Effect of marketing mix, firm generated content, and celebrity endorsement towards customer's purchase decision in choosing dental hospitals during covid – 19 pandemic

Agnella Gwenisa[1], Rudy Pramono[2]

[1]Hospital Management Graduate Student, Universitas Pelita Harapan, Jakarta, Indonesia
[2] Lecturer of Hospitality Management, Universitas Pelita Harapan, Jakarta, Indonesia

A R T I C L E I N F O	**ABSTRACT**
	There were many dental clinics and dental hospitals that experienced a decline in sales and were also changes in people's behaviour in purchasing decision during the Covid – 19 pandemic. People tend to be more careful and thorough in making decisions in spending. Dental hospitals must still survive, hence dental hospitals can implement marketing mix (product, price, promotion), firm generated content, and celebrity endorsement to attract patients. This study aims to determine how celebrity endorsement, company-generated content, and the marketing mix influence customer purchase decisions during the COVID-19 pandemic. Purposive non-probability sampling was used in this quantitative study, which was conducted on a sample of 100 patients from Trisakti University Dental Hospital. A questionnaire is used to collect the data, which is then analyzed using descriptive and inferential data analysis. In contrast to price, promotion, and celebrity endorsement, it can be concluded that customer purchase decisions regarding dental hospitals are significantly and positively influenced by product and firm generated content. Trisakti University Dental Hospital should do further research in a different time frame and a larger population size.

Corresponding Author:

Agnella Gwenisa
Hospital Management Graduate Student
Universitas Pelita Harapan
The Plaza Semanggi, Jl. Jend. Sudirman No.50, RT.1/RW.4, Karet Semanggi, Jakarta, Indonesia,
Email: 01615210009@student.uph.edu, rudy.pramono@uph.edu

INTRODUCTION

The corona virus disease was first emerged in Wuhan, China on December 2019 that kept spreading worldwide causing a global pandemic by March 2020. The SARS-Cov2 virus spreads through aerosols and droplets. Once contracted, the virus incubates in the body for 1 – 14 days (Lucaciu et al, 2020). Dental treatments are considered high risk for contracting the virus due to its production of aerosols and close contact between dentist and the patient's oral cavity, hence worrying about getting infected (Lucaciu et al, 2020). Treatments are limited to emergency procedures (Alharbi, 2020). The feel of worry and limitations causes a decrease in the number of patients' visitation to the dentist up to 50% (ADA, 2020 in: Kranz et al, 2020). The sense of worry

and external factor, such as global economic crisis changes people's perception towards getting treatment, especially spending money on it. This can be concluded that there is a change in a behavior on purchase decision.

Purchase decision can be defined as consumer's decision to buy goods or services. Decisions can be influenced by economic condition, technology, close related person, process, and unexpected conditions (Alma, 2018; Kotler and Keller, 2012). Kotler and Keller (2012) suggest that there are five steps that undertake in making a purchase decision. First, consumers will identify their needs and desires, then consumers will search for information, which then will be analyzed to make the decision. Despite everything, dental clinics still need to stay afloat amidst competition even with the decline of visitors. Teaching hospitals are no exception. Trisakti University Dental Hospital is a teaching hospital that has been operating for a very long time and they too were affected by the pandemic. Before the pandemic, the amount of patient visits reaches up to 50.000, but when the pandemic hits, with all the restrictions, patient visits declined to 12.000 patients throughout 2020. The number of patients has been increasing since the relief of restrictions, but it still hasn't done any justice.

There are ways of resolving this issue. Implementing marketing mix is one way to do a promotional strategy (Mayasari et al,2022). Marketing mix elements that can be used are product, price, and promotion. Each element of the marketing mix has its own definition. Product is something that is offered to fulfill needs dan desires in a form of goods, such as non-durable goods and durable goods, or services. Price is the amount consumers pay to obtain products or services (Kotler and Keller, 2016). Usman and Nadila (2019) stated that price plays an important role in purchasing decision because it is the easiest measurement for customers. Promotion is a form of communication to persuade and gain engagements. Kotler and Keller (2016) suggest that there are five ways to do promotion, which are through advertising, sales promotion, personal selling, online and social media marketing, also events (Tjiptono, 2012; Kotler and Keller, 2016).

