

# The Role Of Perceived Health Benefit, Brand Image, And Design Appeal Towards Health Mask Repurchase Intentions After Easing Policy Of Health Protocol

Caesar Rosyad Achmadi<sup>\*1</sup>, Muhammad Harfiansyah Makarim<sup>2</sup>, Oktafalia Marisa Muzammil<sup>3</sup>

<sup>1,2</sup>Fakultas Ekonomi dan Bisnis, Universitas Negeri Yogyakarta, Indonesia

<sup>3</sup>Business Management, Binus Business School, Indonesia

\*Correspondence e-mail: [caesarrosyad@uny.ac.id](mailto:caesarrosyad@uny.ac.id)

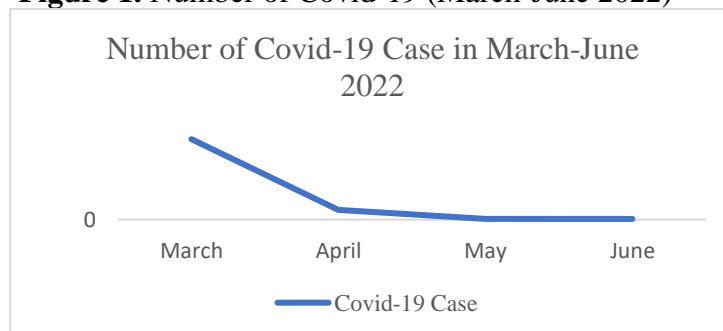
**Abstract**– This research entitled “The Influence of Perceived Health Benefit, Brand Image, and Design Appeal Towards Repurchase Intentions After Easing Policy of Health Protocol” has three objectives, namely: (1) Knowing the influence of perceived health benefit towards health mask repurchase intentions, (2) Knowing the influence of brand image towards health mask repurchase intentions, (3) Knowing the influence of design appeal towards health mask repurchase intentions. WHO (2020) describes a health mask as a loose, disposable device that creates a physical barrier between the wearer's mouth and nose as well as potential contaminants in the immediate environment. The method of this study is quantitative method. The population in this study was citizen of Indonesia in Java Island at least 17 years old who purchase health mask in recent three months. The sample in this study is 248 respondents. Data collecting method using online questionnaire and processed using SPSS version 26. The result of this study are: (1) Perceived health benefit has a significant effect on repurchase intention, (2) Brand image has a significant effect on repurchase intention, (3) Design appeal has a significant effect on repurchase intention.

**Keywords:** *perceived health benefits, brand image, design appeal, repurchase intention, health mask*

## INTRODUCTION

The first Covid-19 case was found in China in 2019. According to the Indonesian Ministry of Health, covid-19 mutated into alpha, beta, Gamma, Delta, and the latest variant is Omicron which were found in 2021. According to [www.covid19.big.go.id](http://www.covid19.big.go.id), until June 14, 2022, the transmission rate of covid-19 reached six million cases. On 2020 Covid-19 case also resulted in Indonesia's GDP dropping to -2.07% due to social restrictions and regional quarantine policies, even though in the previous years GDP growth up to 5,02% based on Media Informasi Penelitian, Pengembangan dan IPTEK.

**Figure 1.** Number of Covid-19 (March-June 2022)



Source: CSSEGI Sand Data Covid-19

Based on Figure 1, the Covid-19 transmission rate as of March 2022 has actually started to experience a significant decline. In addition to implementing strict health protocols, the decline in the number of Covid-19 transmissions was also caused by vaccinations carried out by the government in almost all regions in Indonesia which have reached more than 200 million doses according to Our World in Data 2022. As a result of the decline in COVID-19 cases, Indonesian President Joko Widodo officially relaxed health protocols including wearing masks on May 8, 2022. This will certainly have an impact on reducing demand for masks in the market.

Elis Masitoh as Director of the Textile, Leather and Footwear Industry of the Ministry of Industry uploaded on the website [www.katadata.co.id](http://www.katadata.co.id), May 2022 production of health masks reached 4.63 billion pieces last year, while domestic demand was only 176.59 million. As a result, 4.45 billion pieces or 14,254 tons of health masks piled up in industrial warehouses. So these mask companies must pay attention to the intention to repurchase health masks in the market.

