Received: August 16, 2022

\*Corresponding author:

Andri Astuti Itasari, Study Program Communication

Sciences, Faculty of Social

Slamet Riyadi University, Surakarta, Indonesia

Additional information is

available at the end of the

F-mail.

article

Science and Political Science.

andriastutiitasari@gmail.com

Accepted: February 01, 2023

# JOURNAL OF CONSUMER SCIENCES

## CONSUMER EDUCATION | RESEARCH ARTICLE

The Effect of Advertisement, Word of Mouth, and Brand Awareness towards Buying Decision on "Ruang Guru Apps" in SMU Negeri XYZ Surakarta

Andri Astuti Itasari<sup>1\*)</sup>, Nurnawati Hindra Hastuti<sup>2</sup>

Abstract: Besides studying at school, online tutoring is a non-formal method of education delivery. One online tutoring is Ruang Guru's app, and it is still among competitors such as Zenius, tutoring conventional, and others. This research focuses on Ruang Guru's apps, which have always existed among students in Surakarta until now. This research uses descriptive quantitative. This research analyzes advertisements, word of mouth, and brand awareness toward buying Decision on Ruang Guru apps for students. The population is all SMU Negeri XYZ Surakarta students, with a total of 1.191 students, and about 100 students were selected as the respondent through a random sampling technique. Data collection techniques using questionnaires as primary data and documents from journals and books as secondary data. Data were analyzed using the Structural Equation Modelling - Partial Least Square (PLS). This research shows that advertisement and word of mouth significantly positively affect brand awareness. In addition, advertisement, word of mouth, and brand awareness positively affect buying decisions. Furthermore, advertisement and word of mouth significantly affect buying decisions through brand awareness. Therefore, it is suggested that companies continue to increase word-ofmouth promotions and advertisements related to consumer behavior in purchasing decisions.

Keywords: advertisement, brand awareness, buying decision, Ruang Guru apps, word of mouth

JEL Classification: D24, D70, D83, I23



Andri Astuti Itasari

## ABOUT THE AUTHORS

Andri Astuti Itasari is a magister from Sebelas Maret University in 2018. Now, she is a lecturer of Communication Studies at Slamet Riyadi Surakarta. She can be contacted via andriastutiitasari@gmail.com. The science field involved is business communication and marketing communication. She can be reached at andriastutiitasari@gmail.com

Numawati Hindra Hastuti is a magister from Sebelas Maret University. Now, she is a lecturer of Communication Studies at Slamet Riyadi Surakarta. She can be contacted via nurna.hin@yahoo. The science field involved is marketing communication and mass communication.

#### PUBLIC INTEREST STATEMENT

Marketing mix or modern marketing is a marketing strategy comprising product, price, promotion, and distribution. Advertisements and word of mouth are part of the promotion to show a product and attract customers. Word of mouth has an important role in promotion. Besides, a company always creates positioning for customers, so brand awareness can be up to attract customers. Buying decision is a very important factor and role to make business going on because it has a positive effect. Variables in marketing communication in this study use PLS analysis which can explain the direct and indirect effects so that they become their characteristics in analysis.



©2023 The Author(s). This open-access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license

## 1. Introduction

Education in Indonesia is regulated by Law Number 20 of 2003 concerning the national education system. Education in Indonesia is divided into three channels: formal, non-formal, and informal (Laws of The Republic Indonesia, 2003). Students are the best young generation to be the next generation of a better country, Indonesia. Education can be formal and non-formal. One of formal education is tutoring studies. Usually, non-formal education is delivered outside of school. Many kinds of tutoring studies, offline and online. They are being supported in formal education. Ruang Guru Apps is one of the tutoring studies online—submission of material using videos with animations, trials, and discussions and providing guidebooks. Besides, there is a part to private studies and test room with boot camp digital as a media to discuss for all students in Indonesia. Ruang Guru users have reached 38 million since its establishment until now. The users of this Ruang Guru come from Indonesia and countries in Southeast Asia. In addition, the Ruang Guru has been accessed 200 million times per month (Pramudita, 2022).

Ruang Guru Apps is an educational technology using smartphones as media for online studies. Ruang Guru Apps is a digital application that anyone can access anytime at an affordable price, so it is easy to use for students. On the other hand, students can access the internet easily. They can get more information from the Internet. The internet gives complete information that can be accessed and free, without subscribing like an online tutoring study. Certainly, it is easy to get information from the internet via the web (Restu et al., 2020). Another choice is tutoring studies offline. The offline study is also a good choice for students because they can come in person and learn better when compared to online studies conducted through online media. However, Ruang Guru Apps still existing until now. Ruang Guru Apps can compete with other online studies such as Zenius, conventional tutoring, and the internet. Even, it can attract more customers. This reason is the background of the problems in this research and is interesting to analyze.

Ruang Guru Apps always promotes by advertising on television, newspaper, social media, and other effective and efficient media. Ruang Guru also gives brand awareness to customers so they always remember it and are the big promotion, word of mouth, and big-name owned by Ruang Guru apps able to provide positioning to customers to create brand awareness, and can it influence customer purchasing decisions for this application. The explanation above concerns research urgency: non-formal education is important to support student learning. Students need it, and it can support educating students as a young generation in Indonesia.

This research examines the effect of an advertisement, word of mouth, and brand awareness on buying decisions on Ruang Guru Apps in SMUN XYZ Surakarta. The massive advertisement phenomena and Ruang Guru Apps' existence in students' circles are plausible reasons to conduct this study. It is also interesting for researchers that the Ruang Guru app plays a role in educating Indonesian students.