Another way to obtain more patients is through social media, using firm generated content and celebrity endorsements (Putri and Sijabat, 2021). Firm generated content is a content created and managed by its own company, which is then shared to all social media platforms to obtain customers through social media users (Kumar et al, 2016; Poulis et al, 2016). Celebrity endorsement is a marketing strategy involving celebrities as the promoter, known as celebrity endorser (Osei-frimpong, 2019).

There are still very few literatures on the effect of marketing mix, firm generated content, and celebrity endorsement toward customer's purchase decision in choosing dental hospitals during the Covid – 19 pandemic, especially on teaching hospitals during. Knowing that the pandemic shifts people's behavior and decline on sales brings curiosity to the author on what would affect customer's purchase decision to come back to get treatments in dental hospitals while also gaining new patients.

RESEARCH METHOD

Research Objective

This study will analyze the effect of product, price, promotion, firm generated content, and celebrity endorsement towards customer's purchase decision. Product, price, promotion, firm generated content, and celebrity endorsement are independent variables and purchase decision is the dependent variable.

Operationalization of Research Variabel

This research conducted with six variables, the first is the product which are services provided to fulfill one's needs. The second is price, which is the amount one should pay to obtain services. The third is promotion, which is a form of communication to attract patients. The fourth is

firm generated content, which is content created by the firm and distributed in all social media platforms. The fifth is celebrity endorsement, which is a marketing strategy involving celebrities. The sixth is purchase decision, which means a patient's decision to buy the services provided.

Population and Sample

The population of this research patients who are getting treatment at RSGM-P FKG Universitas Trisakti from September – October 2022. The sampling technique used in this research is non-probability sampling and uses the purposive sampling method that requires all respondents who fulfill the criteria set by the researchers, which in this case are outpatients over the age 20 years old. There are 100 questionnaires distributed and the requirements for all respondents are met.

Data Collection Technique

The primary data sources were obtained thorugh questionares distributed to individuals in accordance with the criteria determined by the researcher. 2) The secondary data sources will be obtained thorugh individuals who are able to provide data related to the reseach that would be carried out which obtained through research conducted by

RESULTS AND DISCUSSIONS

Respondent Demographic

Respondent Demographic	Percentage	Total (f)
Gender		
Woman	61%	61
Man	39%	39
Age		
20 - 30 Years Old	54%	54
31 - 40 Years Old	20%	20
41 - 50 Years Old	18%	18
> 50 Years Old	8%	8
Educational Background		
< High School	9%	9
High School / Vocational High School	28%	28
Diploma	5%	5
Bachelor	51%	51
Masters	7%	7
Occupation		
Student	43%	43
Private Sector Employee	27%	27
Government Sector Employee	4%	4
Housewife	17%	17
Unemployed	19%	19
Services Needed		
Dental Clinical Student	65%	65
General Dentist	12%	12
Dental Specialist	23%	23
Number of Visits		
1x	43%	43
2x	23%	23
3x	14%	14
> 3x	20%	20
Monthly Income (Rp)		
< 500.000	12%	12
500.000 - 1Million	9%	9
1 - 2 Million	32%	32
2 - 5 Million	26%	26
> 5 Millon	21%	21

Table 3.1 Descriptive Statistical Analysis

Source: Data Processing Result

Based on the table above (table 3.1) out of the respondents that partake in this research, 65% percent are women and most repsodents are 20 – 30 year olds with a percentage of 54%. 51% of the respondents have bachelor degrees. 43% of the respondents are students. As presented on

table 3.1, 65% respondents need services from dental clinical students and 43% of respondents only visit once (1x). 32% respondents in this research make 1 – 2 million rupiah per month.

