



The Effect of Quality, Brand Trust, and Brand Image of Cataflam™ on Patient Loyalty: a case study on K24 Pharmacy Yogyakarta

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ABSTRACT: The success of a business is determined by how high consumer loyalty is to the brand owned by the business. High consumer loyalty is determined by product quality, brand trust, and brand image. Cataflam™ as one of the trademarks of a group of pain relievers belonging to the category of non-steroidal anti-inflammatory drugs (NSAIDs). Currently in almost all pharmacies, Cataflam™ is considered the best selling pain reliever compared to other brands. This study aims to observe the effect of product and packaging quality, brand trust, and brand image of Cataflam™ on patient loyalty at Apotek K24 Yogyakarta. Descriptive research method was carried out with student t-test to see the relationship between variables on patient loyalty. The convergence analysis of the questionnaire was proven by loading factor and AVE value, while the reliability analysis of the questionnaire was proven by Cronbach's alpha and composite reliability (CR). Descriptive data collected from 100 patients showed that the questionnaire was reliable and converged with a loading factor of 0.773 to 0.959; AVE value 0.657 to 0.832; Composite Reliability (CR) value 0.884 to 0.933; and Cronbach's alpha value 0.825 to 0.899. The results of the student t-test analysis showed that all p-values were less than 0.05. The conclusion of this study is that the quality, brand trust, and brand image of Cataflam™ as a pain reliever have an effect on patient loyalty.

KEYWORDS: Brand trust, Brand image, Customer loyalty, Cataflam™, Product quality.

INTRODUCTION

Quality is the most basic of customer satisfaction and success in competition. Quality is a must for all sizes of companies, and to develop quality practices and show consumers that they can find expectations for higher quality (Alhadad, 2015). Product quality is the overall characteristics of a product or service in its ability to satisfy stated or implied needs. Consumers will be satisfied if their evaluation results show that the products they use are of high quality (Bigin, 2018).

Consumer satisfaction or dissatisfaction is the result of the difference between consumer expectations and the performance perceived by the consumer. Consumer satisfaction is a response to consumer behavior in the form of after-purchase evaluation of a perceived good or service (product performance) compared to consumer expectations. Consumer satisfaction is highly dependent on the perceptions and expectations of consumers themselves. Consumer satisfaction is also based on the brand of the product. A brand is a symbol or sign that helps customers identify products, companies that have products with a favorable brand image by the public will get a better position (Aufegger et al., 2021).

In addition, the brand is an identity to distinguish the identity of the company's products from products produced by competitors. The stronger the brand image in the customer's mind, the stronger the customer's confidence to remain loyal to the products he buys so that it can lead a company to continue to benefit from time to time. Competition is increasing among brands operating in the market. Only products that have brand image are still able to compete and dominate the market (Anatolevena, 2007).

Product quality, customer satisfaction, and company profitability are three things that are closely related. The higher the level of quality, the higher the level of consumer satisfaction produced. However, this condition is not in line with the theory of Kotler and Keller. Brands can also help companies to expand product lines and develop a specific market position for a product. The brand image describes consumer associations and beliefs about a particular brand. Consumers who are accustomed to using certain brands tend to have consistency in brand image. Brand the image itself has meaning to an image of a product in the minds of consumers in bulk. Everyone will have the same image of a brand. The stronger the brand image in the customer's mind, the stronger the customer's confidence to remain loyal or loyal to the products he buys so that it can lead a company to continue to benefit from time to time



(Diallo et al., 2020). The Brand is a symbol or sign that helps customers to identify the product. Companies with a product with a brand image, by which the public will gain a better position in the market, can also maintain a competitive advantage and increase the amount of market share. Several studies have suggested that a favorable brand image always helps to lead to customer satisfaction or create loyal customers (Delgado and Luis, 2001; Simatupang and Purba, 2020; Wijaya and Annisa, 2020; Sasmita and Suki, 2015; Mabkhot et al., 2017; Hsieh and Li, 2008).

The purchase of over-the-counter drugs or so-called OTC (over-the-counter) drugs made by students is influenced by the brand or brand of the drug according to research conducted by Dozono et al. (2014). Meanwhile, Woo Jun and Woo Choi (2007) found that non-prescription drug purchases made by students were influenced by the country of origin of the drug and the strength of the brand in the country of origin. The image of the country of origin of the drug has a positive and significant effect on the components of brand equity, namely brand strength and brand awareness, which was obtained from the factor analysis conducted on the brand equity component. The image of the country of origin of branded generic drugs has a significant effect but indirectly affects brand equity through mediating variables, brand strength, and brand awareness (Nath Sanyal and Datta, 2011). People generally prefer brand name drugs to generic drugs with logos, while pharmacists who have a better understanding will choose generic drugs with logos over brand name drugs. Doctors as prescribers are not affected by the brand image of drugs, but emphasize the availability of information and clinical data from drug effectiveness tests (Srivastava and Bodkhe, 2017).

