Factors Influencing Brand Equity: Testing Aaker’s Brand Equity Framework in Malaysian Toy Industry

Abstract

Previous studies have demonstrated varying associations between fundamental components of brand equity within diverse sectors. The purpose of the current study is to examine the influence of Aaker’s brand equity model’s dimensions (brand awareness, brand loyalty, perceived quality, and brand association) on brand equity in the context of toy brands in Malaysia. The study employs a quantitative-based correlation design within a non-controlled setting, using a cross-sectional approach with individuals as the unit of analysis. The population consists of respondents from the general public aged 18 and above, as they are valid buyers of toys. Data collection was conducted using a non-probability sampling method. The questionnaire was sent to the targeted respondents using online Google Form links. A comprehensive dataset from 384 respondents was gathered for descriptive analysis of the demographic profile. Hypothesis testing was performed using regression analysis. The findings indicate that, except for brand associations, the remaining three factors – perceived quality (Beta = .377, p < .001), brand loyalty (Beta = .338, p < .001), and brand awareness (Beta = .221, p < .01) – exhibit a statistically significant positive correlation with the brand equity of children’s toy brands in Malaysia.

INTRODUCTION

The global revenue of the toy market was projected to increase to $382.47 billion in 2021, according to a report by Statista (2023). This represents an increase from the $249.5 billion generated by the market in 2014. Along the same lines, the revenue of the toy market in Malaysia has also increased, going from 0.75 billion US dollars in 2015 to 1.11 billion US dollars in 2022.

Over the previous decade, the typical household size in Malaysia has decreased (Povera, 2022). According to Yuen (2018), there is a correlation between the number of children living in a household and the tendency for parents to spend more money on high-quality baby products and toys.

The key players in the toy industry came primarily from Western countries, such as the LEGO Group from Denmark and Hasbro and Mattel from the United States, which are all well-known in the Malaysian market (Fortune Business Insights, 2021). Toy companies need to adopt brand equity as their primary growth strategy to ensure their continued success. According to Keller and Tim (2019), one definition of brand equity is the value consumers assign to a product based on
their thoughts, statements, and actions. According to Aaker (1992), the primary sources of value that contribute to developing a brand’s equity are brand awareness, brand loyalty, perceived brand quality, brand associations, and brand image.

Previous studies have been conducted in a variety of industries, including food, banking, automotive, smartphones, clothing, and fashion, in order to investigate the factors that impact brand equity in Malaysia (Adetunji et al., 2018; Koliby & Rahman, 2018; Ilias et al., 2020; Ng et al., 2022; Saputra, 2022). There is a dearth of research, particularly in Malaysia, that investigates the factors that may influence brand equity, even though it is self-evident that brand equity is essential for the continued existence of the toy market.

1. LITERATURE REVIEW AND HYPOTHESES

Brand equity can be analyzed from an economic standpoint, which looks at how much value a brand is worth, and from a consumer vantage point, which considers how people feel about and interact with a brand (Keller, 1993; Simon & Sullivan, 1993). Customers’ decisions, activities, and evolving preferences regarding their purchases are crucial in shaping the market (Hoeffler & Keller, 2003).

Aaker’s (1991) brand equity model is the most all-encompassing brand equity framework, incorporating not only brand awareness and brand loyalty but also brand perception, brand associations, and other proprietary brand assets like channel relationships, patents, and trademarks, all of which contribute to value creation. Given its widespread use across disciplines and fields (Fong & Goh, 2021; Jayasuriya et al., 2018; Shaalan et al., 2022; Tewodros, 2019), this study focuses on Aaker’s brand equity model. Given the limited scope of this investigation, it chooses primarily the first four elements of the framework.

The term “brand awareness” refers to the extent to which a consumer is familiar with a given brand as part of a given category of goods and services. The need to know and recognize a brand before attributing its qualities has also been emphasized (Aaker, 1991). According to Keller (1993), consumers’ familiarity with a brand can be measured in two ways: by their ability to identify the brand when given a hint (brand recognition) and by their ability to recall the brand when presented with a product category (brand recall).

