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Research paper

Success Factors in Creating Consumer Trust of Standardized Herbal Medicine in East Java, Indonesia

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Abstract

The development of Herbal Medicines in various countries of the World has been a discussion of researchers. Indonesia is one of the countries that uses and produces herbal medicine, which is believed to have enormous natural resources to support the development of this plant-based medicine. Consumer Trust becomes an interesting phenomenon to be examined more deeply, because the use of herbal medicine [traditional] is still less by modern medicine [chemical] when consumers buy for their own treatment. Several studies in various contexts show that Perceived Value has an impact on Consumer Trust. Nevertheless whether in the context of herbal medicine consumer perceptions of the value of herbal medicinal products will affect the trust of taking the herbal medicine. This study uses the design of Structural Equational Modeling analysis, and involving 357 respondents. In this article was revealed the influence of dimensions of Perceived Value to Consumer Trust of Herbal Medicines with Emotional Value, Functional Value, and Price Value Significantly Positive effect Consumer Trust, only one dimension has no significant effect that is Social Value.

Keywords: *Perceived Valu; Consumer Trust; Herbal Medicine; Indonesia, Jamu*

1. Introduction

The development of herbal medicine [traditional medicine] is an interesting phenomenon to be further explored. Herbal medicine offers several benefits; yet, the use of herbal medicine is still lower than modern [chemical] medicine. At this case, consumer trust becomes one of the pivotal issues to encourage more consumers to use herbal medicine. One of the factors that drive consumer trust is through improving perceived value of a product. To conduct this research, the author proposes several review of literature that influences consumer trust [1-5]. Yet, it needs to be further explored in the context of herbal medicine whether consumer perception on product value of herbal medicine will influence consumer trust in consuming the herbal medicine product. Consumers will seek for products that have high value by comparing the benefits they receive and the costs they spend, as they want to attain the products.

Research on herbal medicine consumers is needed to provide meaningful information for health and medical practitioners as well as decision makers in planning health activities [6]. It becomes a challenge for several related parties in herbal medicine industry to explore consumer perception for encouraging consumer trust in consuming herbal medicine. Thus, this research is expected to provide a great deal of benefits for those related parties.
Ministry of Health [7] in Basic Health Research report mentioned that the percentage of Indonesia citizens whom have had experience in consuming *jamu* [herbal medicine] is 59.12% spreading on all of age range, gender [both man and woman], and both rural and urban citizens. The BPS [8] indicated medicine consumption of Indonesia citizens [Figure 1]. When the citizens took self-medication, most of them consumed modern medicine more than traditional medicine. Although the consumption of herbal medicine demand is growing, it growth is still low as compared to modern medicine consumption rate.

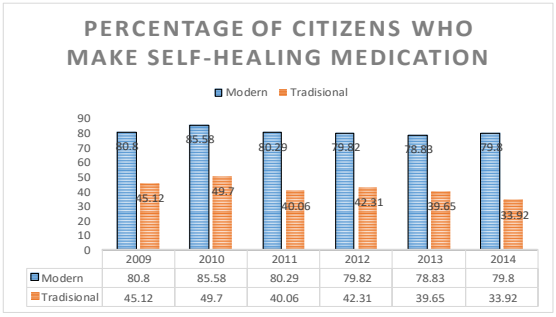


Fig. 1: Comparison between Modern and Traditional Medicine Cosumption

Muslimin et al. [9] found that non consumer perception tend to indicate a lack of trust among them on Indonesian herbal medicine as they complained about counterfeit herbal medicine mixed with chemical substance. Thus, this research aims to reveal the role of perceived value dimensions on consumer trust in standardized-herbal medicine purchase.

2. Literature Review

2.1. Perceived Value

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Zeithaml [10] mentioned that what is called as value means perceived value as consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. Cronin et al. [11] stated that Zeithaml's definition [10] is an ample definition; therefore, they tried to formulate perceived value with SV = f[SQ,SA] which was derived from the Zeithaml's concept [10].

Hallowell [12] justified that quality and value are different terms that radiate different meanings. Similar statement is proposed by Heskett, [13] whom mentioned that perceived value is a ratio form quality process and service delivery for customers compared to price and other costs to attain the service.

Value as consumer perception can be found in several definitions among researchers. For instance, Woodruff, [14] and Sirdeshmukh, et al [15] saw value as consumer perception on costs and benefits.

