Effect Brand Psychological Ownership and Value Congruity to Brand Attachment and Behavioral Brand Loyalty Through Customer Brand Engagement

Teguh Sriwidadi, Hartiwi Prabowo, RiniKurnia Sari, Finddy Wong, and Muhammad Alfarizi

Management Department, BINUS Online Learning
Bina Nusantara University Jakarta, Indonesia
teguhs2405@binus.ac.id, hartiwi2200@binus.ac.id, Rini@binus.ac.id, Afenwong@yahoo.com,
Muhammad.alfarizi@binus.ac.id

Abstract

This study aims to analyze the effect of brand psychological ownership and brand value congruityon brand attachment and behavioral brand loyalty through customer brand engagement. Data collection uses secondary data in the form of scientific journals related to the variables studied, and primary data in the form of google form questionnaires distributed to customers of PT. Abadi CitaSelaras attracted 38 customers. The data processing technique uses path analysis with the help of SmartPLS 3.0 software. The results showed that all of the effects of brand psychological ownership to customer brand engagement, value congruity to customer brand engagement, customer brand engagement to brand loyalty, brand psychological ownership to customer brand attachment, and value congruity to brand loyalty are positive and significant.

Keywords

Brand psychological ownership, value congruity, brand attachment, behavioral brand loyalty, customer brand engagement.

1. Introduction

The medical services industry in Indonesia is a tantalizing speculative opportunity as the development of this industry has driven demand in almost all parts of the business from clinics to medicines to clinical gadgets. This increase in demand will increase the income of the medical services industry and attract Indonesians seeking clinical therapy abroad to spend domestically. More than 1.2 million Indonesians spend more than US\$2 billion annually on medical care overseas, mainly in neighboring Singapore and Malaysia(Medina 2020).

The increasing demand for the medical equipment industry is a breath of fresh air for players in this industry, one of them is PT. Abadi CitaSelaras (PT. ACS) whichis located in South Tangerang City, Banten Province, Indonesia. This company is a distributor of medical equipment, including guiding catheters, manifolds, infusion sets, latex gloves, and masks. Because the company has just launched a new guiding catheter product with the Asahi Sion Blue and Cordisbrands and its sales are not yet stable, therefore it is necessary to investigate how customers are engaged with these new brands.

1.1 Objectives

The objective of this study is to observe the influence of brand psychological ownership to customer brand engagement, value congruity to customer engagement, customer brand engagement to brand attachment, customer brand engagement to brand loyalty, brand psychological ownership to customer brand attachment, and value congruity to brand loyalty.

2. Literature Review

Psychological ownership

The concept of psychological ownership can be directed at the organisation (or workplace) as a whole or at specific aspects of the organisation such as the group, job and work tools (Hou et al. 2009). Collective psychological

Proceedings of the 5th European International Conference on Industrial Engineering and Operations Management Rome, Italy, July 26-28, 2022

ownership, indicating personal feelings of shared ownership at a group level, is more pervasive in collective cultures because individuals with collectivistic values see themselves as intimately connected to their in-groups and are, therefore, more inclined to perceive ownership of objects from a shared ("our") context (Kou & Powpaka, 2021).

Psychological ownership, the feeling that an object is "mine," emerges from three mechanisms: control over the object, intimate knowledge, and investment of the self (Xiong et al. 2019) and (Kuchmaner et al., 2019). The concept of psychological ownership can be defined as "the relationship between an individual and an object, in which the object is experienced as having a close connection with the self". Psychological ownership involves both a cognitive state such as personal awareness, thought, and belief, and an affective or emotional state. Third, this phenomenon is linked with one's self-concept (Hillenbrand & Money 2015). According to Pierce et al. (2001), when one owns something, the target of possession becomes bonded with the self (Lee & Kim 2020).

Value Congruity

The value congruity construct suggests that the conveyance of value-added services could be a key component for effective brands, especially due to their heterogeneity characteristics. In this manner, the congruity (i.e., when there is a seen fit) between the customers' and the brands' values can lead to favorable psychological outcomes (e.g.,belief, fulfillment and positive behavioral eagerly, etc.). In this manner, the consumers' distinguishing proof with the brands and their offerings is likely to be driven by the brands' identities. Several researchers within the branding space have famous such seen congruity between the brands and their consumers' identities. When the brands' values are congruent with their customers' values; it is very likely that there is increased consumer-brand engagement and identification. The indicators of brand value congruity are 1) understanding of the core values 2) support the intent of the core values, and 3) brand's core values represent. There is interrelationship among value congruity, customer—brand identification, affective brand commitment, customer—brand engagement and customer loyalty (Rather & Camilleri 2019). Value congruity has three aspects: external values, internal values, and inter-personal values (Maisam & Mahsa 2016). Value congruity is the extent of similarity in the value believed by a group of people. Consumers will observe the characteristics of both sides (the brand and the consumer) and make use of the similarity in every decision-making stage. Value congruity has always been greatly considered by human in developing and maintaining relationships (Yuniari 2020).