Awareness of a brand is a critical performance metric in today’s highly competitive markets. In order to gauge the success of a marketing campaign in stoking consumers’ interest and driving them to make a purchase, marketers look at how well consumers can identify a brand within a short period (or after the brand’s marketing content has been established) (Perdana & Kartawinata, 2022). Maintaining high levels of brand recognition is crucial from introduction until retirement. If it drops below that level, awareness needs to be brought back up to the target level through increased advertising and promotion (Rajkumar & Hareesh, 2022).

Loyalty to a brand is widely regarded as the most critical factor contributing to a company’s brand equity. A strong brand equity foundation is essential for any business seeking to achieve and maintain a sustainable competitive advantage. According to Aaker (1992), brand loyalty can range from regular purchasers to consumers who are entirely content with a brand and turn that contentment into genuine dedication. According to Aaker (1991), loyal customers typically purchase the same brand because they feel a greater affiliation with it. However, this affiliation will be disrupted if major substitute factors are introduced.

According to Lin and Zhang (2021), cultural significance can foster brand loyalty and benefit brand identity development. In addition to an individual’s emotional attachment to a brand, other factors, such as perceived quality, perceived value, customer satisfaction, and perceived difference, all directly affect a consumer’s propensity to remain loyal to that brand (Atulkar, 2020). According to Ledikwe et al. (2019), the cultivation of commitment, trust, and satisfaction can lead to an increase in attitudinal loyalty, which in turn leads to an increase in behavioral loyalty among SME customers. In addition, Garanti and Kissi (2019)
discovered that brand equity positively influences brand loyalty and helps partially mediate the relationship between brand personality and brand loyalty caused by the effects of social media in the banking industry.

Perceived quality, as defined by Keller (2003), has to do with how customers rate a product or service’s overall quality or superiority. There is a correlation between perceived quality and other brand equity metrics like price premiums, price elasticity, brand usage, and stock return (Aaker, 1996). This makes studying and quantifying brand equity a crucial area of study. A product’s perceived quality increases its value by giving customers a reason to buy, setting it apart from competitors, attracting the interest of channel partners, providing a foundation for new product offerings, and allowing the company to charge a premium price (Aaker, 1992). Consumers’ perceptions of a brand’s quality may not change even if it undergoes a variety of dilution effects or is extended into multiple new product categories and service areas (Keller, 1993).

There is a robust relationship between consumer brand engagement and perceived quality because these factors contribute to the consumer’s opinion of the product or service’s dependability, preference, satisfaction, and propensity to purchase (Shanahan et al., 2019). Extrinsic attributes, such as brand name and brand image, corporate reputation, and reviews of retail stores, manufacturers, and countries of origin, can influence a consumer’s perception of a product’s quality just as much as intrinsic attributes, such as its performance, characteristics, applicability, stability, sustainability, serviceability, and aesthetics.

According to Hoeffler and Keller (2003), the level of abstraction that brand associations can have can range from specific product qualities to more general brand attributes. This can be determined by the content of the brand associations and whether or not they are related to the product or non-product associations that relate to the user, usage imagery, or brand personality. According to Aaker (1992), some examples of brand associations include product characteristics, consumer advantages, uses, lifestyles, competitors, and nations. In addition, Kotler and Keller (2006) provided a variety of examples related to brand associations. These examples included ideas, perceptions, emotions, colors, sounds, visuals, smells, beliefs, attitudes, and experiences connected to the brand.

According to Aaker (1992), associations can make it easier for customers to process or retrieve information, serve as the basis for differences and extensions, give customers a reason to purchase, and elicit positive emotions. According to Berni et al. (2020), buyers or consumers are willing to pay a higher price for products or goods because they are associated with a particular brand. This prevents them from selecting an alternative option. According to Jamshidi and Rousta (2021), companies that amplify brand associations can increase their sales and profits and gain a competitive advantage over their rivals because of their devoted customer base.

According to Susanti et al. (2019), brand associations could influence customer satisfaction. In addition, Zarantonello et al. (2020), who looked at the relationship between consumer-based brand equity and the market share of global and local brands, found that, with the exception of brand associations, other aspects of brand equity showed a stronger relationship.

The purpose of this study is to examine the brand equity among consumers in the toy industry; hence, a consumer-based brand equity framework was selected. Based on the literature review, Aaker’s brand equity model’s dimensions have been subjected to extensive empirical testing across a wide range of industries and settings. They also imply that these factors might have an immediate effect on the value of a brand. It is noted, however, that research on the effect of these dimensions on brand equity in the context of the Malaysian toy industry is lacking.