Cataflam™ is a non-steroidal anti-inflammatory drug (NSAID) with the generic name Diclofenac Potassium or Diclofenac Potassium. The use of Cataflam™ as a pain reliever in various conditions has been widely used in the community. The availability of Cataflam™ in pharmacies seems to be an obligation because so many people are looking for and buying Cataflam™.

The problem in this study is to observe the relationship between quality, brand trust, and brand image of the Cataflam™ drug on patient loyalty. The purpose of this study was to provide an overview of the partial relationship between quality, brand trust, and brand image of the Cataflam™ drug on patient loyalty. The benefit of this research for pharmacies is as a basis for making decisions on Cataflam™ drug supply management including safety stock by patient loyalty to Cataflam™. The benefits of this research for the pharmaceutical industry as a basis for making strategic decisions to determine the market share of pain medications in pharmacies.

RESEARCH METHODS

This research is a descriptive study using quantitative data. The population of this study was patients at K24 Pharmacy in Yogyakarta who had bought Cataflam™ based on patient purchase records, while the number of samples was 100 respondents. The questionnaire uses a google form with the scale used is the Likert Scale.

Table 1: Variables and Indicators in Questionnaire

Variable	No #	Statement as variable indicator
Quality	1	The quality of the Cataflam™ packaging is good and has never encountered any defects in the packaging
	2	Cataflam™ packaging provides complete information about indications, how to use the drug, contraindications, side effects, and special warnings that are easy to read and understand.
Brand Image	3	The design of the Cataflam™ packaging display, both the outer box design and the medicine packaging are considered good and attractive and easy to remember
	4	The Cataflam™ brand is very well known by the general public so it is not difficult to get this drug
	5	Every time I look for Cataflam™ in all pharmacies it is always available and I've never come across a pharmacy that doesn't have Cataflam™ in stock
Brand Trust	6	So far I have used Cataflam™ as a pain reliever and have never been disappointed with it
	7	I've found that everyone who uses Cataflam™ never complains or finds it ineffective for pain relief.
	8	Cataflam™ is my first choice as a pain reliever
Patient Loyalty	9	When I feel pain (toothache, backache, joint pain, etc.), then I will definitely look for Cataflam™ at the nearest pharmacy
	10	



- 11 I have been using Cataflam™ for more than 4 years and never try to change another brand
Even though I was offered another cheaper drug with the same indications and composition as Cataflam™, I would still choose to buy Cataflam™ and not want to be replaced by another

Convergent validity testing with a significance level of 0.05. The questionnaire is considered valid if the convergent validity test of the loading factor is equal to or more than 0.7 and the AVE value is greater than 0.5.

The reliability test uses two methods, namely Cronbach's alpha and composite reliability. Cronbach's alpha measures the lower limit of the reliability value of a construct, while composite reliability measures the actual value of the reliability of a construct. However, composite reliability is considered better in estimating the internal consistency of a construct. rule of thumb used for Composite Reliability is greater than 0.7 and Cronbach's alpha value is greater than 0.7.

RESULT AND DISCUSSION

Convergent validity relates to the principle that the manifest variables of a construct should be highly correlated. Convergent validity was assessed based on the loading factor varied from 0.773 to 0.959 and the AVE value varied from 0.657 to 0.832. Meanwhile, reliability is assessed based on the Composite Reliability (CR) value varied from 0.884 to 0.933 and Cronbach's alpha value varied from 0.825 to 0.899. This result's study show that all the questions used meet the validity and reliability requirements.

Table 2: Test of Validity and Reliability

Variable	Statement No #	Load Factor	CR	Cronbach's alpha	AVE
Quality	1	0.906	0.884	0.825	0.657
	2	0.773			
Brand Image	3	0.929	0.933	0.889	0.822
	4	0.921			
	5	0.864			
Brand Trust	6	0.936	0.903	0.839	0.766
	7	0.757			
	8	0.915			
Patient Loyalty	9	0.927	0.931	0.899	0.832
	10	0.842			
	11	0.959			

The normality test aim to find out whether the research variables have a normal distribution or not. This study uses the Kolmogorov-Smirnov Test with 0.05 then the data distribution is declared to meet the assumption of normality, otherwise if $p < 0.05$ it is interpreted as abnormal. This result's study shows the test value of $p = 0.945$ so that it meets the requirements of the data normality test.