## 2. Literature Review

## 2.1 Marketing Mix

The basic concept of modern marketing, or marketing mix, is a marketing strategy consisting of product, price, promotion, and place. A product is a combination of goods and services a company offers customers. Price is the amount of money paid by customers to get the product. Promotion means activity to show the product's uses and persuade customers to buy the product. In comparison, place includes company activity to supply products for target subscribers (Kotler & Armstrong, 2008). Meanwhile, Belch and Belch (2006) explained that marketing wants to know customers' needs carefully and wants by developing products and services, offering certain prices, providing distribution channels, and developing promotional programs to create awareness and interest.

The marketing mix is an integral part of a company's marketing strategy, which is related between the company and the market. According to American Marketing Association in Wichmann, marketing mix refers to the marketing variable the company uses to sell orientation on the target market. Thus, it becomes a part of the company's marketing strategy. The marketing mix is a company's process of creating a product, communicating through promotion, distributing, and offering through price, which has value for subscribers, partners, clients, and society (Wichmann et al., 2021). Promotion, part of the marketing mix, has an important role in company strategy. Promotion in this research refers to variable advertisement and word of mouth, both variables capable of influencing buying Decisions in Ruang Guru apps in SMUN XYZ in Surakarta.

## 2.2 Marketing Communication

Promotion is a company activity to communicate the product's goodness and persuade the subscribers and customers to buy, so promotion will create communication between the company and customers to support the selling system. According to Wicaksono and Seminari (2016), the company must be budgeting cost of marketing communication on eight models of communications, that is advertisement, sales promotion, public relations, and publicity, events, and experiences, direct marketing, interactive marketing, word of mouth marketing, and salesperson. The marketing communication mix includes advertising, direct marketing, internet marketing, sales promotion, public relations, and sales personnel (Belch & Belch, 2006).

Marketing communication is a method the company establishes to inform and convince consumers, either directly or indirectly, regarding the products being sold (Firmansyah, 2020). Marketing communication is important in developing and promoting a product so it gives a good image. Besides, marketing communication can develop customer awareness. Therefore, marketing communication applied can reach the goals. Marketing communications is an attempt to convey the message to the public, primarily targeting consumers of the product's existence on the market. Therefore, marketing communication is the interaction of individuals or groups in providing customer satisfaction that can give the impression that marketing communication activities are aimed at customers.

## 2.3 Advertising

Advertising is an offering activity to society orally or seen (news) about a product, service, or idea. In marketing, customers are interested in buying something unique. The role of advertisement is very useful in influencing customers. Besides, it ensures customers know the product, categories, and price. Advertisements can give attribute information to customers. Wicaksono and Seminari (2016) explain that an advertisement is an activity of news delivery from part who wants his or her products and services to be liked, chosen, and bought. It is emphasized by (Wicaksono & Seminari, 2016) explains that advertisement has the power to push potential customers to buy a product without seeing and trying it first. An advertisement is also a promotion tool that is considered the most effective way to introduce and remember a product to customers (Wicaksono & Seminari, 2016). Meanwhile, advertising that a company holds can be divided into (a) Advertising of goods: the goal of advertising is to promote goods sold by the company, e.g., advertising of watches and shoes, and (b) Advertising of institution: the goal of advertising is to remind customers about the company, not the goods, e.g., advertising of Mandiri Bank, or BNI 46 Bank.

Advertising is a great tool for delivering information from seller to buyer, influencing and persuading a person to do an action. Competition is more competitive in the market. It asks a company to provide attractive advertisements and persuasive information, so customers can be more sensitive to the advertisement. Informative advertisement can be customers' reference to find goods to their tastes. One of the advertising strategies is font and language style which is different from others, so it can attract customers. The advertiser uses creative ways to put advertisements on social media platforms to persuade customers to buy the products because customers feel so tired in every media context (Huang & Liu, 2022).

## 2.4 Word of Mouth (WOM)

Word of Mouth (WOM) is a company advertisement. Word of Mouth (WOM) has been interpersonal communication among customers about the product and services offered. Word of Mouth (WOM) is a conversation phenomenon from one person to another or a chain of communication that spreads quickly and conveys mouth by mouth in a marketing context. When a subscriber feels satisfied with buying or using services or goods in a place, he or she will tell his or her experience to others and recommend it. The subscriber not only buys product or services but also buy the benefit, so the subscriber feels satisfied with the benefit accepted, and it will be a good effect on the company (Herlambang, 2014).

According to Wiyono (2009), in term of Word of Mouth (WOM), communication can be occurred by some factors. They are (a) Talk, occurred by involving a person with a product or service and telling his/her experiences about the product and services, (b) Promote, occurred in a person who tells his/ her experiences about using the product or services and he/ she tells to others, (c) Recommend, occurred by a person who wants recommend a product or services which ever used and give good news to other customers, and (d) Sell, selling activity in Word of Mouth (WOM) communication without change customers position, but a customer who changes other customer thought from do not trust or give negative value become trust and give positive value. Subscribers will tell others directly, so it will be a free advertisement for the company. The benefits of Word of Mouth (WOM) are (a) Word of Mouth (WOM) communication obtained from and to customers, and (b) Word of Mouth (WOM) communication does not need big capital to spread information, because communication does from the mouth by mouth when the conversation, exchange thought and information.