There are still a number of factors that still encourage people to buy masks repeatedly in the midst of easing health protocols, namely perceived health benefits, brand image, and design appeal. Perceived health benefits are the level of a person's perception of health regarding physical, mental, and social well-being (Z. Li & XiaoBo, 2022). Perceived health benefits arise because of a regulation from the Indonesian Ministry of Health which recommends wearing a mask because it can dispel the splashes of saliva that come out when talking, exhaling, or coughing and sneezing so as to reduce the spread of the virus. Then it can affect on consumer health perception of using health health mask.

Brand is a name, term, sign, symbol, design, or a combination of them intended to identify the goods or services of one seller or group of sellers to differentiate them from other competitors (Kotler & Armstrong, 2017). Based on data compiled by the Ministry of Health in Indonesia as of April 2021, there are 996 medical masks that have obtained distribution permits. This certainly makes the Indonesian mask market filled with various types of mask brands, with the implication that every mask manufacturer company must build a strong brand image in order to be able to compete in the market.

Design is a construction that can be described as any design that will increase the attractiveness and attractiveness of an object for the observer (Thielsch & Niesenhaus, 2017). In addition to being beneficial for health, the design of mask products must of course be attractive to increase added value and consumers' willingness to buy. On the other hand, an unattractive mask design will reduce consumer attention to mask products and will certainly have a direct impact on consumers' unwillingness to buy.

So it can be concluded that the drastic decline in the demand for masks was caused by the easing of health protocols by the government. Mask manufacturers have temporarily suspended production. There are three factors that can increase the intention to repurchase medical masks in the community, namely perceived health benefits, brand image, and design appeal. So it is important to know which of the three driving factors has a significant impact on the intention to repurchase masks.

---

## METHODOLOGY

### *Research Design*

This study uses quantitative research methods to get or obtain the results of the study. Quantitative research is research using data in the form of numbers obtained through several structured questions (Schindler & Pamela S, 2019). The ideal number of the samples used in the study is ten times the number of the indicators (Hair & Brunsveld, 2019). The indicators of this study is 16, then the minimum of the samples is 160. To get better sampling, authors decide to take 248 respondents in this study in order to be more representative of the specified population. This research used a purposive sampling technique. Data of this study processed using IBM SPSS (Statistical Program for Social Science) version 26.

### *Research Population and Sample*

In this study, the population is the Indonesian population over 17 years old who have purchased health masks. Then in selecting samples, researchers used a purposive sampling method, namely a sampling method with certain predetermined criteria or conditions. The conditions are domiciled in Java Island, over 17 years old, and have ever bought a health mask. This study uses primary data as a data source. Primary data is data that is obtained directly and processed directly by researchers (Schindler & Pamela S, 2019) Primary data in this study were obtained from distributing questionnaires via google form. The method of distributing questionnaires to research subjects is included in the self-administered survey method (Schindler & Pamela S, 2019).

### *Perceived Health Benefit*

Perceived health benefits or health benefits are the level of one's health perceptions regarding physical, mental, and social well-being (H. Li et al., 2021). Perceived health benefits is an indicator based on individual statements about their own general state of health, without having to justify their choice of each response given (Gumà, 2021). Perceived health benefits included in the Health Belief Model (HBM) theory identify five basic dimensions as the basis for behavior: perceived severity of the condition, perceived susceptibility (vulnerability to the disease process), perceived benefits (belief in efficacy), costs/barriers, and cues to action (Tajiki et al., 2022).

### *Brand Image*

Brand as a name, term, sign, symbol, design, or a combination of all of them that are intended to identify a good or service from one seller or group of sellers to differentiate from other competitors (Kotler & Armstrong, 2017). Another definition, brand image is the consumer's response to the overall offering provided by a company (Kelvin et al., 2017). Company image can also be understood as a number of customer beliefs and impressions of the company. Brand image is an integral component of brand knowledge when branding a product. Therefore, the company's competitive advantage in the market can be achieved based on a positive brand.