Table 3: Test of Normality

	Unstandarized residual
N	100
Kolmogorov-Smirnov Z	.945
Asymp. Sig. (2-tailed)	.307



The t-test is most commonly applied when the test statistic will follow a normal distribution. The results of the student t-test which are compared between the variables show that the p-value is less than 0.05, indicating that there is a relationship between the two variables.

Table 4: Hypothesis test of student t-test

Hypothesis	Relationship between variables	t test	p-values
H1	Quality - Patient Loyalty	6.187	0.000
H2	Brand Trust - Patient Loyalty	3.985	0.000
H3	Brand Image - Patient Loyalty	3.699	0.001

Cataflam™ is a trademark of the pharmaceutical company Novartis. Novartis was founded in 1996 through the merger of Ciba-Geigy and Sandoz. Novartis and its predecessor companies have a history in the drug industry of more than 250 years, with a rich track record of developing innovative products. Initially, Novartis was a chemical and dye trading company founded in Basel Switzerland in the mid-18th century, while Ciba-Geigy started producing dyes in 1859, and Sandoz produced chemicals in Basel in 1886.

Novartis, Ciba-Geigy, and Sandoz share a common passion for developing and marketing new products that contribute to human progress through the advancement of science and health. Today Novartis is focusing its innovation prowess on meeting the needs of patients in medicine around the world.

The relationship between the quality of Cataflam™ with patient loyalty. The quality standards and the quality of raw materials applied by Novartis apply internationally to ensure the quality of the drugs produced is the same in every country. Novartis Indonesia's production process standards follow Novartis production standards internationally, as a foreign-owned company or PMA so the production process follows the Novartis qualifications that have been set for all countries. Novartis Indonesia's quality control standards for Cataflam™ are also set internationally so that it does not allow drugs that do not meet international standards to be distributed. The quality of Cataflam™ in medicinal raw materials, production processes, and quality control cause patients to trust Cataflam™ as a good quality pain medicine, even though the selling price of Cataflam™ compared to similar drugs from the domestic drug industry is many times more expensive.

Novartis already has brand trust the Cataflam™. Public trust in quality medicines is unquestionable, so it is on the basis of this belief that people choose Cataflam™ over other brands. Drug selection is a unique thing because there are psychological factors from the patient that determines the patient in choosing the drug. For patients who have a history of using Cataflam™ and have a good perception of Cataflam™ then this belief is what makes patients choose Cataflam™ again in their next treatment. Some patients who have high loyalty to Cataflam™ even refuse when offered other drugs with the same composition and strength of the preparation. It is this patient's trust in a drug brand that cannot easily be replaced or changed, because patients choose to take drugs that are definitely effective according to their previous treatment history.

brand image is related to patient loyalty. Patient loyalty to Cataflam™ is the patient's desire to buy back Cataflam™ when experiencing pain symptoms in the future. The patient's loyalty to Cataflam™ also indicates that the patient is not willing to be given another substitute drug even though the composition and strength of the preparation are the same as Cataflam™. Patient loyalty to Cataflam™ is due to the brand image of Cataflam™ as a painkiller that can be found in every pharmacy, making it easier for patients to get Cataflam™. Cataflam™ packaging equipped with leaflets containing detailed and complete drug information, in Indonesian and English, enhances a good impression on Cataflam™. In addition, almost every patient who comes to the pharmacy to look for pain medication already knows Cataflam™, so pharmacists do not need to repeat a lot of information and education about the use of Cataflam™ to patients.

LIMITATION AND FUTURE PROSPECT

This study has the limitation of not comparing Cataflam™ with other brand name pain relievers. In addition, this research is limited in the scope of the K24 Pharmacy in Yogyakarta. Thus, research can be carried out to compare patient loyalty to Cataflam™ and various other brands of pain relievers, as well as carried out in all pharmacies and not only in K24 pharmacies.