Customer Brand Engagement

The notion of customer-brand engagement has been defined as a customers' motivationally driven volitional investment of operand/operant resources in brand interactions, and it has gotten a lot of scholarly attention in the previous decade. As engaged customers actively participate in innovative service and product development, are less price sensitive, resist switching, and advocate for brands/firms, customer-brand engagement is gaining traction. Given the interactive nature of the engagement, service brands and/or situations have been identified as having particular applicability for the notion. Even though the practitioner and academic communities have paid increasing attention to the topic of customer-brand interaction, critical knowledge gaps still exist. Despite the growing interest in establishing customer-brand interaction, empirical research is limited, and little is known about the role of customer-brand engagement in fostering consumer behaviors like loyalty in an isolated model. Despite the fact that little research has been done on customer-brand engagement in the context of hospitality brands, a better understanding of this concept is critical (Rather & Camilleri 2019). Value congruity has a positive influence on customer brand engagement (Yuniari, 2020). CBE has been defined as a customer's resource investment in his/her brand interactions, highlighting its interactive nature that differentiates it from related concepts, including involvement or commitment views interaction as an interpersonal communication, thus incorporating both face-to-face and remote (e.g. platformmediated) interactions within its scope(Hollebeek et al., 2021). Engagement with the brand results in psychological consequences such as enhanced self-brand association/ connection and brand possession recall, both of which are essentially similar to the two dimensions of brand attachment, i.e. self-brand connection and brand prominence(Kumar & Nayak, 2019).

Customer Brand Loyalty

Brand loyalty indicates that consumers have positive attitudes toward a particular brand and are inclined to regularly purchase this brand. Brand loyalty is essential for succeeding and accomplishing marketing strategies and related research. Brand loyalty has behavioral and attitudinal components (Li et al., 2020). Brand image is an important factor in creating brand loyalty and thus strengthening brand equity. In managerial terms, our approach emphasises three specific routes to brand loyalty (affective, cognitive and normative) (Diallo et al., 2021). The behavioural perspective

Proceedings of the 5th European International Conference on Industrial Engineering and Operations Management Rome, Italy, July 26-28, 2022

of brand loyalty has been normally measured via repurchase behaviour, share of wallet and quantity of brand purchases, and frequency of purchase (Kosiba et al. 2018).

Brand Attachment

Its definition refers to "an emotion-laden target-specific bond between a consumer and a specific brand". It refers to the emotional bond between a consumer and a brand, just as in the relationship between a child and his or her caregiver where attachment is essentially created through strong feelings (Huaman-Ramirez & Merunka 2019). Brand attachment is embodied by customers' experiences and memories of a brand; they reported that brand attachment plays an important role in the development of positive behavioral intentions (Hwang et al. 2021). There are four dimensions to measuring brand attachment: resonance, bonding, companionship and love (Bidmon 2017).

3. Methods

The research method used is quantitative research with causal research type. Determination of the number of samples using census. Census refers to the quantitative research method, in which all the members of the population are investigated(Surbhi 2017). By using this method, the number of samples is the same as the total population of 38 hospital managers.

4. Data Collection

A questionnaire with a semantic differential measurement scale was utilized to collect data. PLS-SEM (Hair et al. 2017) with SmartPLS 3.3 software (Ringle et al. 2015) was used to process and analyze responses to the questionnaire items.

5. Results and Discussion

Characteristics of respondents include age of hospital, customer location, and customer expenses shown by Figure 1, Figure 2, and Figure 3 respectively. According to Figure 1, the percentage of hospital age is 0 - 10 years by 30%, 11 - 20 years by 20%, 21 - 30 years by 35 years, 31 - 40 years by 10%, and over 40 years by 5%. The largest percentage of hospital age is 21 - 30 years, which is 35%. From Figure 2 noted that most of the customers are in Jakarta, Bogor, Depok, Tangerang, and Bekasi (JABODETABEK) areas, which is 79% while the remaining 21% are located outside JABODETABEK. Figure 3 denotes customer expenses are grouped into 3 categories, namely below 40 million rupiahs by 20%, between 40 million rupiahs to 60 million rupiahs by 64% and above 60 million rupiahs by 16%.