Construct Reliability

Table 2 Construct Validity and Reliability

Construct	Indicator
Product (AVE = 0,560)	
PRO1	Jasa yang disediakan RSGM-P FKG Universitas Trisakti bermanfaat bagi saya.
PRO2	Jasa yang ditawarkan di RSGM-P FKG Universitas Trisakti untuk pasien sudah sesuai.
PRO3	Terdapat berbagai macam jasa (dokter gigi umum, dokter gigi spesialis, dan dokter umum IGD) di RSGM-P FKG Universitas Trisakti yang dapat saya pilih.
PRO4	Menurut saya, fasilitas medis (radiologi, ruang tekanan negatif, lab gigi, lab darah, dan lab mikrobiologi) yang tersedia di RSGM-P FKG Universitas Trisakti sudah memadai.
PRO5	Saya membutuhkan jasa dan fasilitas yang tersedia di RSGM-P FKG Universitas Trisakti.
Price (AVE = 0,532)	
PRC1	Tarif yang dikenakan pasien di RSGM–P FKG Universitas Trisakti tidak mahal.
PRC2	Tarif jasa pelayanan di RSGM-P FKG Universitas Trisakti lebih murah dibandingkan klinik gigi lainnya.
PRC3	Tarif jasa pelayanan di RSGM-P FKG Universitas Trisakti sesuai dengan kualitas pelayanan yang diberikan.
PRC4	Tarif yang ditetapkan bervariasi tergantung tindakan / pelayanan yang dilakukan.
Promotion (AVE = 0,588)	
PRM1	Brosur yang diterbitkan RSGM-P FKG Universitas Trisakti sangat informatif.
PRM2	Bahasa yang digunakan dalam brosur dan media sosial FKG RSGM-P Universitas Trisakti mudah untuk dimengerti.
PRM3	RSGM-P FKG Universitas Trisakti mempromosikan jasa yang disediakan melalui media sosial, seperti *Instagram*.
PRM4	RSGM-P FKG Universitas Trisakti mempromosikan jasa dan fasilitas yang disediakan melalui media elektronik, seperti berita televisi dan *website*.
PRM5	RSGM-P FKG Universitas Trisakti memberikan diskon untuk pelayanan yang ditawarkan.
Firm Generated Content (AVE = 0,665)	
FGC1	Saya puas dengan konten media sosial RSGM-P FKG Universitas Trisakti.
FGC2	Konten yang ditampilkan pada media sosial RSGM-P FKG Universitas Trisakti memenuhi ekspektasi saya
FGC3	Konten media sosial RSGM-P FKG Universitas Trisakti sangat menarik.
FGC4	Konten media sosial RSGM-P FKG Universitas Trisakti memiliki tampilan yang lebih baik dibandingkan dengan RSGM / klinik lainnya.
FGC5	Konten media sosial RSGM-P FKG Universitas Trisakti sangat informatif.
Celebrity Endotsement (AVE = 0,742)	
CE1	*Celebrity endorsement* menangkap perhatian saya terhadap RSGM-P FKG Universitas Trisakti
CE2	*Celebrity endorsement* meningkatkan motivasi saya untuk memilih Rumah Sakit Gigi dan Mulut.
CE3	*Celebrity endorsement* membangun keyakinan pelanggan terhadap kualitas RSGM-P FKG Universitas Trisakti.*
CE4	*Celebrity endorsement* membangun kepercayaan pelanggan terhadap RSGM-P FKG Universitas Trisakti.
CE5	*Celebrity endorsement* mengingatkan pelanggan akan RSGM-P FKG Universitas Trisakti.
Purchase Decision (AVE = 0,649)	
PCD1	Saya memilih RSGM-P FKG Universitas Trisakti karena memenuhi kebutuhan saya.
PCD2	Saya memilih RSGM-P FKG Universitas Trisakti karena memberikan informasi yang jelas mengenai pelayanan / jasa yang ditawarkan di media sosial.
PCD3	Saya memilih RSGM-P FKG Universitas Trisakti karena kualitasnya baik.
PCD4	Saya memilih RSGM-P FKG Universitas Trisakti karena fasilitasnya lengkap.
PCD5	Saya memilih RSGM-P FKG Universitas Trisakti karena lokasinya yang strategis.
PCD6	Saya memilih RSGM-P FKG Universitas Trisakti karena memahami kebutuhan pasiennya.
PCD7	Saya akan tetap memilih RSGM-P FKG Universitas Trisakti meskipun ada jasa perawatan di tempat lain yang menawarkan.