Accordingly, the study seeks to answer the following research question: Do brand awareness, brand loyalty, perceived quality, and brand association have a significant impact on the brand equity of children’s toy brands in Malaysia? This research question is answered by testing the following hypotheses using empirical data:

**H1:** Brand awareness has a significant impact on the brand equity of children’s toy brands in Malaysia.
H2: Brand loyalty has a significant impact on the brand equity of children’s toy brands in Malaysia.

H3: Perceived quality has a significant impact on the brand equity of children’s toy brands in Malaysia.

H4: Brand associations have a significant impact on the brand equity of children’s toy brands in Malaysia.

2. METHODOLOGY

A correlational study was selected to identify associations between two or more relevant variables through comparison (Creswell, 2014). This study adopted a cross-sectional design as the data were collected at a single point in time.

Convenience sampling, a non-probability sampling method frequently used in the business and social sciences, was used in this investigation. Since there are approximately 22 million adults in Malaysia (Department of Statistics Malaysia, 2022), Krejcie and Morgan (1970) conclude that a sample size of 384 would be adequate. Table 1 shows the demographics of the respondents of this survey.

According to Table 1, female responses outnumber males, 67% to 33%. Most of the respondents fall under the 31-35 age range, with 25%, and the 26-30 age range, with 23%, followed by the 18-25 age range and the 36-40 age range, both with 18%, while more than 40-year-old respondents have a total of 15%. Chinese gave the majority responses of 60% on this study among Malay (16%), Indian (15%), and other races (9%). In terms of marital status, most of the respondents are married (54%) versus single (46%). Most of the respondents in this study earn RM 6,001-RM 9,000 (37%), followed by high household income of above RM 9,001 (25%), RM 3,001 to RM 6,000 (21%), and lower household income of RM 3,000 and below (17%). A total of 7 children’s toy brands are selected as preferred toy brand options in this study, with LEGO being the top preferred brand with 35%, followed by no preferred brand (27%) and other brands (9%).

In order to collect data for this study, a survey instrument was modified to meet the requirements. The purpose of the questionnaire was to gather data from respondents on demographic characteristics, the dependent variable (brand equity), and the independent variables (brand awareness, brand loyalty, perceived quality, and brand associations). The items were adapted from earlier research that had successfully ensured the validity and reliability of the instruments. This was done so that the validity of the scales could be guaranteed together with the validity of the items. The details of the scales included in the survey questionnaire are presented in Table 2, along with the sources of the items included in the questionnaire. The questions in the survey were formatted to be responded to using a five-point Likert scale, with one representing “strongly disagree” and five indicating “strongly agree.”

For data collection, the adapted questionnaire was put online. Data were collected by distributing the online questionnaire via email, Facebook, and WhatsApp to respondents for self-answering.

This study utilized version 25 of the Statistical Package for Social Science (SPSS) to analyze the data. A series of preliminary analyses were carried out before the primary data analysis to establish whether the instrument was reliable for use in the
research setting. Following that, the study carried out an exploratory factor analysis and a reliability analysis. The findings of the EFA showed that 87.34% of the variation could be attributed to five factors, which corresponded to the five variables investigated for this study. After that, everything with a factor loading of 0.7 or greater was put up for sale in the store, except for one particular item.

Last but not least, a reliability study was performed on the kept items. The number of items that make up each variable is presented in Table 3, along with the Cronbach’s alpha coefficient. Accordingly, each of the five variables achieved an alpha greater than .90, which indicates that the findings derived from the data might be trusted.

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand equity</td>
<td>5</td>
<td>0.923</td>
</tr>
<tr>
<td>Brand awareness</td>
<td>4</td>
<td>0.927</td>
</tr>
<tr>
<td>Brand loyalty</td>
<td>4</td>
<td>0.928</td>
</tr>
<tr>
<td>Perceived quality</td>
<td>4</td>
<td>0.907</td>
</tr>
<tr>
<td>Brand associations</td>
<td>4</td>
<td>0.914</td>
</tr>
</tbody>
</table>

Following the completion of the preliminary studies and verifying the instrument’s dependability, the regression analysis planned for the study was carried out to verify its assumptions.