Word of mouth communication plays a key role in decision buying (Iyer & Griffin, 2021). Word of mouth is one of the most incredible ways for customers to get more information about the product and decide to adopt the product. WOM must be managed well as an important part of the marketing mix, and marketing communication strategy will give positive WOM and the willingness of customers must have knowledge and skills to see a brand, so customers are closer to the brand (Sun, Foscht, & Eisingerich 2021). Therefore, it is important for companies to be able to change the perception that word-of-mouth communication is more than just an interesting conversation; a product or service is not only a topic of conversation that is then promoted, but on the other hand, word of mouth can change consumer behavior and change thinking. Skeptical consumers who were initially not interested in trying and buying were finally interested in trying and buying (Sumardy, 2011).

## 2.5 Brand Awareness

Brand awareness is an awareness of a brand that is hoped for growth in customers' minds about the product and company. A brand that is always remembered will build awareness of certain brands, thus positively affecting the company. Armawati, Saryadi, and Prabawani (2014) explain, brand awareness is the ability of customers to remember that a brand is part of a product. The awareness brand is created to increase repeated familiarity, and the level of brand awareness is different for every person. The steps are (a) unaware of the brand, (b) brand recognition, (c) brand recall, and (d) top of mind.

Producers must always develop brands and do promotion about brand awareness through sales promotion, advertisement, and other marketing (Eliasari & Sukaatmadja, 2017). When brand awareness is high, customers will make buying decisions. Wicaksono and Seminari (2016) confirmed that brand is the most important element in brand awareness. Brand awareness can make customers think about using and buying.

## 2.6 Buying Decision

Buying decision by customers is related to customer involvement in the product they bought. Customer involvement causes ideas that the level of customer involvement depends on the level of personal involvement caused by the product to customers. The level of involvement is determined by how important customers see the product or services. According to Tee, Erdiyansah, and Aulia (2020), buying decisions by customers is buying decision by customers start by introducing problems, finding information, and evaluating it, then deciding to make a buying decision and acting after it.

This time customers depend on all information entered before making a buying decision (Hock, 2022). Customers want to get information about a product by observing other customers because the product becomes complex. Sources of traditional information such as friends, family, and others are very important in buying a product. Due to the large amount of information available, people faced great uncertain things and then took shortcuts to follow the colonies in adopting technology to rely on opinions from many others. To decrease the uncertain phase of pre-buying, customers find information that is more intensive to evaluate the products for comparison. Meanwhile, buying phase identifies the optimal alternative and satisfies the decision alternative, so the willingness to buy is formed, and the buying proceeds. After buying phase, customers can compare their experience now with what they did do to anticipate buying.

## 3. Conceptual Framework

This research framework is based on previous relevant research; advertisement, and word of mouth, which are part of marketing communication, affect purchasing decisions through brand awareness directly or indirectly. The influence of advertisement, word of mouth, and brand awareness toward buying decisions can be designed in Figure 1.

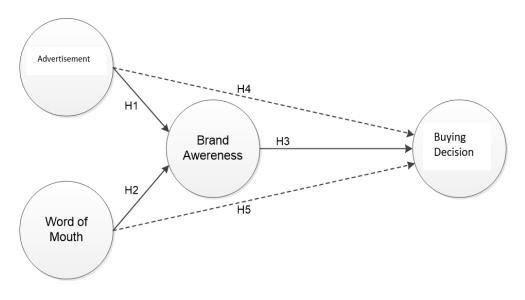


Figure 1. Conceptual framework

Research hypotheses are:

- H1: Advertisement significantly affect brand awareness
- H2: Word of mouth significantly affect brand awareness
- H3: Brand awareness significantly affect buying decision
- H4: Advertisement significantly affect buying decision
- H5: Word of mouth significantly affect buying decision

## 4. Methods

## 4.1 Participants

The population in this research is students of SMUN XYZ Surakarta in the education year 2021/2022. The technique of taking a sample is the probability with simple random sampling, which means giving the same chance in every population chosen as a sample based on population member frequency. The population in this research is about 1.191 respondents. The sample are 100 respondents. It is based on the theory of (Sugiyono, 2017), which explains that a big population cannot be researched entirely, so only take some samples. The research location is at SMU N XYZ in Surakarta in March to May 2022.

#### 4.2 Measurement

Primer data are obtained by questionnaire directly. Secondary data are obtained by research and literature reviews such as books and journals. Measurement of variables using ordinal measurement scale called Likert scale. Tools of research measure use statements items arranged by variable research indicators. The measurement scale is a deal used reference to determine the interval length in the measurement tool. Thus, measurement tools can be used in research and result in quantitative data (Sugiyono, 2017).

The advertising variable in this study uses a measuring tool adapted from Endyana and Ardani (2019). Advertising is offering activities to a society orally or in writing (news) about a product, service, or idea. This advertising variable has an answer scale that is used, namely the Likert scale, from strongly agree to strongly disagree. In addition, it has five dimensions, namely: charm, showing the benefits, attention, building the willingness to try or have, and directing people to do buying.

Word-of-mouth variables refer to Tee, Erdiansyah, and Aulia (2020). Word of mouth is one of the most incredible ways for customers to get more information about the product and decide to adopt the product. Word of mouth theory with indicator variables is (1) listening to Ruang Guru apps in daily conversation, (2) getting recommendations of Ruang Guru apps from another person, (3) listening to Ruang Guru apps from family, friends, or another person, and (4) talk about Ruang Guru apps with the member of Ruang Guru or people who want to try it. Whereas brand awareness refers to Endyana and Ardani (2019) theory with indicator variables (1) Ruang Guru apps is a familiar brand, (2) Ruang Guru apps is a famous brand, and (3) Ruang Guru apps is a brand recognized by competitors.