### *Design Appeal*

Design is defined as a form of material and immaterial display and provides the logic that supports form and expression (Woelfel et al., 2013). The design of a product will attract consumers to learn more about the product. This is in accordance with the

statement that design is a construction that can be described as any design that will increase the attractiveness and appeal of an object to the observer (Thielsch & Niesenhaus, 2017). Aesthetics and design dimensions are important components in building competitive advantage, especially in saturated and stagnant markets (Hauser et al., 2022).

### ***Repurchase Intention***

Repurchase intention is the actual behavior of consumers that results in the purchase of the same product or service on more than one occasion (Ibzan et al., 2016). Another definition conceptually, repurchase intention is the operationalization of the future tendency to engage in consumer repurchase behavior of company products and services (Istanbulluoglu & Sakman, 2024). Repurchases made by consumers are a form of positive reaction to products consumed or purchased (Law et al., 2022).

### ***The Relationship Between Health Benefits And Health Repurchase Intention***

Perceived health benefits are a person's perceived level of health regarding physical, mental, and social well-being (H. Li et al., 2021). A previous study showed that the health benefits of food are associated with emotional appraisal (Peštek & Činjurević, 2014). In addition to emotional appraisal, health information attached to a product can increase the repurchase intention of a product (Klepacz et al., 2016). In this study, the higher the health benefits perceived by consumers, the higher the intention to repurchase health masks. This is supported by research conducted by (Wang & Tsai, 2019) which states that the health benefits of tracked fresh food have a positive effect on food repurchase intentions. In addition, there is research from (De Temmerman et al., 2021) which states that there is a significant positive effect of the health benefits variable on the repurchase intention of food supplement products.

H1: Health benefits have a positive effect on repurchase intention

### ***The Relationship Between Brand Image And Repurchase Intention***

Brand image according to Kelvin et al., (2017) states that brand image is the consumer's response to the overall offering provided by a company. Brand image not only symbolizes how important the brand is to consumers, but brand image is able to influence consumer views to move consumers to buy certain products. This is in accordance with the statement from Baksi & Panda (2018), namely a positive brand image captured by customers or profitable, will affect product purchase intentions. Mask companies can create positive stimuli for consumers of health masks, so the company's brand image will also get a positive image. This has an impact on consumer action/behavior on the product in a positive way. In this study, the more positive (high) the brand image has a positive effect on the intention to repurchase health masks. This research is supported by previous research conducted by El Shiffa et al., (2021) which states that product image affects the repurchase of luxury products.

H2: Brand image have a positive effect on repurchase intention

### ***The Relationship Between Design Appeal And Repurchase Intention***

Design is a construct that can be described as any design that will increase the attractiveness and appeal of an object to the observer (Thielsch & Niesenhaus, 2017). Design is a construction that can be described as any design that will increase the attractiveness and appeal of an object to the observer (Thielsch & Niesenhaus, 2017)). Attractive design is one of the factors to increase competitive advantage which can be in

the form of repurchase intentions. This is in accordance with the statement put forward by Pikkemaat & Weiermair (2003), namely design is an important factor that can create consumer perceptions, emotions, and views that are useful for formulating good marketing strategies. In this study, the more attractive the mask design, the higher the intention to repurchase health masks. This research is supported by research conducted by Lin & Filieri (2015) which states that design appeal has a positive effect on smart phone repurchase intentions.