3. RESULTS AND DISCUSSION

Based on the proposed research methodology, this study employed multiple linear regression to evaluate four hypotheses on the relationships between brand awareness, brand loyalty, perceived quality, and brand association. The data were checked for violations of the normality and collinearity assumptions of regression before the results of multiple regression were interpreted.

The general evaluation of the model is summarized in Table 4. The results show that the model is statistically significant, proving that the four predictors affect the outcome variable (brand equity). Further, $R^2 = 0.699$ indicates that the model’s conceptual framework (consisting of brand awareness, brand loyalty, perceived quality, and brand associations) is sufficiently robust to predict almost 70% of the variation in brand equity. The findings from this study support the conclusion that achieving brand equity in the context of the Malaysian toy business requires a focus on all four aspects of Aaker’s brand equity model.

The impact of the model’s four independent variables (awareness, brand loyalty, perceived quality, and brand associations) was then analyzed. The findings of the investigation are presented in Table 5.

Table 5 shows a positive relationship between brand awareness and brand equity ($\beta = 0.220, p = 0.003$). As a result, H1 is accepted. Brand equity of children’s toy brands in Malaysia is significantly influenced by brand awareness. Perdana and Kartawinata (2022), Sürückü et al. (2019), and Tran et al. (2020) showed the importance of brand awareness in achieving brand equity.

Table 5 shows a similar positive relationship between brand loyalty and brand equity ($\beta = 0.347, p = 0.001$). Thus, H2 is confirmed. This means that brand loyalty significantly impacts the
brand equity of children’s toy brands in Malaysia. Aris (2020), Garanti and Kissi (2019), and Muniz et al. (2019) showed that brand loyalty has a significant effect on a company’s brand equity.

Also, as shown in Table 5, a positive correlation exists between perceived quality and brand equity ($\beta = 0.359, p = 0.001$). Therefore, H3 is accepted: perceived quality has a significant impact on the brand equity of children’s toy brands in Malaysia. Doddy et al. (2020), Fong and Goh (2021), and Pinar et al. (2020) confirm the significance of perceived quality in achieving brand equity in the Malaysian toy industry, providing further support for the finding.

In contrast to the prior three variables, brand association does not significantly affect brand equity ($\beta = 0.259, p = –0.107$). As a result, H4 is rejected. In Malaysia, the brand equity of children’s toy brands is not significantly affected by brand association. Dada (2021) and Zarantonello et al. (2020) show that brand association has no substantial effect on brand equity. More research is required to confirm the findings, but the existing literature suggests a positive effect.

Li et al. (2023) propose that the strong significant effect of other variables in the model may account for the non-significant effect of brand association on brand equity. In addition, brand association measures, which include associated thoughts, feelings, ideas, perceptions, colors, sounds, sights, smells, beliefs, attitudes, and experiences (Kotler & Keller, 2006), may be more sensitive to the research context. Furthermore, when there is a weak relationship between a brand and its consumers, it is not easy to realize the benefits of its brand association (Li et al., 2023) (brand power is the ability of a brand to draw consumers from a specific market).

The most important relationship is one’s perception of quality, which marketers can stress even more and focus on when developing new children’s toys. According to Nana et al. (2019), customer-perceived quality is necessary for successful competition because customers’ favorable views of brand quality encourage repeat purchases of the same brand. As a result, many businesses have turned customer-perceived quality into an effective strategic weapon. To achieve this goal, toy manufacturers can release products that are of a higher quality and safer, as well as acquire toy safety certification at either local or international standards. This will increase the confidence that adults have in purchasing toys for their children’s playtime, which will increase sales.

When it comes to boosting the brand equity of children’s toy brands in Malaysia, marketers need to consider several important factors, including brand awareness and brand loyalty. According to Vaishnavi and Justus (2020), brand performance significantly impacts its image, which in turn leads to customer brand loyalty and helps recruit new customers. Toy industry marketers can fo-
cus on developing brand awareness with a positive, recognizable brand by creating a brand story and value that appeals to both parents and children. This will help the brand become more recognizable in the marketplace. When it comes to customer loyalty to a particular brand, businesses may choose to speed up loyalty programs by, for example, giving birthday presents to members who have loyalty cards or inviting the children of members to take part in a toy-playing competition by, for example, participating in make-and-take in-store activations. Since childhood, fostering a relationship of loyalty between a brand and its target consumers or shoppers has been essential to the success of the brand.