Tee, Erdiansyah, and Aulia (2020) buying decision that customers are buying decisions by customers start by introducing problems, finding information and evaluating it, then deciding to make a buying decision and acting after it. Buying decision with indicator variables are (1) feeling that Ruang Guru apps promotion has been done very well, (2) feeling the products of Ruang Guru apps are suitable with willingness, (3) seeking Ruang Guru information will be bought, (4) choose Ruang Guru apps from the brand, (5) buy Ruang Guru apps products because the recommended by other people, (6) buy Ruang Guru apps, and (8) have the willingness to repeat order.

## 4.3 Analysis

This research used primer data by questionnaire. Data analysis in research uses SPSS to identify the characteristics of respondents. SmartPLS analyzes the influence of advertisement, word of mouth, and brand awareness toward buying decisions in Ruang Guru Apps in SMUN XYZ in Surakarta. Data analysis uses Smart Partial Least Square (Smart PLS). Respondents' descriptions are based on the gender and age of student SMUN XYZ Surakarta. The result shows that advertisement, word of mouth, and brand awareness positively and significantly influence buying decisions.

Evaluation of path coefficients used to show how strong the effect or influence of an independent variable on another variable is. While coefficient determination (R-Square) measures how many independent variables are fulfilled by another variable. Chin

mentions the result  $R^2$  amount up of 0,67 for the independent variable in the structural model identified the influence of the independent variable toward the dependent variable in the good category. Meanwhile, if the result is 0.33 - 0.67 in the medium category and if the result is 0.19 - 0.33 in the low category (Hair, Hult, Ringle, & Sarstedt, 2017).

Table 1 shows that R-Square is used to see the influence of advertisement variable, word of mouth toward brand awareness and how big the influence advertisement, word of mouth, and brand awareness toward buying decisions. So, it can be seen that the influence of advertisement and word of mouth toward brand awareness is amount 0.255 or 25.5 percent, and the influence of advertisement, word of mouth, and brand awareness toward buying decisions is 0.577 or 57.7 percent.

Table 1. R square

Variables	R Square	R Square Adjusted
Buying decision	0.577	0.564
Brand awareness	0.255	0.240

Table 2 shows that the convergent validity tests are used for outer loading or loading factor score. An indicator said suitable with convergent validity in the good category if the score of outer loading >0.70 (Ghozali, 2014). Based on the data in Table 2, each variable in this research has a score of outer loadings >0.50. The measure of individual reflection said high if it is correlated more than 0.70 with measured constructed. However, according to Ghozali (2014), the development of the score measurement scale is loading 0.5 to 0.6 considered not bad. The data do not show a variable with a score of outer loadings <0.5, so all indicators are worthy or valid for the next analysis.

Variable	Indicator	Outer Loadings
Advertisement	X1.1	0.870
(X <sub>1</sub> )	X1.2	0.751
	X1.3	0.782
	X1.4	0.900
	X1.5	0.747
Word of mouth	X2.1	0.716
(X <sub>2</sub> )	X2.2	0.778
	X2.3	0.822
	X2.4	0.850
Brand awareness (Z)	Z1	0.816
	12	0.865
	13	0.720
Buying decision	Y1	0.741
(Y)	Y2	0.798
	Y3	0.794
	Y4	0.868
	Y5	0.800
	Y6	0.790
	Y7	0.767
	Y8	0.847

Table 2. Outer loadings

Based on Table 3, it can be seen that score of AVE from advertisement >0.50 or 0.643; the variable of word of mouth >0.50 or 0.644; the variable brand awareness >0.50 or 0.660; and the variable of buying decision >0.50 or 0.629. It shows that every variable has had good discriminant validity. Discriminant validity can be seen by Average Variant Extracted (AVE) method for each indicator which has criteria <0.50 for valid (Ghozali, 2014).

Table 3. Average variant extracted (AVE)

Variables	Average variant extracted (AVE)	Description
Advertisement (X <sub>1</sub> )	0.643	Valid
Word of mouth (X <sub>2</sub> )	0.644	Valid
Brand awareness (Z)	0.660	Valid
Buying decision (Y)	0.629	Valid

Table 4 shows that composite Reliability is used to test reliability scores in variable indicators. Variables can fulfill Composite Reliability if the score of Composite Reliability in each variable >0.70 (Ghozali, 2014). The following score of the results by Composite Reliability from each variable. Based on Table 4, the score of Composite Reliability from advertisement is >0.70 or 0.935; the variable of word of mouth is >0.70 or 0.844; the variable brand awareness is >0.70 or 0.906, and the variable buying decision is >0.70 or 0.871. It shows that every variable is reliable.

#### Table 4. Composite reliability

Variables	Composite Reliability	Description
Advertisement (X <sub>1</sub> )	0.935	Reliable
Word of mouth (X <sub>2</sub> )	0.844	Reliable
Brand awareness (Z)	0.906	Reliable
Buying decision(Y)	0.871	Reliable

Based on Table 5 shows that score of Cronbach's alpha from advertisement is >0.70 or 0.920, the variable of word of mouth is >0.70 or 0.720, the variable of Brand awareness is >0.70 or 0.870, and the variable of buying decision >0.70 or 0.806. It shows that each variable in this research has fulfilled the required score of Cronbach's alpha, so it can be concluded that the entire variables have a highly reliable level. The reliability test in Composite Reliability above can be strengthened using the score of Cronbach's alpha. A variable can be reliable if it has a score of Cronbach's Alpha >0.70 (Ghozali, 2014).