H3: Design appeal have a positive effect on repurchase intention

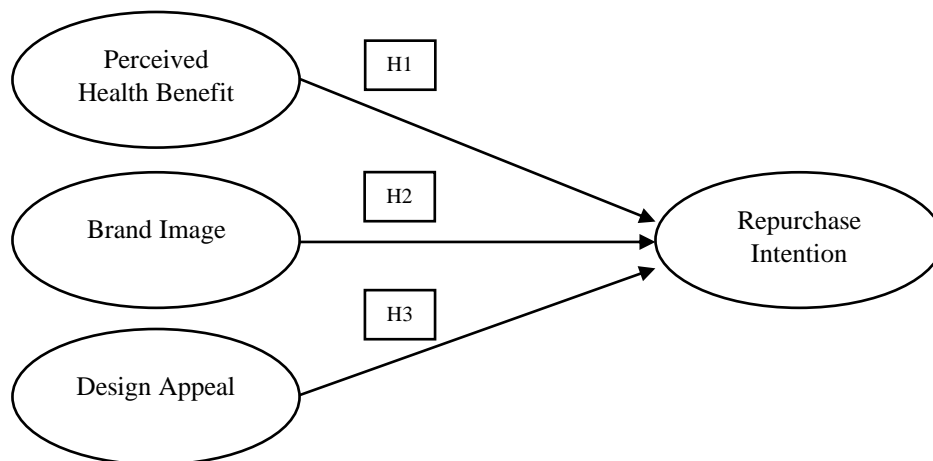


Figure 2. Research Framework

**Instrument Testing and Data Analysis Methods**

This study uses a classic assumption test consisting of validity test, reliability test, normality test, mulitcholnearity test heteroscedasticity test, and goodness of fit test. While the data analysis test uses the significance test, t test, f test, and R-square. Data of this study processed using IBM SPSS (Statistical Program for Social Science) version 26.

**RESULT AND DISCUSSION**

**Respondent Description**

The subject of this study were citizen of Indonesia in Java Island at least 17 years old who purchase health mask in recent three months.

Table 1. Respondent Description

	Frequency	Frequency	Percentage
Gender	Male	127	51,1%
	Female	121	48,9%
Age	17–20 Years	31	12,5%
	21–30 Years	85	34,3%
	31–40 Years	36	14,5%
	41–50 Years	30	12,1%
	>50 Years	66	26,6%

Source: Processed Data SPSS 26

As seen in Table 1, there are a total of 248 respondents, of which 127 are male and 121 are female. In terms of age, at the age range of 17 years to 20 years, there is 12,5%, at the age range of 21 years to 30 years, there is 34,2%, at the age range of 31 years to 40 years, there is 14,5%, at the age range of 41 years to 50 years, there is 12,1%, and at the age older than 50 years, there is 26,6%.

**Instrument of Test Result**

**Validity Test**

The results of the validity test are measured by the value of the resulting loading factor. If the value of the loading factor of the rotated component matrix is more than 0.500, it can be said to be good or valid. The results of the validity test are summarized in the table 3.2.

**Table 2.** Validity Test

Indicators	Component				Description
	1	2	3	4	
RI1	0,840				Valid
RI2	0,852				Valid
RI3	0,812				Valid
RI4	0,850				Valid
BI1		0,621			Valid
BI2		0,752			Valid
BI3		0,746			Valid
BI4		0,827			Valid
BI5		0,733			Valid
PHB1			0,860		Valid
PHB2			0,876		Valid
PHB3			0,784		Valid
PHB4			0,813		Valid
DA1				0,796	Valid
DA2				0,832	Valid
DA3				0,580	Valid

Source: Processed Data SPSS 26

As seen in table 2, there are four questionnaire question on the Repurchase Intention (RI) variable as dependent variable. There are five questionnaire question on the Brand Image (BI) as independent variable. There are four questionnaire question on the Perceived Health Benefit (PHB) as independent variable. And, there are three questionnaire question on the Design Appeal (DA) as independent variable. It is proven that all questionnaire questions in each variable have a value of more than 0.5. In addition, each question item is grouped on each component.

**Reliability Test**

The reliability test in this study used the Cronbach's Alpha which refers to the value of  $\alpha$ , the value have to  $(\alpha) > 0.60$ . When the Cronbach's alpha value was above 0.60, the instrument was declared consistent or reliable. The results of the reliability test are summarized in the table 3. From the table 3, shows four variables to be tested in this study. First is Perceived Health Benefit (PHB), second is Brand Image (BI), Design



Appeal (DA), and Repurchase Intention (RI). The results from reliability test show the Cronbach alpha value is bigger than 0,70. It means that the data was consistent or reliable.