Source: Data Processing Result

This study uses Likert scale from 1 – 5 as responds to the questionnaire, with 1 being strongly disagree and 5 being strongly agree. Based on table 3.2 all variables passed validity and reliability test with AVE (Average Variance Extracted) value above 0,5. According to Ghozali and Latan (2015), AVE value must be above 0,5 construct variables.

Discriminant Validity

Table 3. Fornell-Lacker Discriminant Validity

	CE	FGC	PRC	PRO	PRM	PCD
CE	0,861					
FGC	0,658	0,815				

PRC	0,071	0,331	0,730		
PRO	0,238	0,366	0,603	0,748	
PRM	0,422	0,566	0,461	0,340	0,767
PCD	0,361	0,559	0,376	0,545	0,340	0,806

Source: Data Processing Result

The discriminant validity value of each indicator has met the Fornell – Larcker criteria, where the square root of the AVE value of each indicator must have a higher value than the correlation value of the construct of other variables (Hair et al. 2019). All indicators of this research variable meet discriminant validity.

Collinearity Test

Table 4 Collinearity Test (VIF Value)

	CE	FGC	PRC	PRO	PRM	PCD
CE						1,931
FGC						2,273
PRC						1,940
PRO						1,688
PRM						1,731
PCD						

Source: Data Processing Result

According to Hair et al. (2019), the value of the Variance Inflation Factor (VIF) is ideal if it is below 3. Based on table 3.4, the Variance Inflation Factor (VIF) value of all research variables is categorized as eligible, because every value from each construct are below 3.

Table 5. Path Coefficient and P-Value

	Original Sample	**P Value**
Product -> Purchase Decision	0,390	0,002
Price -> Purchase Decision	0,018	0,854
Promotion -> Purchase Decision	-0,048	0,523
Firm Generated Content-> Purchase Decision	0,437	0,002
Celebrity Endorsement -> E-Satisfaction	0,000	0,996

Source: Data Processing Result

The path coefficient needs to be done to assess the effect of the independent variable on the dependent variable by doing a p-value test. The results of the study are significant if the p-value obtained is below 0,05 (Hair et al., 2019). Based on the results of the study in table 3.5, only product and firm generated content that has p – value below 0,05. The results for price, promotion, and celebrity endorsement are not significant because the p – value is above 0, 05.

R-Squares

Table 6 R-Square

Variable	R Square	R – Square Adjust
Purchase Decision	0,447	0,418

Source: Data Processing Result

R – square evaluation is used to assess the predictive power of the construct relationship of the research model. According to Chin (1998, in: Ghozali and Latan, 2015) the R- square value with

a value of 0,67 is substantial; 0,33 is moderate and 0,19 is weak. Based on the results in table 3.6, the R - Square value of purchase decision is 0,447 (44,7%) and R – Square adjust is 0,418 (41,8%) and is qualified as moderate, which means 41,8% of the variable can be explained using the variables used in this study and the 48,2% are explained using variables not in this study.