Table 5. Cronbach's alpha

Variables	Cronbach's alpha	Description
Advertisement (X1)	0.920	Reliable
Word of mouth (X <sub>2</sub> )	0.720	Reliable
Brand awareness (Z)	0.870	Reliable
Buying decision (Y)	0.806	Reliable

## 5. Findings

## 5.1 Characteristics of Respondents

Description of respondent data is used to identify the characteristic respondents, including gender and age, based on the questionnaire answers. Data respondents consist of two parts in detail, that is, gender and age. Gender is a physiology and anatomy attribute in the respondents. Female is 59 people (59%), and male is 41 people (41%). The age category of respondents in this research is 16-17 years old, is amount to 47 people or 47 percent, and the age <16 years old is about 39 people (39%), and the age >17 years old is about 14 people (14%).

#### 5.2 Inner Models

This research will be explained the result of the path coefficient. Research results show that it can be concluded that the effect of advertisements on buying Decisions is positive and significant. It can be concluded that the effect of word of mouth on buying Decisions is positive and significant. And it can be concluded that the effect of advertisements on Brand awareness is positive and significant. So, it can be concluded that the effect of word of mouth on Brand awareness is positive and significant. This research will be explained the result of the path coefficient.

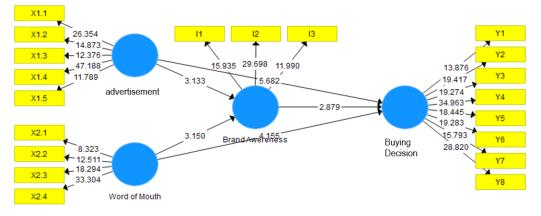


Figure 2. Inner weights

Based on the schema of the inner model in Figure 2, it can be explained that the biggest path coefficient from advertisement influence toward buying decision amounts to 5.493. Then, the second influence is word of mouth toward buying decisions, amount 3.950; the third is word of mouth toward buying decisions amounting to 3.134; the fourth is advertisement toward Brand awareness, amount 3.030. The smallest influence is Brand awareness toward buying decisions, amount 2.823.

Based on the explanation, it shows that the entire variables in this model have a path coefficient in a positive number. It shows that more getting big of path coefficient score in an independent variable toward the dependent variable, so it is more getting strong the influential among independent variables toward the dependent variable.

## 5.3 Hypothesis Testing Result

The hypothesis test in this research did by t Statistics and p-values. The hypothesis can be accepted if p-values <0.05. This research has direct and indirect influences because there are independent, dependent, and mediation variables. Table 6 shows the hypothesis tested by Path Coefficients in the Bootstrapping technique.

Variables	Original sample	Sample mean	Std. dev	t-Stat (Ts)	t- Tabel (Tt)	Result	p-value	Description
Brand awareness → Buying decision	0.222	0.212	0.079	2.823	1.985	Ts>Tt	0.005	Positive significant
Advertisement → Buying decision	0.421	0.426	0.077	5.493	1.985	Ts>Tt	0.000	Positive significant
Advertisement $\rightarrow$ Brand awareness	0.245	0.250	0.081	3.030	1.985	Ts>Tt	0.003	Positive significant
Word of mouth → Buying decision	0.340	0.350	0.086	3.950	1.985	Ts>Tt	0.000	Positive significant
Word of mouth $\rightarrow$ Brand awareness	0.367	0.366	0.117	3.134	1.985	Ts>Tt	0.002	Positive significant

Table 6. Inner weights score

## 5.4 Direct Effect Test

Table 7 shows that this research submits seven hypotheses. The hypothesis test uses the analysis technique of bootstrapping. The result of t-statistics it knows that significant effect between the independent variable and the dependent variable. If the score of t-statistics >1.985 (=TINV (0.05;100-4) (t-table significantly 5%), the effect is significant. Next, the result of the P-Value in every variable <0.05, so H<sub>0</sub> rejected. The positive effects can be seen in the original sample.

### Table 7. Result of direct effect test (path coefficients)

Variables	Hypot hesis	Direction	Big effect	t-Stat (Ts)	t-Table (Tt)	Description
Brand awareness → Buying decision	H1	+	0.222	2.823	1.985	Positive Significant
Advertisement $\rightarrow$ Buying decision	H2	+	0.421	5.493	1.985	Positive Significant
Advertisement $\rightarrow$ Brand awareness	H3	+	0.245	3.030	1.985	Positive Significant
Word of Mouth $\rightarrow$ Buying Decision	H4	+	0.340	3.950	1.985	Positive Significant
Word of Mouth $\rightarrow$ Brand awareness	H5	+	0.367	3.134	1.985	Positive Significant

Based on Table 7, t statistics from brand awareness affect buying decision bigger than ttable (1.985) amount 2.823 with effect amount 0.222 and p-values >0.05 amount 0.005. So that can be concluded that the effect of brand awareness on buying decisions is positive and not significant. It is suitable with H<sub>1</sub>: brand awareness positively affects buying decisions, accepted. The score of t statistics from the direct effect toward buying decision is bigger than the t-table (1.985), which is amount 5.493 with a big effect amount of 0.421 and p-value <0.05 amount 0.000. Therefore, the effect of advertisements on buying Decisions is positive and significant. H<sub>2</sub>: advertisement is affected toward buying decision, accepted.