**Table 3.** Reliability Test

Variable	Code	Correlation (r)	Cronbach's Alpha	Description
Perceived Health Benefit (X <sub>1</sub> )	PHB1	0,741	0,868	Reliable
	PHB2	0,818		
	PHB3	0,643		
	PHB4	0,719		
Brand Image (X <sub>2</sub> )	BI1	0,555	0,835	Reliable
	BI2	0,603		
	BI3	0,614		
	BI4	0,732		
	BI5	0,675		
Design Appeal (X <sub>3</sub> )	DA1	0,635	0,739	Reliable
	DA2	0,579		
	DA3	0,493		
Repurchase Intention (Y)	RI1	0,731	0,905	Reliable
	RI2	0,810		
	RI3	0,786		
	RI4	0,825		

Source: Processed Data SPSS 26

**Normality Test**

The normality test in this study used the Kolmogorov-Smirnov test. Significance value of this test must be bigger than 0,05, so it can be declared the distribution is normal. The normality test shown on the table as follows:

**Table 4.** Normality Test

Data Distribution	Asymp. Sig. (2-tailed) / p-Value	Description
Unstandardized Residual	0,054	Normal

Source: Processed Data SPSS 26 (2022)

Based on Table 4, the normality test used the Kolmogorov-Smirnov test has a significant result of 0.054, so it can be declared that the research data has a normal distribution.

**Multicollinearity Test**

Multicollinearity test is done by looking at Tolerance and VIF. If the tolerance is close to 1, and the VIF is not more than 10, it is concluded that there is no multicollinearity. The result of Multicollinearity test shown on the table as follows.

Based on Table 5, the VIF value of all variables is less than 10.00. So it can be conclude the study meets the assumption of multicollinearity free.

**Table 5. Normality Test**

No	Variable	Collinearity Statistic	
		Tolerance	VIF
1	Perceived Health Benefit	0,893	1.119
2	Brand Image	0,722	1.384
3	Design Appeal	0,696	1.436

Source: Processed Data SPSS 26 (2022)

**Heteroscedasticity Test**

Heteroscedasticity test is to determine the similarity of variance in the residuals. Heteroscedasticity test used Glejser test method. The test refers to the value of Significance. If the value Sig > 0.05, there is no heteroscedasticity in this study data. The results of the heteroscedasticity test are as follows:

**Table 6. Heteroscedasticity Test**

Variable	t	Sig.	Description
Perceived Health Benefit	1.392	0.165	there is no heteroscedasticity
Brand Image	1.697	0.091	there is no heteroscedasticity
Design Appeal	-2.107	0.036	there is no heteroscedasticity

Source: Processed Data SPSS 26 (2022)

Based on Table 6, it can be describe that the residual value of all independent variables has a Sig value. > 0.05, then it can be conclude that there is no heteroscedasticity in the data.

**Hypothesis Test**

The data in this study were analyzed by multiple regression analysis. The results of multiple linear regression analysis are briefly presented in Table 7.

**Table 7. Multiple Regression Result**

Independent Variable	Standardized Coefficients Beta	t	Sig. (p)
Perceived Health Benefit	0,161	2.733	0,007
Brand Image	0,267	4.060	0,000
Design Appeal	0,256	3.825	0,000

Source: Processed Data SPSS 26 (2022)

Researchers use the following criteria to test the hypothesis of all variables. If the value of sig. < 0.05, then H0 is rejected and Hypotheses is accepted. If the value of sig. > 0.05, then H0 is accepted and Hypotheses is rejected. Based on Table 7, it is known that perceived health benefit has a Sig value. < 0.05, which means H0 is rejected and H1 is accepted. So, perceived health benefit variable has a significant effect on the repurchase intention variable. With the same criteria brand image variable has a significant effect on the repurchase intention variable. For design appeal variable, it also has a significant effect on the repurchase intention.



### ***The Effect of Perceived Health Benefit on Repurchase Intention***

The results of the first hypothesis test show that Perceived Health Benefit ( $X_1$ ) has a significant effect on repurchase intention (Y) of health mask. In this result, it can be claimed the more health benefits perceived by the consumer, the higher the probability of customer repurchase intention. This study is supported by prior research Wang & Tsai, (2019) which found perceived health benefit had positive effect on repurchase intention of traceable fresh food.

### ***The Effect of Brand Image on Repurchase Intention***

The results of the second hypothesis test show that brand image ( $X_2$ ) has a significant effect on repurchase intention (Y) of health mask. In this result, it can be claimed the better the brand image that is seen by consumers, the higher the probability of customer repurchase intention of health mask. This study is supported by prior research Wang & Tsai (2019) which found perceived health benefit had positive effect on repurchase intention of traceable fresh food. Earlier research found that brand image had positive effect on repurchase intention of online ticketing (El Shiffa et al., 2021). Another study also found that brand image had positive positive effect on repurchase intention of domestic ecotourism (Huang et al., 2019).