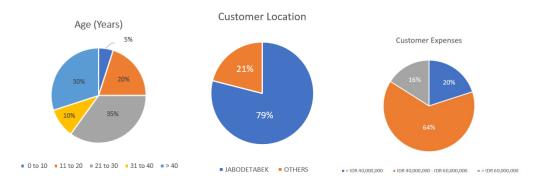


Figure 1. Customer Age Figure 2. Customer Location Figure 3. Customer Expenses

5.1 Numerical Results

Outer Model

The PLS-SEM examination produces two estimations: the outer and inner models (Hair et al. 2017). The outrageous model is utilized to survey the instrument's validity and dependability. Table 1 shows the aftereffects of the outer model. The loading factor marker a value for every variable is more significant than 0.7 (Hair et al. 2017). Similarly, the average variance extracted (AVE) value is higher than 0.5 (Hair et al. 2017). This value demonstrates that convergent validity is extremely acceptable. The reliability test alludes to the CompositeReliability (CR) and Cronbach Alpha (CA) values. Thus, every variable has a CR and CAworth of more than 0.7 so the indicators used to measure every variable have a high level of consistency.

Table 1. Loading Factor, AVE, CA, and CR

		Loadin				
Variabl	Item	g	4 7 7 7 7	.		GD.
e		Factor	AVE	CA	1	CR
BA	BA1	0.851	0.744	0.884		0.921
	BA2	0.913				
	BA3	0.883				
DI	BA4	0.799	0.660	0.020		0.041
BL	BL1	0.786	0.668	0.929		0.941
	BL2	0.849				
	BL3	0.805				
	BL4	0.844				
	BL5	0.868				
	BL6	0.785				
	BL7	0.738				
	BL8	0.854				
BPO	BPO 1	0.899	0.722	0.923		0.940
	BPO 2	0.830				
	BPO 3	0.904				
	BPO 4	0.802				
	BPO 5	0.787				
	BPO 6	0.870				
CBE	CBE 1	0.911	0.802	0.918		0.942
	CBE 2	0.884				
	CBE 3	0.918				
	CBE 4	0.869				
VC	VC1	0.898	0.762	0.841		0.905
	VC2	0.941				
	VC3	0.770				

Table 2. Fornell Larcker Criterion

	BA	BL	BPO	CBE	VC
BA	0.863				
BL	0.762	0.817			
BPO	0.793	0.787	0.850		
CBE	0.825	0.802	0.762	0.896	
VC	0.623	0.786	0.715	0.793	0.873

In Table 2 above, the results of the discriminant validity analysis, namely the Fornell Larcker Criterion(Chatarsis, 2019)which is the root value of the AVE of each construct, is greater than its correlation with other variables. The Brand Attachment (BA) root value of AVE is 0.863, which is greater than its correlation with other constructs, namely Brand Loyalty (BL) of 0.762, Brand Psychological Ownership (BPO) of 0.793, with Customer Brand Engagement (CBE) of 0.825, and Value Congruity (VC) is 0.623. And so on for the other constructs, namely Brand Loyalty (BL),

Proceedings of the 5th European International Conference on Industrial Engineering and Operations Management Rome, Italy, July 26-28, 2022

Brand Psychological Ownership (BPO), Customer Brand Engagement (CBE), and Value Congruity. construct meets discriminant validity.

	Original Sample	STDEV	T Statistics	P Values	R-Square	Q-Square	F-Square
BPO -> BA	0.392	0.128	3.062	0.002	0.745	0.540	0.253
CBE -> BA	0.526	0.136	3.872	0.000			0.455
CBE -> BL	0.482	0.162	2.977	0.003	0.704	0.438	0.290
VC -> BL	0.404	0.164	2.465	0.014			0.204
BPO -> CBE	0.399	0.124	3.228	0.001	0.707	0.529	0.266
VC -> CBE	0.508	0.126	4.029	0.000			0.430

Table 3. Original Sample, STDEV, T Statistics, P Values, R-Square, Q-Square, and F-Square

To know the size of the impact between variables, allude to the F-Square value (Table3). Brand Psychological Ownership (BPO)has a medium affects to Brand Attachment (BA); Customer Brand Engagement (CBE) and Value Congruity (VC) has a medium affects to Brand Loyalty (BL); and Brand Psychological Ownership (BPO) also has a medium effects on Customer Brand Engagement (CBE); while Customer Brand Engagement (CBE) has a large effect to Brand Attachment (BA), and also Value Congruity (VC) has a large affects to Customer Brand Engagement (CBE). Guidelines for assessing f^2 are that values of 0.02, 0.15, and 0.35, respectively, represent small, medium, and large effects of the exogenous latent variable. Effect size values of less than 0.02 indicate that there is no effect.