The score of t statistics from the direct effect of advertisement on brand awareness is bigger than the t-table (1.985), amount 3.030. Therefore, the effect of advertisements on brand awareness is positive and significant. So, H<sub>3</sub>: advertisement is affected brand awareness and acceptance. The score of t statistics from direct effect by buying decision is bigger than the t-table (1.985) is amount 3.950 with a big effect amount of 0.340 and p-values <0.05 amount of 0.000. Therefore, it can be concluded that the effect of word of mouth on buying decisions is positive and significant. So, H<sub>4</sub>: word of mouth is affected toward buying decision, accepted.

A score of t statistics from the direct effect of word of mouth on brand awareness is bigger than the t-table (1.985), which is amount 3.134, with a big effect amount of 0.367, and p-values <0.05 amount of 0.002. So, it can be concluded that the effect of word of mouth on brand awareness is positive and significant. So, H<sub>5</sub>: word of mouth is affected brand awareness and acceptance. Research results through direct effect test show that (1) brand awareness has a positive effect on buying decision, accepted, (2) advertisement is affected toward buying decision, accepted, (3) advertisement is affected toward brand awareness, accepted, (4) word of mouth is affected toward buying decision, accepted, (5) word of mouth is affected toward brand awareness, accepted.

## 5.5 Indirect Effect Test

Table 8 shows that the indirect effect test is to know the indirect effect of the advertisement variable, which is mediated by the brand awareness variable toward the buying decision, and the word of mouth variable, which is mediated by brand awareness toward buying decision.

Variables	Original sample	t-Stat (Ts)	t-Table (Tt)	t- Result	p-value	Description
Advertisement $\rightarrow$ Brand awareness $\rightarrow$ Buying decision	0.054	2.081	1.985	Ts <tt< td=""><td>0.038</td><td>Positive Significant</td></tt<>	0.038	Positive Significant
Word of Mouth $\rightarrow$ Brand awareness $\rightarrow$ Buying decision	0.082	2.168	1.985	Ts>Tt	0.031	Positive Significant

Table 8. Result of indirect effect test

Based on Table 8, the score of t statistics by advertisement effect, which is mediated by the brand awareness variable toward buying the decision bigger t-table (1.985), is amount 2.081 with a big effect is 0.054 and p-value <0.05 amount 0.038. So, it can be concluded that the effect of the advertisement, which is mediated by the brand

awareness variable toward buying decisions, is positive and significant. It is suitable with  $H_6$ : advertisement, which s mediated with brand awareness variable, is affected positively toward buying decision, accepted.

A score of effect t statistics of word of mouth, which is mediated by brand awareness variable toward buying decision bigger than t-table (1.985), is amount 2.168 with a big effect amount of 0.082 and p-values <0.05 amount of 0.031. So, it can be concluded that the effect of word of mouth, which is mediated by the Brand awareness variable toward buying decisions, is positive and significant. It is suitable with H<sub>7</sub>: word of mouth, which is mediated by the brand awareness, is affected positively toward buying decision accepted. Research results through the indirect effect test show that (1) advertisement, which s mediated by the brand awareness variable, is positively affected toward buying decision accepted, and (2) word of mouth, which s mediated by the brand awareness variable, is affected positively toward buying decision, accepted.

# 5.6 Total Effect of the influence between Advertisement and Buying Decision through Brand Awareness Mediated

Table 9 shows that known that significant influence will occur on the advertisement toward brand awareness with a significant number of 3.030 and the effect of brand awareness toward buying decision with a significant number of 2.823, and also a direct effect of the advertisement variable toward buying decision variable with a significant number of 5.493. Therefore, it can be concluded that the influence means the relation of all significant variables (partial mediation).

Table 9.	Total effect of the influence between advertisement and buying decision (Y)
	through brand awareness mediated

Variables	Total effect	t-Stat	p-value	Description
Advertisement → Buying decision	0.421	5.493	0.000	Significant
Advertisement → Brand awareness mediated	0.245	3.030	0.003	Significant
Brand awareness mediated $\rightarrow$ Buying decision	0.222	2.823	0.005	Significant
Advertisement $\rightarrow$ Brand awareness mediated $\rightarrow$ Buying decision	0.054	2.081	0.038	Significant

Based on Table 10, it can be known that the significant influence occurred on word of mouth variable toward brand awareness with a significant number of 3.134 and the influence of brand awareness toward buying decisions with a significant number of 2.823. Also, the direct influence of the word-of-mouth variable toward buying decision variable has a significant number of 3.950. These results indicate that word of mouth and brand awareness can influence buying decisions.

Table 10. The influence between word of mouth and buying decisions on brand awareness mediated

Variables	Total effect	t-Stat	p-value	Description
Word of mouth $\rightarrow$ Buying decision	0.340	3.950	0.000	Significant
Word of mouth $\rightarrow$ Brand awareness mediated	0.367	3.134	0.002	Significant
Brand awareness mediated $ ightarrow$ Buying decision	0.222	2.823	0.005	Significant
Word of mouth $\rightarrow$ Brand awareness mediated $\rightarrow$ Buying decision	0.082	2.168	0.031	Significant

## 6. Discussion

This research aims to analyze advertisements, word of mouth, and brand awareness toward buying decision on Ruang Guru apps in students. In this study, the researchers focused on the advertising variables, word of mouth, and brand awareness which became the basis of the research. According to Wicaksono and Seminari (2016) explains that an

advertisement is an activity of news delivery from part who wants his or her products and services to be liked, chosen, and bought, besides that advertisement also has the power to push potential customers to buy a product without see and try it first. The results of the direct effect test give the result that the effect of advertising on purchasing decisions is positive and significant. In comparison, the indirect effect test results show that the effect of advertising mediated by the brand awareness on purchasing decisions is positive and significant. His is supported by the role of the teacher's room application which (1) Have charm, (2) Show the benefits, (3) Have attention, (4) Build the willingness to try or have, and (5) Direct to do buying (Endyana & Ardani, 2019).

