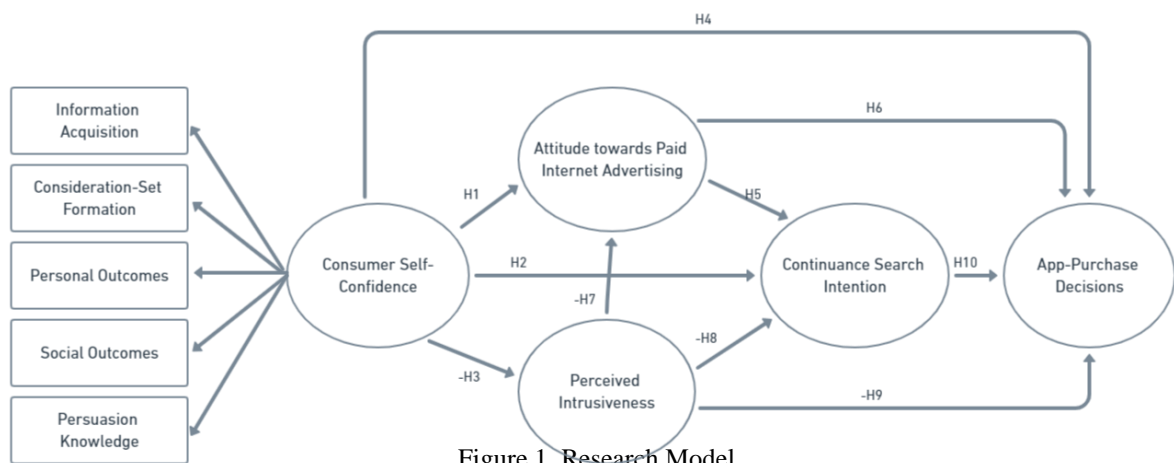


Figure 1. Research Model  
Source: Rezaei (2018)

Reliability and validity tests were carried out on 40 questions of the questionnaire which were conducted on 50 respondents. The outer loading measurements for all indicators resulted in  $> 0.4$ . The test showed CA 0.899, CR 0.912, AVE 0.509 for consumer self-confidence, CA 0.692, CR 0.829, AVE 0.619 for attitude towards paid advertising, CA 0.824, CR 0.877, AVE 0.589 for perceived intrusiveness, CA 0.768, CR 0.866, AVE 0.684 for continuance search intention, and CA 0.683, CR 0.826, AVE 0.614 for app-purchase decision. Based on this result, the preliminary reliability and validity test showed that all indicators are reliable and valid. (Hair, Risher, Sarstedt, & Ringle, 2019).

## Results and Discussion

### Convergent Validity and Reliability

In a convergent validity test, the loading factors of each indicator which has a value between 0.4 and 0.7 are still acceptable as long as the AVE value is greater than 0.50. The reliability of the indicators is evaluated using composite reliability value. (Furadantin, 2018) Stated that an indicator is reliable if the composite reliability value is greater than 0.7.

**Table 1**  
**Convergent Validity and Reliability Test Result**

Variable	Indicator	Loading Factor	AVE	Cronbach Alpha	Composite Reliability
Consumer Self-Confidence	CSCIA1	0.601	0.502	0.899	0.912
	CSCIA2	0.549			
	CSCIA3	0.570			
	CSCIA4	0.474			
	CSCIA5	0.458			
	CSCCSF1	0.486			
	CSCCSF2	0.505			
	CSCCSF3	0.509			
	CSCCSF4	0.525			
	CSCCSF5	0.524			
	CSCPO1	0.489			
	CSCPO2	0.523			
	CSCPO3	0.595			
	CSCPO4	0.589			
	CSCPO5	0.532			
	CSCSO1	0.513			
	CSCSO2	0.583			
	CSCSO3	0.530			
	CSCSO4	0.493			
	CSCSO5	0.464			
CSCPK1	0.605				
CSCPK2	0.503				
CSCPK3	0.574				
CSCPK4	0.523				
CSCPK5	0.645				
CSCPK6	0.576				
Perceived Intrusiveness	PI1	0.709	0.543	0.792	0.855
	PI2	0.758			
	PI3	0.777			
	PI4	0.765			
	PI5	0.669			
Attitude towards PIA	APIA1	0.746	0.611	0.681	0.825
	APIA2	0.794			
	APIA3	0.803			
Continuance Search Intention	CSI1	0.821	0.650	0.732	0.848
	CSI2	0.806			
	CSI3	0.792			
App-Purchase Decision	AP1	0.776	0.606	0.674	0.822
	AP2	0.759			
	AP3	0.799			

Source: Research data (2022)

### Discriminant Validity

The discriminant validity of the constructs was concluded according to the Heterotrait-Monotrait Ratio of Correlations (HTMT). HTMT values shown in Table 2 imply that all values are below the threshold of 0.9.

**Table 2**  
**Discriminant Validity - Heterotrait-Monotrait Ratio (HTMT)**

	APIA	CSC	CSI	APD	PI
Attitude towards PIA					
Consumer Self-Confidence	0.595				
Continuance Search Intention	0.646	0.661			
App-Purchase Decision	0.619	0.853	0.556		
Perceived Intrusiveness	0.372	0.181	0.280	0.249	

Source: Research data (2022)

### Hypothesis

The hypothesis was concluded by looking at path coefficients and the significance of the p-value. The hypothesis can be supported with 5% significance if the p-value < 0.05 (Furadantin, 2018).