Flint et al. [16] proved that consumers do perceive or assess. The pivotal components demonstrated by Flint et al. [16] include benefits and sacrifice. The discussion about benefit and sacrifice drew a lot of attention from several researchers. When Zeithaml's term is callez as utility; on the contrary, [16] called the term as benefit.

Slater and Narver, [17] examined how value is created as they conclude that the benefits that consumers receive from a product is greater than its long term costs that can be paid by the customers for the product. This definition is similar with other researchers' definition when value correlates with benefits and costs. Hansen et al. [18] mentioned that perceived value is the benefits received by consumers compared to the resources that the consumers have sacrificed to attain the benefits. Similar notion is also proposed which assumes perceived value as a result of benefit attained by customers compared with the total costs that they spend. Sirdeshmukh et.al., [15] clearly defined perceived value as a perception on the discrepancy between costs and benefits that consumers attain.

By using customer value as a term, Butz Jr & Goodstein [19] stated that emotional bond between customers and producers is built after the customers have used the product or service which is made by the producers and find that that the product or service has an added-value. Thus, value is consumer experience in using a product as Holbrook [20] defined consumer value as an interactive relativistic preference experience. Similar opinion is proposed by Vranesevic, et al. [21] when perceived value is defined as subjective experience not a fact of general knowledge. Further, Vargo and Lusch, [22] also mentioned that value is always intangible, heterogeneously experienced, co-created, and potentially perishable.

From several definitions and notions among researchers above, the common similarity of perceived value is explained as consumer perception on what they get or received compared to what they give or sacrifice. Things that the consumer receives can be benefits or utilities; meanwhile, things that they give can be costs or sacrifices.

Sheth, et al [23] stated that there are five dimensions of perceived value including social, emotional, functional, epistemic and conditional values which are then reduced by Sweeney & Soutar [24] into four dimensions such as functional, social, emotional, and price. Meanwhile, Chai et al. [25] proposed only two dimensions of perceived value namely utilitarian and hedonic values.

2.2. Consumer Trust

Trust occurs when the cooperating party believe on the reliability and integrity of its exchange partner [26]. In other words, trust indicates common expectation of how a product or service will be functioned in the future. Trust comes up when a consumer understands that the product or service they have bought can function well.

In the context of green marketing, Yu-Shan Chen [1] defined green trust as consumer willingness to depend on a product, service, or brand based on their believe or expectation that are resulted from credibility, wisdom, and ability about the performance of their surroundings. Delgado-Ballester, [27] in brand context defines trust as the confident expectations of the brand's reliability and intentions in situations entailing risk to the consumer.

Among several definitions proposed by former researcher, trust can be explored in other relevant contexts like partnership [people or organization], brand or objects that encourage trusts based on credibility, wisdom, ability, integrity, and reliability.

In this research, the definition of consumer trust uses Delgado-Ballester, [27] definition as they defined trust as the confident expectations of the brand's reliability and intentions in situations entailing risk to the consumer.

There is a diverse opinion from several researchers about the dimension of trust. Wang, et al [28] identified the dimensions of trust that are often used in research include reliability, working for the interest of the partner, competence trust, benevolence trust, confidence, reliability, integrity, technical competence of a company, skills and ability, as well as goodwill.

Chaudhuri & Holbrook [29] mentioned that in the context of brand, trust is considered as a single dimension. Further, Gefen [30] conceptualized trust among internet users as a construct. Different from the researcher who defined trust as a single dimension, Delgado-Ballester, [27] and Sirdeshmukh et al. [15] and stated that there are two dimensions of trusts. Delgado-Ballester, [27] included reliability and intention as the dimensions of trust. Reliability is related to a perception that a brand can meet consumer's needs; while intention is based on the consumers believe whether the brand will always fulfill their interest when there is an unintentional problems that occurs during consuming the product.

The relationship between perceived value and consumer trust has been proved by some empirical research in diverse contexts like green marketing [1-3], online services [4, 5], umroh and hajj travel service [31], and automobile product[32].

Thus, based on the reveiew of literature above, these are the proposed hypotheses:

H1: Hedonic Value significantly and positively influences consumer trust

H2: Price Value significantly and positively influences consumer trust

H3: Functional Value significantly and positively influences consumer trust

H4: Social Value significantly and positively influences consumer trust

3. Research Method

Primary data source or respondents of this research are the consumers of standardized-herbal medicine in Malang, East Java. The analysis unit of this research is the consumers of standardized-herbal medicine; while its observation unit is the consumers of standardized-herbal medicine in Malang-East Java who have purchased and consumed standardized herbal medicine.