Word of mouth is one of the most credible ways for customers to obtain product-related information and decide to adopt the product (Sun, Foscht, & Eisingerich, 2021). Therefore, it is important for companies to be able to change the perception that word-of-mouth communication is more than just an interesting conversation; a product or service is not only a topic of conversation that is then promoted, but on the other hand, word of mouth can change consumer behavior and change thinking. Skeptic consumers who were initially not interested in trying and buying are finally interested in trying and buying (Sumardy, 2011). The direct test results show that the influence of word of mouth on purchasing decisions is positive and significant, and the indirect effect suggests that the influence of word of mouth on brand awareness is positive and significant. Line, The study by Tee, Erdiansyah, and Aulia (2020) refers to (1) hearing the teacher's room application from other people, (3) listening to the teacher's room application discussed by family, friends or other people, and (4) discussing the application of the teacher's room with people who have tried or will try.

Before consumers use a product or service, of course, they have several choices so that consumers determine which are their priorities. In determining their choice, consumers already have a standard of goods and services that will be used. Making purchasing decisions is an important factor in determining consumer choices. Currently, consumers rely on various information inputs before purchasing decisions. Consumers want to get more relevant product information from the observations of others because the product is becoming more complex, so traditional sources of information such as friends, family, and others are very important in the involvement of purchasing a product (Hock, 2022). The results of the study show that advertising and word of mouth have a significant positive effect on brand awareness. Advertising, word of mouth, and brand awareness significantly positively affect purchasing decisions. Advertising and word of mouth significantly affect purchasing decisions mediated by brand awareness. Therefore, marketing communication through advertising and word of mouth has a big role in making purchasing decisions.

The purchasing decision variable by Tee, Erdiansyah, and Aulia (2020) is supported by several indicators, namely (1) Feeling that the promotion of the teacher's room application is carried out as desired, (2) Looking for information on the teacher's room application to be purchased, (3) Choosing the teacher's room application from alternative brands similar to those purchased, (4) Purchased the Ruang Guru application product because it received recommendations from others, (5) Purchased the Ruang Guru application product because it was familiar with the brand, (6) Satisfied with the Ruang Guru application product, (7) Have the desire to make repeat purchases. Meanwhile, brand awareness is supported by an indicator variable: the Ruang Guru application is a brand familiar, well-known, and recognized by competitors. The explanation on the indicators in the advertising variable, word of mouth, and brand awareness of purchasing decisions, so based on the results of this study, the factors that influence purchasing decisions on the teacher's room application are advertising, word of mouth, and brand awareness. This study's results follow the theory that Wicaksono and Seminari (2016) explain that advertisement is an activity of news delivery from part who wants his or her products and services to be liked, chosen, and bought.

Communication from mouth to mouth is key in decision buying (lyer & Griffin, 2021). Word of mouth is one of the most incredible ways for customers to get more information about the product and decide to adopt the product. The producers must always develop a brand and do promotion about brand awareness through sales promotion, advertisement, and other marketing. When brand awareness is high, customers will make buying decisions (Eliasari & Sukaatmadja, 2017).

The total effect of influence among variables is used to see whether there is a correlation between full mediation or partial mediation in research. Fully mediation means influence occurred has a significant effect on the independent variable with the meditation variable and the dependent variable. However, the direct effect of the independent variable on the dependent variable is insignificant. Partial mediation means the influence of significant effect occurred in all variables, that is independent variable effect toward the meditated variable which significant, mediated variable effect toward the significant dependent variable, and the independent variable direct effect toward the dependent variable is significant (Hair, Hult, Ringle, & Sarstedt, 2017). This research is limited to questionnaires distributed to students at school as the primary data in this study.

### 7. Conclusion

Data respondents consist of two parts in detail, that is, gender and age. Gender is a physiology and anatomy attribute in the respondents. Female is 59 people (59%), and male is 41 people (41%). The age category of respondents in this research is 16-17 years old, is 47 percent, and the age <16 years old is about 39 people (39%), and the age >17 years old is about 14 people (14%).

Based on the research, it can be concluded that advertisement from word of mouth has a significant influence on brand awareness. Advertisements, word of mouth, and brand awareness have influenced positive significant toward buying Decisions. Advertisements and word of mouth significantly influence buying decisions mediated by brand awareness. The results of this study answer the problem in this study whether advertising, word of mouth, and brand awareness influence purchasing Decisions in the Ruang Guru application.

## 8. Recommendation

Ruang Guru Apps is a kind of online tutoring study that keeps giving the best products and doing innovation. So, it can stay hold on among other online or offline tutoring studies in Surakarta. Ruang Guru Apps must be ready for some competitors. It always gives the best facilities. Ruang Guru apps, as an education-based technology, make innovations in enhancing fun learning, which directly increases student learning desires. Ruang Guru apps are still developing promotion through advertising and word of mouth as the best tool for promoting products to attract customers.