### ***The Effect of Design Appeal on Repurchase Intention***

The results of the third hypothesis test indicate that Design Appeal ( $X_3$ ) has a significant effect on repurchase intention (Y) of health mask. So the better design of the health mask, the higher the probability of customer repurchase intention of health mask. According to previous study by found that design appeal had positive effect on repurchase intention of smartphone brands (Lin & Filieri, 2015).

## **CONCLUSION**

Based on the result of this study, the conclusion is as follows; perceived health benefit has a significant positive effect on repurchase intention of health mask. Brand image has a significant positive effect on repurchase intention of health mask. Design appeal benefit has a significant positive effect on repurchase intention of health mask. Suggestions to further can add other variables to improve research analysis and result. Improve or switch the research population and increase the number of research samples to improve the representation of the answers to the questionnaire. In addition, researchers can also change the research method to be qualitative to enrich the study result.

### ***Theoretical Implications***

The theoretical implication that can be obtained from this research is the success of researchers in supporting and proving hypotheses with theory and previous research. The theories in this study relate to the variables of health benefits, brand image, and design appeal, and repurchase intentions. Researchers hope that the theories and hypotheses that have been tested can become a reference and source of support for further research related to the variables of health benefits, brand image, design appeal and repurchase intentions.

### ***Managerial Implications***

This study proves that the health benefits variable strengthens the repurchase intention of health masks. From the proof of this hypothesis, managerial implications for

the company can be drawn. Mask producing companies should improve the quality of masks to increase the benefits obtained by consumers when using health masks. Companies can also make promotions or advertisements that emphasize the importance of the benefits of masks for body health after the relaxation of health protocols. This aims to continue to convey the value or value of the health masks offered to the public so that the public assesses that masks are still very beneficial for body health after the relaxation of health protocols. With these efforts, it is hoped that the public will still have the view that masks are very beneficial for their health after the relaxation of health protocols so that they will continue to repurchase health masks.

## LIMITATION

The limitation of this research is that this research only covers respondents in the community on the island of Java, most of the respondents are focused on the Special Region of Yogyakarta. The research sample should have been taken with a wider range. By using the online survey method, the sample in this study can only reach those who already have internet access facilities and understand the mechanism of filling out the questionnaire, so there are still many samples that may not be reached to fill out this research questionnaire. In addition, research bias may occur because the questionnaire data collection in this study was carried out independently or self-administered survey.

## REFERENCES

- Baksi, A. K., & Panda, T. K. (2018). Branding destinations with multisensory brand associations and evaluating its impact on behavioural pattern under the intervention of multiplex phenomenon of relationship-branding. *Management Science Letters*, 8(11). <https://doi.org/10.5267/j.msl.2018.8.007>
- De Temmerman, J., Heeremans, E., Slabbinck, H., & Vermeir, I. (2021). The impact of the Nutri-Score nutrition label on perceived healthiness and purchase intentions. *Appetite*, 157. <https://doi.org/10.1016/j.appet.2020.104995>
- El Shiffa, N. A., Rahmiati, F., Santoso, A. S., & Yustina, A. I. (2021). Strategic entrepreneurship for achieving customers repurchase intention amidst pandemic COVID-19 on digital multi-sided platform: A case of Traveloka. *Procedia Computer Science*, 197. <https://doi.org/10.1016/j.procs.2021.12.138>
- Gumà, J. (2021). What influences individual perception of health? Using machine learning to disentangle self-perceived health. *SSM - Population Health*, 16. <https://doi.org/10.1016/j.ssmph.2021.100996>
- Hair, J. F., & Brunsveld, N. (2019). Essentials of business research methods. In *Essentials of Business Research Methods*. <https://doi.org/10.4324/9780429203374>
- Hauser, D., Leopold, A., Egger, R., Ganewita, H., & Herrgessell, L. (2022). Aesthetic perception analysis of destination pictures using #beautifuldestinations on Instagram. *Journal of Destination Marketing and Management*, 24. <https://doi.org/10.1016/j.jdmm.2022.100702>
- Huang, L. C., Gao, M., & Hsu, P. F. (2019). A study on the effect of brand image on perceived value and repurchase intention in ecotourism industry. *Ekoloji*, 28(107).
- Ibzan, E., Balarabe, F., & Jakada, B. (2016). Consumer satisfaction and repurchase intentions. *Developing Country Studies*, 6(2), 96–100. *Developing Country Studies*, 6(2).