There are four hundred respondents that were attained through multistage sampling technique; yet, after being checked for their criteria, only 357 respondents that can be further processed in data analysis.

The sampling frame used in the sampling technique is derived from the list of some drugstores in Malang City. Through this sampling frame, it led to multi—stage sampling technique to define the respondents. The respondents of this research are the visitors of drugstores in Malang City whom meet some criteria like 1] he/she had ever bought or consumed standardized-herbal medicine [with that brand that previously had been defined by the researcher based BPOM data], 2] he/she has an experience of buying standardized-herbal medicine in the last three months, 3] he/she is older than 17 years old to consider the consumer's self-decision making ability in a purchase activity.

The structural equation model analysis used in this research is done through SmartPLS 3 software.

4. Findings

Table 1: Construct Reliability and Validity

Construct	Composite Reliability	Average Variance Extracted [AVE]
Consumer Trust	0.915	0.575
Functional Value	0.913	0.839
Hedonic Value	0.896	0.682
Intention Trust	0.897	0.636
Price Value	0.822	0.701
Reliable Trust	0.878	0.706
Social Value	0.906	0.708

From the Table 1 above, it can be found that reliability and validity measurement scale that uses composite reliability shows that the number is greater than 0.7 that confirms internal validity; further, the AVE score is greater than 0.5 which indicates convergent validity.

Table 2: Outer Loading

Path	Original Sample [O]
Y12 ←Hedonic Value	0.800
Y13 ← Hedonic Value	0.839
Y14 ← Hedonic Value	0.838
Y15 ← Hedonic Value	0.827
Y22 ← Price Value	0.927
Y23 ← Price Value	0.737
Y31 ←Functional Value	0.899
Y32 ←Functional Value	0.933
Y42 ←Social Value	0.851
Y43 ← Social Value	0.831
Y44 ← Social Value	0.898
Y45 ← Social Value	0.780
Z11 ← Reliable Trust	0.874
Z11 ← Consumer Trust	0.755
Z12 ←Reliable Trust	0.845
Z12 ←Consumer Trust	0.728
Z13 ←Reliable Trust	0.800
Z13 ← Consumer Trust	0.779
Z21 ← Intention Trust	0.783
Z21 ←Consumer Trust	0.751
Z22 ←Intention Trust	0.826
Z22 ← Consumer Trust	0.795
Z23 ←Intention Trust	0.813
Z23 ←Consumer Trust	0.772
Z25 ←Intention Trust	0.766
Z25 ← Consumer Trust	0.718
Z26 ←Intention Trust	0.798
Z26 ← Consumer Trust	0.767

The outer loading score has met the requirements as all of the indicators get score which is greater than 0.708 that confirms its validity.

Table 3: Discriminant Validity [Fornell-Larker Criterion]

	Consumer Trust	Functional Value	Hedonic Value	Intention Trust	Price Value	Reliable Trust	Social Value
Consumer Trust	0.759						
Functional Value	0.666	0.916					
Hedonic Value	0.66	0.659	0.826				
Intention Trust	0.954	0.591	0.566	0.798			
Price Value	0.568	0.48	0.523	0.534	0.837		
Reliable Trust	0.9	0.657	0.685	0.728	0.523	0.84	
Social Value	0.473	0.486	0.555	0.387	0.356	0.516	0.841

From the Table 3 above, it concludes that the latent variables of this research have met discriminant validity requirement when it is tested by using Fornel-Larker Criterion.

Table 4: R Square

	R Square	Q Square
Consumer Trust	0.574	0,305
Intention Trust	0.91	0,545
Reliable Trust	0.809	0,539

Structural modeling in the table above shows the R square of consumer trust [0.547], intention trust [0.910], and reliable trust [0.809] with Q square of consumer trust [0.305], intention trust [0.545], and reliable trust [0.539]. Hair [2016] stated that PLS-SEM aims at maximizing the R2 values of the endogenous latent variable[s] in the path model. Thus, the objective is high R2 values. While the exact interpretation of the R2 value level depends on the particular model and research discipline, in general, R2 values of 0.75, 0.50, or 0.25 for the endogenous constructs can be described as respectively substantial, moderate, and weak.“ Further, Q square according to Hair et al. [33] is the resulting Q2 values larger than 0 indicate that the exogenous constructs have predictive relevance for the endogenous construct under consideration. As a relative measure of predictive relevance [q2], values of 0.02, 0.15, and 0.35 respectively indicate that an exogenous construct has a small, medium, or large predictive relevance for a certain endogenous construct.