Furthermore, R Square statistics explains the variance in the endogenous variable explained by the exogenous variable(s)(Kh.Fawad, 2022). In Table 3 the R-Square of Brand Attachment (BA) is 0.745 implies that Brand Psychological Ownership (BPO) and Customer Brand Engagement (CBE) contribute 74.5% in shaping a Brand Attachment (BA). The R-Square value of Brand Loyalty (BL) is 0.704 proves that Customer Brand Engagement (CBE) and Value Congruity (VC)contribute 70.4% in shaping a Brand Loyalty (BL). The next R-Square value is for the Customer Brand Engagement (CBE) construct where the value is 0.707 indicating that Brand Psychological Ownership (BPO) and Value Congruity (VC) contribute 70.7% in forming CBE.

Another important measurement is Q Square (predictive relevance), measures whether a model has predictive relevance or not (> 0 is good). From Table 3 all of the Q Square values > 0. From Table 3 found that the model has predictive relevance(Kh.Fawad, 2022).

5.2 Graphical Results

The structural model's path coefficients are interpreted as standardized OLS (ordinary least square) regression coefficients. A report of the results of structural model estimates is shown in Figure 4 and Table 3.

Proceedings of the 5th European International Conference on Industrial Engineering and Operations Management Rome, Italy, July 26-28, 2022

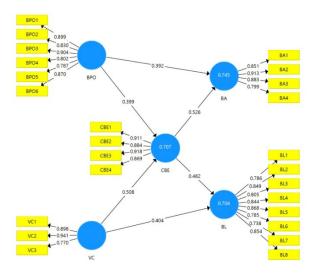


Figure 4. Structural Model

5.3Proposed Improvements

The quality of numerical and graphical results still need to be increased.

5.4Validation

The Research Hypotheses

Ho1: Brand Psychological Ownership (BPO) does not affect Customer Brand Engagement (CBE).

Ha1: Brand Psychological Ownership (BPO) affects Customer Brand Engagement (CBE).

Ho2: Value Congruity (VC) does not affect Customer Brand Engagement (CBE).

Ha2: Value Congruity (VC) affects Customer Brand Engagement (CBE).

Ho3: Customer Brand Engagement (CBE) does not affect Brand Attachment (BA).

Ha3: Customer Brand Engagement (CBE) affects Brand Attachment (BA).

Ho4: Customer Brand Engagement (CBE) does not affect Brand Loyalty (BL).

Ha4: Customer Brand Engagement (CBE) affetcs Brand Loyalty (BL).

Ho5: Brand Psychological Ownership (BPO) does not affect Brand Attachment (BA).

Ha5: Brand Psychological Ownership (BPO) affects Brand Attachment (BA).

Ho6: Value Congruity (VC) does not affect Brand Loyalty (BL).

Ha6: Value Congruity (VC) affects Brand Loyalty (BL).

6. Conclusion

This study especially analyzed the effects of brand psychological ownership to customer brand engagement, value congruity to customer brand engagement, customer brand engagement to brand attachment, customer brand engagement to brand loyalty, brand psychological ownership to customer brand attachment, and value congruity to brand loyalty are positive and significant. The highest indicator based on filling out the questionnaire is in the customer brand engagement variable, namely using the brand gets to think about the brand, which means that customers are happy to use the brand and the impact will remember the brand, so companies need to increase brand awareness to customers. While the indicator that has the lowest score is commitment feelings towards the brand which is an indicator of the brand loyalty variable which shows that customers are less committed to the brand so that the company needs to improve the quality of its products so that customers are committed to using the company's brand.