**Table 3**  
**Hypothesis Test Result**

No	Hypothesis	Original Sample	T-Statistics	P-Value	Significance	Result
H1	Consumer self-confidence has a positive effect on attitude towards paid internet advertising	0.446	7.614	0.000	Significant	Supported
H2	Consumer self-confidence has a positive effect on continuous information search intentions	0.545	10.009	0.000	Significant	Supported

H3	Consumer self-confidence hurts perceived intrusiveness	-0.108	1.564	0.059	Insignificant	Unsupported
H4	Consumer self-confidence has a positive effect on app-purchase decisions	0.671	19.972	0.000	Significant	Supported
H5	Attitudes towards paid internet advertising have a positive effect on continuance search intention	0.229	3.149	0.001	Significant	Supported
H6	Attitude towards paid internet advertising has a positive effect on app-purchase decisions	0.108	2.188	0.015	Significant	Supported
H7	Perceived intrusiveness hurts attitude towards paid internet advertising	-0.238	4.651	0.000	Significant	Supported
H8	Perceived intrusiveness hurts continuance search intention	-0.164	3.637	0.000	Significant	Supported

H9	Perceived intrusiveness hurts app-purchase decisions	-0.124	3.250	0.000	Significant	Supported
H10	Continuance search intention has a positive impact on app-purchase decisions	-0.017	0.254	0.400	Insignificant	Unsupported

Source: Research data (2022)

### Specific Indirect Effects

This test was carried out to analyze the role of mediating variables by analyzing T-statistics and Standardized Coefficients. The result of the indirect effects test can be seen in the following table.

**Table 4**  
**Specific Indirect Effects Test Result**

	Standardized Coefficients	T-Statistics	P-Value
CSC → PI → APIA	0.017	1.521	0.064
CSC → APIA → CSI	0.031	3.294	0.001
PI → APIA → CSI	0.023	2.359	0.009
CSC → PI → APIA → CSI	0.005	1.283	0.100
CSC → PI → CSI	0.009	1.261	0.104
CSC → APIA → APD	0.024	2.016	0.022
PI → APIA → APD	0.013	2.075	0.019
CSC → PI → APIA → APD	0.002	1.194	0.117
CSC → APIA → CSI → APD	0.007	0.243	0.404
APIA → CSI → APD	0.016	0.242	0.405
PI → APIA → CSI → APD	0.004	0.229	0.410
CSC → PI → APIA → CSI → APD	0.001	0.194	0.423
CSC → CSI → APD	0.028	0.252	0.401
PI → CSI → APD	0.008	0.230	0.409
CSC → PI → CSI → APD	0.001	0.198	0.402
CSC → PI → APD	0.008	1.312	0.095

Source: Research data (2022)

Note: CSC: Consumer Self-Confidence; APIA: Attitude towards Paid Internet Advertising; PI: Perceived Intrusiveness; CSI: Continuance Search Intention; APD: App-Purchase Decision.

This research shows that the influence of attitudes towards paid internet advertising, perceived intrusiveness, and continuance search intentions are related to app purchase decisions. Based on the hypothesis test result, consumer self-confidence appears to have a positive relationship with attitude towards paid internet advertising, continuance search intention, and app-purchase decision on the Halodoc application (H1, H2, H4). This is by previous research by (Rezaei, Emami, & Ismail, 2018). Meanwhile, consumer self-confidence does not have a negative effect on consumers' perceived intrusiveness (H3 unsupported).

Attitude toward paid internet advertising has a positive influence on continuance search intention and app-purchase decisions (H5, H6). Positive attitudes towards paid internet advertising are also influenced by the creative content presented, whether it is an image, video, or copywriting. (Singla, Nandrajog, Singh, Ahuja, & Mehta, 2024). This shows the importance for advertisers to carry out A/B test experiments regularly. A/B testing is a way to improve the performance of advertising and has a significant influence on user experience (Paul, Ueno, & Dennis, 2023).

Perceived intrusiveness hurts attitudes toward paid internet advertising as stated in H7. This perceived intrusiveness factor also hurts continuance search intention on a product or service (H8). This perceived intrusiveness factor is certainly detrimental for enterprises that use online media advertising regularly, so it is necessary to prevent or improve the advertisement. Martin (2003) in Hootsuite, explains several ways to make an advertisement stand out, including: focusing on the headline to maximize the ad potential, conducting tests and experiments for variation in ad copy and creativity, making sure the ad has a clear Call to Action (CTA), in addition, if using Google Ads as advertising media, use all available attributes, such as Callouts and Sitelinks extensions.

Perceived intrusiveness has a negative effect on app-purchase decisions (H9). Continuance search intention, according to the result, does not have a positive relation with the app-purchase decision (H10 unsupported). This shows that consumers have multiple sources of information that can be utilized to do research on a product or service before they decide to purchase, namely offline media advertising and word-of-mouth recommendation.

## **Conclusion**

This study concludes that consumer self-confidence has a positive relationship with attitude towards paid internet advertising, continuance search intention, and app-purchase decision. Consumer self-confidence does not hurt perceived intrusiveness.

Some recommendations can be performed by digital marketing or business practitioners, such as improving the user experience to enhance consumers' comfort in online shopping, making good communication with the target audience to help build a



good perception towards products or brands, and creating more educative content to help consumers increase their knowledge and their confidence in choosing products or services. Further research can be done based on this study, and this study suggests to differentiate audience segments. Audience segments can be specified based on age, gender, education, or occupation. Each of the audience segments might have different responses to the same research questions, one of the things that might cause this is their knowledge level of technology or digital literacy, that's how the research results can be more specified. Besides audience segments, digital marketing channels itself is a broad subject to study, this research can also be repeated to a specific channel only, such as Google Ads only, or Social Media Ads only. The result could be different as these channels have different strategies in consumers' approach.

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