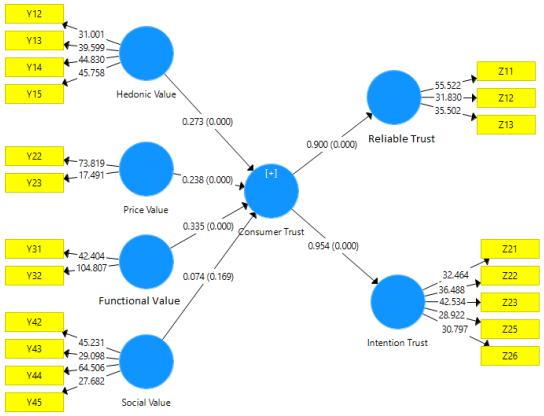


Fig. 2: Structural Equation Model

Table 5: Path Coefficient

Construct	Consumer Trust	Intention Trust	Reliable Trust
Consumer Trust		0.954**	0.9**
Functional Value	0.335**		
Hedonic Value	0.273**		
Price Value	0.238**		
Social Value	0.074 [NS]		

Note: ** Significant alpha 0.01

Path coefficients on the Figure 2 and Table 5 demonstrate that functional value, hedonic value, and price value has positive and significant effect on consumer trust with level of significance which is greater than 0.01. Meanwhile, social value does not significantly influence consumer trust. Intention trust and reliable trust as the dimensions of consumer trust show high path coefficient and significant effect with 0.01 level of significance.

Table 6: Indirect Effect

Path	Original Sample [O]	P Values
Functional Value -> Intention Trust	0.32	0,000
Functional Value -> Reliable Trust	0.302	0,000
Hedonic Value -> Intention Trust	0.261	0,000
Hedonic Value -> Reliable Trust	0.246	0,000
Price Value -> Intention Trust	0.227	0,000
Price Value -> Reliable Trust	0.214	0,000
Social Value -> Intention Trust	0.07	0.150
Social Value -> Reliable Trust	0.066	0.150

Based on the Table 6 above, the exogenous variables like functional value, price value, and hedonic value have significant and

indirect effect on reliable trust and intention trust as the endogenous variables. Yet, social value variable does not have significant and indirect effect on reliable trust and intention trust.

5. Conclusion

The findings show that hedonic value, functional value, and price value have positive and significant effect on consumer trust; however, there is one dimension that does not have significant effect of consumer trust that is social value dimension.
The exogenous variables like functional value, price value, and hedonic value have significant and indirect effect on reliable trust and intention trust as the endogenous variables. Yet, social value variable does not have significant and indirect effect on reliable trust and intention trust.