- Istanbulluoglu, D., & Sakman, E. (2024). Successful complaint handling on social media predicts increased repurchase intention: The roles of trust in company and propensity to trust. *European Management Journal*, 42(1). <https://doi.org/10.1016/j.emj.2022.06.004>
- Kelvin, K., Lane Keller, K., & Osborn, E. (2017). Kotler, Philip and Keller Kelvin Lane. (2016). Marketing Management. (15th global edition) Edinburgh: Pearson Education. (679 pp). *Kasem Bundit Journal*, 18(2).
- Klepacz, N. A., Nash, R. A., Egan, M. B., & Raats, M. M. (2016). When Is an Image a Health Claim? A False-Recollection Method to Detect Implicit Inferences About Products' Health Benefits. *Health Psychology*, 35(8). <https://doi.org/10.1037/hea0000317>
- Kotler, P., & Armstrong, G. (2017). Principles of Marketing, (17th edn, Global Edition). In Harlow: Pearson.
- Law, C. C. H., Zhang, Y., & Gow, J. (2022). Airline service quality, customer satisfaction, and repurchase intention: Laotian air passengers' perspective. *Case Studies on Transport Policy*, 10(2). <https://doi.org/10.1016/j.cstp.2022.02.002>
- Li, H., Luo, W., Hou, Y., Xia, Y., Yao, J., Kang, N., Deng, C., Sun, H., & Chen, C. (2021). Factors Affecting Perceived Health Benefits and Use Behaviors in Urban Green Spaces During the COVID-19 Pandemic in Southern China Megacities. *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.759444>
- Li, Z., & XiaoBo, C. (2022). Recommendation algorithm of influence and trust relationship. *Multimedia Tools and Applications*, 81(11). <https://doi.org/10.1007/s11042-022-12231-5>
- Lin, Z., & Filieri, R. (2015). Airline passengers' continuance intention towards online check-in services: The role of personal innovativeness and subjective knowledge. *Transportation Research Part E: Logistics and Transportation Review*, 81. <https://doi.org/10.1016/j.tre.2015.07.001>
- Peštek, A., & Činjarević, M. (2014). Tourist perceived image of local cuisine: The case of bosnian food culture. *British Food Journal*, 116(11). <https://doi.org/10.1108/BFJ-01-2014-0046>
- Pikkemaat, B., & Weiermair, K. (2003). the Aesthetic ( Design ) Orientated Customer in Tourism - Implications for Product Development. *EIASM-10th International Product Development Management Conference, May 2014*.
- Schindler, & Pamela S. (2019). Business Research Methods, 13th Edition. In *Business Research Methods* (Issue 13).
- Tajiki, I., Vizeshfar, F., & Keshtkaran, Z. (2022). The effect of training program based on health belief model on burn prevention knowledge in mothers of children aged to 1–3 years: A randomized controlled. *Burns*, 48(4). <https://doi.org/10.1016/j.burns.2021.11.001>
- Thielsch, M. T., & Niesenhaus, J. (2017). User Experience, Gamification, and Performance. In *The Wiley Blackwell Handbook of the Psychology of the Internet at Work*. <https://doi.org/10.1002/9781119256151.ch5>
- Wang, E. S. T., & Tsai, M. C. (2019). Effects of the perception of traceable fresh food safety and nutrition on perceived health benefits, affective commitment, and repurchase intention. *Food Quality and Preference*, 78. <https://doi.org/10.1016/j.foodqual.2019.103723>

---

Woelfel, C., Krzywinski, J., & Drechsel, F. (2013). Knowing, reasoning and visualizing in industrial design. *Knowledge Engineering Review*, 28(3).  
<https://doi.org/10.1017/S0269888913000258>