Hypothesis Test

<div align="center">Table 7 Hyphothesis Test</div>

Hypothesis	Path Coefficients	p - value	Result
H1: Product offered by Trisakti University Dental Hospital effect customer's purchase decision in choosing dental hospitals during Covid - 19 pandemic.	0,390	0,002	Supported
H2: Price set by Trisakti University Dental Hospital effect customer's purchase decision in choosing dental hospitals during Covid - 19 pandemic.	0,018	0,854	Unsupported
H3: Promotion done by Trisakti University Dental Hospital effect customer's purchase decision in choosing dental hospitals during Covid - 19 pandemic.	-0,048	0,523	Unsupported
H4: Firm generated content created by Trisakti University Dental Hospital effect customer's purchase decision in choosing dental hospitals during Covid - 19 pandemic.	0,437	0,002	Supported
H5: Celebrity endorsement towards Trisakti University Dental Hospital effect customer's purchase decision in choosing dental hospitals during Covid - 19 pandemic.	0,000	0,996	Unsupported

Source: Data Processing Result

Based on table 3.7, there are five hypotheses proposed in the research model where not all hypotheses are supported. Only two out of the five hypotheses tbat are supported, which are the effect of product towards customer's purchase decision and firm generated content towards customer's purchase decision, with both having p-values at 0,002. According to the table, price, promotion, and celebrity endorsement hypothesis towards customer's purchase decision because the p – values are above 0,05.

Based on the results above (table 3.7), it can be concluded that not all hypotheses are supported, with the following explanation: 1) Product positively and significantly effect customer's purchase decision in choosing a dental hospital, with p – value of 0,002, which is below <0,05, hence the hypothesis is supported. This result is in accordance with previous researches (Ulfah et al, 2013; Usman and Nadila, 2019; Widyastuti et al, 2020; Gunawan and Melinda, 2021) that shows products positively and significantly effect customer's purchase decision. Knowing that the location for the research is a teaching hospital that is very well equipped due to its purpose to teach the students, all patient's needs can be fulfilled. 2) Price positively effect customer's purchase decision but not significant because the p-value is above 0,05, hence the hypothesis is unsupported. This result is supported by previous research (Ulfah et al, 2013) that shows price is not part of the consideration to influence customer's purchase decision. 3) Promotion negatively and insignificantly effect customer's purchase decision because the p-value is above 0,05, hence the hypothesis is unsupported. This result is

supported by previous research (Widyastuti et al, 2020) that shows promotion does not effect customer's purchase decision which may be caused by lack of promotion, unattractive promotion, and rarely do discounts. 4) Firm generated content (FGC) positively and significantly effect customer's purchase decision in choosing a dental hospital, with p – value of 0,002, which is below <0,05, hence the hypothesis is supported. This result is in accordance to previous research (Kumar et al, 2016; Putri and Sijabat,2021) that shows FGC effects customer's purchase decision because it aids customer's to gain information. 5) Celebrity endorsement positively effect customer's purchase decision but not significant because the p-value is above 0,05, hence the hypothesis is unsupported. This result is supported by previous research (Adam and Hussain, 2017) that celebrity endorsement doesn't always effect customer's purchase decision due to doubt that results on customers differs from the endorser.

CONCLUSION

This study aims to analyze the effect on marketing mix with elements of product, price, and promion, firm generated content, and celebrity endorsement towards customer's purchase decision in choosing dental hospitals during the Covid – 19 pandemic. Based on the analysis that has been carried out, the following conclusions can be formed: 1) Products offered by Trisakti University Dental Hospital positively and significantly effect customer's purchase decision. 2) Price set by Trisakti University Dental Hospital positively but not significantly effect customer's purchase decision. 3) Promotion done by Trisakti University Dental Hospital negatively and insignificantly effect customer's purchase decision. 4) Firm generated content created by Trisakti University Dental Hospital positively and significantly effect customer's purchase decision 5) Celebrity endorsement towards Trisakti University Dental Hospital positively and significantly effect customer's purchase decision

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