## Citation information

**Cite this article as** Itasari, A. A., Hastuti, N. H. (2023). The effect of advertisement, word of mouth, and brand awareness towards buying decision on "Ruang Guru Apps" in SMU Negeri XYZ Surakarta. *Journal of Consumer Sciences*, 8(2), 155-168. doi: https://doi.org/10.29244/jcs.8.2.155-169

## References

Armawati, I., Saryadi, S., & Prabawani, B. (2014). Pengaruh brand awareness, brand image dan perceived quality terhadap keputusan pemakaian jasa pada maskapai penerbangan Garuda Indonesia. Jurnal Ilmu Administrasi Bisnis, 3(4), 323-331.

https://doi.org/10.14710/jiab.20 14.6576

- Belch, G. E., & Belch, M. (2006). Advertising and promotion: an integrated marketing communication perspective global edition. School of Marketing and International Business, Victoria University of Wellington
- Eliasari, P. R. A., & Sukaatmadja, I. P. G. (2017). The effect of brand awareness on purchase intention is mediated by perceived quality and brand loyalty (Pengaruh brand awareness terhadap purchase intention dimediasi oleh perceived quality and brand

loyalty). E-Jurnal Manajemen Unud, 6(12), 6620-6650.

Endyana, M. D. A., Ardani, I. Gst. A.Kt (2019). The role of brand awareness mediates the effect of advertising on purchasing decisions (Peran brand awereness memediasi pengaruh advertising terhadap keputusan pembelian). *E-Jurnal Manajemen*, 8(11), 6558 - 6576.

https://doi.org/10.24843/EJMUN UD.2019.v08.i11.p09

- Firmansyah, A. (2020). Marketing Communications (1st Edition) (Komunikasi Pemasaran (Edisi ke 1)). Pasuruan(ID): Penerbit Qiara Media
- Ghozali, I. (2014). Multivariate Analysis application with SPSS Program (4th Edition) Aplikasi Analisis Multivariate dengan Program SPSS (Edisi ke 4)). Semarang(ID): Badan Penerbit UNDIP
- Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer On Partial Least Squares Structural Equation Modelling (PLS-SEM) (2nd-ed). Thousand Oaks, CA(US): Sage Publications
- Herlambang, S. (2014). Marketing Basics Easy Ways to Understand Marketing Science (Dasar-Dasar Marketing Cara Mudah Memahami Ilmu Pemasaran). Yogyakarta(ID): Gosyeng Publishing
- Hock, N. (2022). Herd behavior along the consumer buying decision process experimental study in the mobile communications industries. *Digital Bussiness*, 2(1), 100018. 100018.https://dx.doi.org/10.10 16/j.digbus.2021.100018
- Huang, M., & Liu, T. (2022). Subjective or objective how the style of text in computational advertising influences consumer behavior? *Fundamental Research*, 2(1), 144-153. https://doi.org/10.1016/j.fmre.
- 2021.11.004 Kotler, P., & Armstrong, G. (2008). Principles of Marketing Volume I Twelfth Edition (Prinsip Prinsip Pemasaran Jilid I Edisi Keduabelas). Jakarta(ID): Penerbit Erlangga
- Laws of The Republic Indonesia. (July 08, 2003). Law Number 20 of 2003 concerning The National

# JOURNAL OF CONSUMER SCIENCES

Education System (Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional). Retrieved from https://peraturan.bpk.go.id/Ho me/Details/43920/uu-no-20tahun-2003

- Iyer, R., & Griffin, M. (2021). Modeling word of mouth usage a replication. *Journal of Bussiness Research*, *126*, 512-523. https://doi.org/10.1016/j.jbusre s.2019.12.027
- Pramudita, B. (June 20, 2022). Ruang Guru Report: as of May, 38 million users have been reached (Laporan Ruang Guru: per Mei, 38 juta pengguna sudah diraup). Retrieved from https://www.marketeers.com/la poran-Ruang Guru-per-mei-2022-38-juta-pengguna-sudah-diraup
- Restu, W. F., Ramdan, A. M., Sunarya, E., & Santika. (2020). Analysis of Ruang Guru advertisements and brand ambassadors in increasing consumer confidence in Ruang Guru users (Analisis iklan Ruang Guru dan brand ambassador dalam meningkatkan kepercayaan konsumen pengguna Ruang Guru). Syntax Idea, 2(9), 690-695.
- Sugiyono. (2017). Quantitative Research Methods, Qualitative, and R&D (Metode Penelitian Kuantitatif, Kualitatif, dan R&D). Bandung(ID): Alfabeta
- Sun, X., Foscht, T., & Eisingerich, A. B. (2021). Does educating customers create positive word of mouth?. *Journal of Retailing and Consumers Services*, 62, 102638. https//doi.org/10.1016/j.jretcon ser.2021.102638
- Tee, J., Erdiyansah, R., & Aulia, S. (2020). The influence of word of mouth and brand awareness on purchasing decisions of Xing Fu Tang in Indonesia (Pengaruh word of mouth dan brand awareness terhadap keputusan pembelian Xing Fu Tang di Indonesia). Prologia, 4(1), 18-24. https://doi.org/10.24912/pr.v4i1 .6420
- Wicaksono, M. P. A., & Seminari, N. K. (2016). The influence of advertising and word of mouth on Traveloka's brand awareness (Pengaruh Iklan dan word of mouth terhadap *brand awareness*

Traveloka). E Jurnal Manajemen Unud, 5(8), 5098-5127. Wichmann, J. R. K., Uppal, A., Sharma, & Dekimpe. (2021). A global perspective on the marketing mix across time and space. International Journal of Researchiln Marketing, 39(2), 502-521.https://doi.org.10.1016/j.ijr esmar.2021.09.001

# JOURNAL OF CONSUMER SCIENCES

Wiyono, B. (2009). The Effect of Word of Mouth on Purchasing Decisions (Pengaruh Word of Mouth dalam Keputusan Pembelia)n. Bandung(ID): Kappa Sigma