References

[1] Chen Y-S. Towards green loyalty: driving from green perceived value, green satisfaction, and green trust. Sustainable Development. 2013;21[5]:294-308.
[2] Chen YS, Chang CH, Yu-Shan C, Ching-Hsun C. Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. Management Decision. 2012;50[3]:502-20.
[3] Kwok M-LJ, Wong M-CM, Lau MM. Examining How Environmental Concern Affects Purchase Intention: Mediating Role of Perceived Trust and Moderating Role of Perceived Risk. Contemporary Management Research. 2015;11[2]:143-52.
[4] Chang K-C, Kuo N-T, Hsu C-L, Cheng Y-S. The Impact of Website Quality and Perceived Trust on Customer Purchase Intention in the Hotel Sector: Website Brand and Perceived Value as Moderators. International Journal of Innovation, Management and Technology. 2014;5[4]:255-60.
[5] Kim C, Zhao W, Yang KH. An Empirical Study on the Integrated Framework of e-CRM in Online Shopping: Evaluating the Relationships Among Perceived Value, Satisfaction, and Trust Based on Customers' Perspectives. Journal of Electronic Commerce in Organizations. 2008;6[3]:1-19.
[6] Torri MC. Traditional jamu versus industrial jamu: perceptions and beliefs of consumers in the city of Yogyakarta: what future for traditional herbal medicine in urban Indonesia? International Journal of Entrepreneurship and Small Business. 2013;19[1]:1-20.
[7] Kemenkes. Riset Kesehatan Dasar. Jakarta, Badan Penelitian dan Pengembangan Kesehatan,Kementerian Kesehatan Repubilk Indonesia. 2010.
[8] Bps. No Title. 2015.
[9] Muslimin L, Wicaksena B, Setiyawan B, Subekti NA, Sukesi H, Surachman H, et al. Kajian potensi pengembangan pasar jamu. Pusat Penelitian dan Pengembangan Perdagangan Dalam Negeri Badan Penelitian dan Pengembangan Perdagangan Kementerian Perdagangan. 2009:215-.
[10] Zeithaml VA. Consumer Perceptions Of Price, Quality, And Value: A Means. Journal of Marketing. 1988;52[3]:2-.
[11] Cronin JJ, Brady MK, Brand RR, Hightower Jr R, Shemwell DJ. A cross-sectional test of the effect and conceptualization of service value. The Journal of Services Marketing. 1997;11[6]:375-91.
[12] Hallowell R. Southwest Airlines: A Case Study Linking Employee Needs Satisfaction and Organizational Capabilities to Competitive Advantage. Human Resource Management [1986-1998]. 1996;35[4]:513-.
[13] Heskett J. Creating economic value by design. International Journal of Design. 2009;3[1].
[14] Woodruff RB. Customer value: The next source for competitive advantage. Academy of Marketing Science Journal. 1997;25[2]:139-53.
[15] Sirdeshmukh D, Singh J, Sabol B. Consumer trust, value, and loyalty in relational exchanges. Journal of Marketing. 2002;66[1]:15-37.
[16] Flint DJ, Woodruff RB, Gardial SF. Customer value change in industrial marketing relationships: A call for new strategies and research. Industrial Marketing Management. 1997;26[2]:163-75.
[17] Slater SF, Narver JC. Intelligence generation and superior customer value. Academy of Marketing Science Journal. 2000;28[1]:120-7.
[18] Hansen H, Samuelsen BM, Silseth PR. Customer perceived value in B-t-B service relationships: Investigating the importance of corporate reputation. Industrial Marketing Management. 2008;37[2]:206-17.
[19] Butz Jr HE, Goodstein LD. Measuring customer value: Gaining the strategic advantage. Organizational Dynamics. 1996;24[3]:63-77.
[20] Holbrook MB. Consumer value: a framework for analysis and research: Psychology Press; 1999.
[21] Vranesevic T, Vignali C, Vignali D. Consumer Perception of Perceived Value and Satisfaction in Marketing Management. Journal of Food Products Marketing. 2004;10[3]:61-89.
[22] Vargo SL, Lusch RF. Service-dominant logic: continuing the evolution. Journal of the Academy of marketing Science. 2008;36[1]:1-10.
[23] Sheth JN, Newman BI, Gross BL. Why we buy what we buy: A theory of consumption values. Journal of Business Research. 1991;22[2]:159-70.
[24] Sweeney JC, Soutar GN. Consumer perceived value: The development of a multiple item scale. Journal of Retailing. 2001;77[2]:203-20.
[25] Chai JCY, Malhotra NK, Alpert F. A two-dimensional model of trust–value–loyalty in service relationships. Journal of Retailing and Consumer Services. 2015;26:23-31.
[26] Morgan RM, Hunt SD. The commitment-trust theory of relationship marketing. Journal of Marketing. 1994;58[3]:20-.
[27] Delgado-Ballester E. Applicability of a brand trust scale across product categories: A multigroup invariance analysis. European Journal of Marketing. 2004;38[5/6]:573-92.
[28] Wang L, Law R, Hung K, Guillet BD. Consumer trust in tourism and hospitality: A review of the literature. Journal of Hospitality and Tourism Management. 2014;21:1-9.
[29] Chaudhuri A, Holbrook MB. The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. Journal of Marketing. 2001;65[2]:81-93.
[30] Gefen D. E-commerce: the role of familiarity and trust. Omega. 2000;28[6]:725-37.
[31] Oktora K, Achyar A. The Effect Of Post-Purchased Perceived-Value Towards The Relationship Quality Of Hajj And Umrah Travel Agencies In Indonesia. The South East Asian Journal of Management. 2014;8[1]:29-.
[32] Marcel P, Raphael R, Sina W, Paulssen M, Roulet R, Wilke S. Risk as moderator of the trust-loyalty relationship. European Journal of Marketing. 2014;48[5/6]:964-81.
[33] Hair Jr JF, Hult GTM, Ringle C, Sarstedt M. A primer on partial least squares structural equation modeling [PLS-SEM]: Sage Publications; 2016.