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CONCLUSION

Based on the results of this study, it was found that the quality, brand trust, and brand image of the Cataflam™ brand affect patient loyalty to continue to make Cataflam™ the first choice in overcoming pain so that it is not easily replaced by other drugs with the same composition and dosage strength as Cataflam™. The quality of Cataflam™ is evidenced by the drug packaging which is designed by prioritizing Novartis manufacturers who come from abroad, as well as very complete labels and leaflets in English and Indonesian, showing that the quality of Cataflam™ is not only recognized in Indonesia but is standardized internationally. The patient's belief in Cataflam™ as pain medicine is evidenced by the patient's belief in the effectiveness of anti-pain and being the first drug of choice in overcoming pain. Meanwhile, the image is proven by the appearance of the packaging, it is widely known, and is available in all pharmacies.

REFERENCES

1. Alhaddad, A. (2015). Perceived Quality, Brand Image and Brand Trust as Determinants of Brand Loyalty. *Journal of Research in Business and Management*, 3, 1–8.
2. Anatolevena, A. T. (2007). The effects of corporate brand attributes on attitudinal and behavioural consumer loyalty. *Journal of Consumer Marketing*, 24(7), 395–405. <https://doi.org/10.1108/07363760710834816>
3. Aufegger, L., Yanar, C., Darzi, A., & Bicknell, C. (2021). The risk-value trade-off: Price and brand information impact consumers' intentions to purchase OTC drugs. *Journal of Pharmaceutical Policy and Practice*, 14(1), 11. <https://doi.org/10.1186/s40545-020-00293-5>
4. Bilgin, Y. (2018). The Effect of Social Media Marketing Activities on Brand Awareness, Brand Image, and Brand Loyalty. *Business & Management Studies: An International Journal*, 6(1), 128–148. <https://doi.org/10.15295/bmij.v6i1.229>
5. Delgado, B. E., & Luis, M. J. (2001). Brand trust in the context of consumer loyalty. *European Journal of Marketing*, 35(11/12), 1238–1258. <https://doi.org/10.1108/EUM0000000006475>
6. Diallo, M. F., Moulins, J.-L., & Roux, E. (2020). Unpacking brand loyalty in retailing: A three-dimensional approach to customer–brand relationships. *International Journal of Retail & Distribution Management*, 49(2), 204–222. <https://doi.org/10.1108/IJRDM-03-2020-0115>
7. Dozono, R., Izumisawa, M., Hibino, H., & Koyama, S. (2014). *Brand-image of Over-The-Counter Drugs in Non-pharmaceutical and Pharmaceutical Students*. 238. https://doi.org/10.11247/jssd.61.0_238
8. Hsieh, A., & Li, C. (2008). The moderating effect of brand image on public relations perception and customer loyalty. *Marketing Intelligence & Planning*, 26(1), 26–42. <https://doi.org/10.1108/02634500810847138>
9. Mabkhot, H., Shaari, H., & Md Salleh, S. (2017). The Influence of Brand Image and Brand Personality on Brand Loyalty, Mediating by Brand Trust: An Empirical Study. *Jurnal Pengurusan*, 50. <https://doi.org/10.17576/pengurusan-2017-50-07>
10. Nath Sanyal, S., & Datta, S. K. (2011). The effect of country of origin on brand equity: An empirical study on generic drugs. *Journal of Product & Brand Management*, 20(2), 130–140. <https://doi.org/10.1108/10610421111121125>
11. Sasmita, J., & Suki, M. N. (2015). Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. *International Journal of Retail & Distribution Management*, 43(3), 276–292. <https://doi.org/10.1108/IJRDM-02-2014-0024>
12. Simatupang, P., & Purba, F. (2020). The Brand Image and Its Effect on Consumer Loyalty and Satisfaction as a Variable Intervening of Aqua Mineral Water Product (Study on Undergraduate Student of Management Study Program, Universitas Simalungun). *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(3), 1902–1910. <https://doi.org/10.33258/birci.v3i3.1123>
13. Srivastava, R. K., & Bodkhe, J. (2020). Does brand equity play a role on doctors prescribing behavior in emerging markets? *International Journal of Healthcare Management*, 13(sup1), 1–11. <https://doi.org/10.1080/20479700.2017.1409954>



14. Wijaya, A. P., & Annisa, I. T. (2020). The Influence of Brand Image, Brand Trust and Product Packaging Information on Purchasing Decisions. *Jurnal Analisis Bisnis Ekonomi*, 18(1), 24–35. <https://doi.org/10.31603/bisnisekonomi.v18i1.3077>
15. Woo Jun, J., & Won Choi, C. (2007). Effects of country of origin and country brand attitude on nonprescription drugs. *Journal of Targeting, Measurement and Analysis for Marketing*, 15(4), 234–243. <https://doi.org/10.1057/palgrave.jt.5750050>

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