References

- Bidmon, S., How does attachment style influence the brand attachment brand trust and brand loyalty chain in adolescents? *International Journal of Advertising*, vol. 36, no. 1, pp. 164–189, 2017.
- Chatarsis., Fornell-Larcker Criterion. https://forum.smartpls.com/viewtopic.php?t=24523#:~:text=Fornell-Larcker criterion says that, distrinct based on Fornell-Larcker, 2019.
- Diallo, M. F., Moulins, J. L., & Roux, E., Unpacking brand loyalty in retailing: a three-dimensional approach to customer–brand relationships. *International Journal of Retail and Distribution Management*, vol. 49, no. 2, pp. 204–222, 2021.
- Hollebeek, L. D., Smith, D. L. G., Kasabov, E., Hammedi, W., Warlow, A., & Clark, M. K., Customer brand engagement during service lockdown. *Journal of Services Marketing*, vol. 35, no. 2, pp. 201–209, 2021.
- Hou, S. T., Hsu, M. Y., & Wu, S. H., Psychological ownership and franchise growth: An empirical study of a Taiwanese taxi franchise. *International Journal of Entrepreneurial Behaviour and Research*, vol. 15, no. 5, pp. 415–435, 2009.
- Huaman-Ramirez, R., & Merunka, D., Brand experience effects on brand attachment: the role of brand trust, age, and income. *European Business Review*, vol. 31, no. 5, pp. 610–645, 2019.
- Hwang, J., Choe, J. Y. (Jacey), Kim, H. M., & Kim, J. J., Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty? *International Journal of Hospitality Management*, vol. 99, no. 103050, 2021.
- Kh,, Fawad., Understanding R Square, F Square, and Q Square using SMART-PLS. Summer Research Cost, 2022.
- Kosiba, J. P. B., Boateng, H., Okoe Amartey, A. F., Boakye, R. O., & Hinson, R., Examining customer engagement and brand loyalty in retail banking: The trustworthiness influence. *International Journal of Retail and Distribution Management*, vol. 46, no. 8, pp. 764–779, 2018.
- Kou, Y., & Powpaka, S., Pseudo-ownership advertising appeal creates brand psychological ownership: the role of self-construal and customer type. *Journal of Product and Brand Management*, vol. 30, no. 2, pp. 215–230, 2021.
- Kuchmaner, C. A., Wiggins, J., & Grimm, P. E., The Role of Network Embeddedness and Psychological Ownership in Consumer Responses to Brand Transgressions. *Journal of Interactive Marketing*, 47, pp. 129–143, 2019.
- Kumar, J., & Nayak, J. K., Consumer psychological motivations to customer brand engagement: a case of brand community. *Journal of Consumer Marketing*, vol. 36, no. 1, pp. 168–177, 2019.
- Lee, S., & Kim, D. Y., The BRAND tourism effect on loyal customer experiences in luxury hotel: The moderating role of psychological ownership. *Tourism Management Perspectives*, vol. 35, no. 100725, 2020.
- Li, M. W., Teng, H. Y., & Chen, C. Y., Unlocking the customer engagement-brand loyalty relationship in tourism social media: The roles of brand attachment and customer trust. *Journal of Hospitality and Tourism Management*, vol. 44, pp. 184–192, 2020.
- Maisam, S., & Mahsa, R. D., Positive word of mouth marketing: Explaining the roles of value congruity and brand love. *Journal of Competitiveness*, vol. 8, no. 1, pp. 19–37, 2016.
- Medina, A. F., Indonesia's Healthcare Industry: Growing Opportunities for Foreign Investors. ASEAN BRIEFING, 2020.
- Rather, R. A., & Camilleri, M. A., The effects of service quality and consumer-brand value congruity on hospitality brand loyalty. *Anatolia*, vol. 30, no. 4, pp. 547–559, 2019.
- Surbhi. Difference Between Census and Sampling. Key Difference. 2017.
- Xiong, L., So, K. K. F., Wu, L., & King, C., Speaking up because it's my brand: Examining employee brand psychological ownership and voice behavior in hospitality organizations. *International Journal of Hospitality Management*, vol. 83, pp. 274–282, 2019.
- Yuniari, W. (2020). The Role of Customer Brand Engagement and Affective Brand Commitment in Mediating the Relationship between Value Congruity and Brand Loyalty. *Journal of Advanced Research in Dynamical and Control Systems*, vol. 12, no. SP4, pp. 1963–1973, 2020.

Biographies

Teguh Sriwidadi is currently working as an Online Lecturer Coordinator at the Business Management Department of BINUS Online Learning, Bina Nusantara University Jakarta. She graduated from a doctoral program with a concentration in management science. She has done a lot of research in the field of strategic management and human resource management.

Proceedings of the 5th European International Conference on Industrial Engineering and Operations Management Rome, Italy, July 26-28, 2022

Hartiwi Prabowo is currently working as Head of Management DepartmentBINUS Online Learning, Bina Nusantara University Jakarta. She is a PhD graduate with a concentration in strategic management science. She has done a lot of research in the field of strategic management and marketing management.

RiniKurnia Sariis currently working as Lecturer Specialist of Management DepartmentBINUS Online Learning, Bina Nusantara University Jakarta. She is a student of Padjadjaran University Doctorate Program Bandung West Java Indonesia major ini business economic.

Finddy Wong, and Muhammad Alfariziare students of Management DepartmentBINUS Online Learning, Bina Nusantara University Jakarta.