Due to the time constraint, convenience sampling was selected as the research approach. Although convenience sampling is easy and simple for the researcher to collect the data, this type of sampling strategy entails selecting accessible subjects. Hence, there is a possibility to include the drawbacks of convenience sampling, such as bias and lack of variety, as well as the unknown error of the sample population. Based on the demographic findings, the highest contribution to this study is female (67%). In terms of race, the Chinese contribute the most, with 60%. This implies that the sample population is not equally representative of the general responses due to the implementation of the convenience sampling method. In addition, respondents may need clarification about how to answer the questionnaire as the data are collected via self-answering online without assistance. The total sample size was also collected with minimum criteria of N = 384. The combination of all the factors may cause the possibility of inaccuracy in the data samples.

As per the results of this study, only brand associations, the antecedent of brand equity, have a significant relationship with the brand equity of children’s toy brands in Malaysia. Therefore, future studies can further explore the brand associations of children’s toy brands in Malaysia. This can be further understood by understanding the influences and impacts from different dimensions on brand association aspects, such as ideas, perceptions, emotions, colors, sounds, visuals, smells, beliefs, attitudes, and experiences connected to the brand (Kotler & Keller, 2006). Perceived quality is the most significant influence on brand equity. Brand equity does not represent the purchase intention, as consumers’ awareness and knowledge of a product brand are not compelling factors to directly influence the purchase intention (Arshad & Victor, 2020). Hence, it can benefit both academia and industry through future studies that further examine the perceived quality and purchase intention of children’s toys in Malaysia.

CONCLUSION

The study aimed to examine Aaker’s brand equity theory by applying it to the context of the Malaysian toy industry. In order to accomplish this, influencing factors such as brand awareness, brand loyalty, perceived quality, and brand association were regressed on brand equity. According to the findings of the study, there is a significant positive effect that brand awareness, brand loyalty, and perceived quality have on brand equity. On the other hand, the analysis found that brand associations did not demonstrate a statistically significant impact. The findings highlight how important it is to build brand recognition, foster brand allegiance, and maintain a perception of excellence in order to increase brand equity within the toy industry.

There has not been much research done on the marketing aspects of the toy industry. This study can be helpful for industry marketers in the children’s toy industry to understand and investigate the topic of brand equity related to the children’s toy industry from the perspective of marketing. According to the findings, a significant relationship exists between brand awareness, brand loyalty, and the perceived quality of children’s toys in Malaysia. These three factors are the critical antecedents that have a significant influence on brand equity. Besides expanding the research topics, different data collection methods and types of analysis can be executed for future studies. Different data collection methods, such as qualitative research methodol-
ogy, can be implemented with open-ended questions in a focus group discussion environment. The type of analysis in qualitative research is also different from that in quantitative research. Examples of analysis that qualitative research presents include constant comparative analysis, content analysis, thematic analysis, and basic interpretive analysis. Increasing the overall sample size for future studies could improve how the hypotheses are examined and provide a more accurate representation of the studied population.

**AUTHOR CONTRIBUTIONS**

Conceptualization: Wong Chee Hoo, Chai Yi Xin.
Data curation: Chai Yi Xin.
Formal analysis: Chai Yi Xin.
Fund Acquisition: Wong Chee Hoo.
Investigation: Wong Chee Hoo, Chai Yi Xin.
Methodology: Chai Yi Xin.
Project administration: Wong Chee Hoo, Visal Moosa.
Resources: Wong Chee Hoo.
Software: Chai Yi Xin.
Supervision: Wong Chee Hoo.
Validation: Wong Chee Hoo, Visal Moosa.
Visualization: Wong Chee Hoo, Visal Moosa.
Writing – original draft: Wong Chee Hoo, Chai Yi Xin.
Writing – review & editing: Wong Chee Hoo, Visal Moosa.

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**REFERENCES**


20. Fortune Business Insights. (2021). Toys market size, share & COVID-19 impact analysis, by product type (dolls, outdoor and sports toys, building and construction set, infant and preschool toys, games & puzzles, and others), by age group (0-3 years, 3-5 years, 5-12 years, 12-18 years, and 18+ years), by distribution channel (online and offline), and regional forecast, 2021-2028. Retrieved from https://www.fortunebusinessinsights.com/infographics/toys-market-104699


