Brand Equity and Credibility Sustaining FMCG Purchase Decisions Through the Enduring COVID-19 Turbulence in Malaysia

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Abstract. This empirical study investigates the impact of brand equity and credibility on 140 consumers' purchase decisions regarding fast-moving consumer goods (FMCG) in Malaysia during the enduring COVID-19 turbulence. Statistical analysis using PLS-SEM demonstrates brand equity and credibility each directly and positively influence purchase decisions. Further, brand credibility significantly mediates the relationship between equity and purchase decisions. As organizations aim to reclaim losses and rebound from lingering pandemic impacts, results signify maintaining branding investments and favorability can restore consumer trust and choices. Findings also advance theoretical understanding of how risk perceptions amplify reliance on brand signals when navigating decisions.

Keywords: Brand Equity, Brand Credibility, Purchase Decision, Signaling Theory, Fast-Moving Consumer Goods

1. Introduction

Following the COVID-19 global pandemic outbreak towards the tail end of 2019 and beginning of 2020, the entire world stood still, businesses halted, and virtually all spares of human endeavors were negatively affected (Hasanat et al., 2020). As a result of the outbreak, governments were charged to swing into action, enforcing different preventive measures and programs against the spread of the virus. The Malaysian government announced the Movement Control Order (MCO) implementation, which consequently led to the closure of many factories, a shortage of supply, and the inability to produce and distribute products freely (Shah et al., 2020). Additionally, this halted many industries in Malaysia, including the automobile industry, aquaculture industry, retail and service industry, tourism, and the fast-moving consumer goods (FMCG) industry (Hasanat et al., 2020; Waiho et al., 2020). Meanwhile, as the COVID-19 situation lingers, and continues, the government is forced to allow some sort of conditional permission to convenience stores, supermarkets, and health-related businesses. Even though many other industries remain in a seemingly never-ending state of total lockdown, consumer spending on FMCG did not plummet completely (Shaari, 2020). Nonetheless, the FMCG industry is faced with other challenges ranging from insecurity, lack of labor, and inconvenient transportation to inventory accumulation, especially during the COVID-19 period (Singh et al., 2020; Sun et al., 2021), as only convenience stores, supermarkets, and health-related businesses selling necessities were allowed to operate, and consumers spent more on FMCG products (Shaari, 2020). Therefore, this study chooses the FMCG industry and it provides an opportunity to reassess the importance of brand equity and brand credibility in this industry.

Given that the current literature has consistently asserted the importance of building successful brand equity and highly recognized brand image are crucial in enhancing and managing corporate competitiveness and persuading consumers' decisions (Aaker, 1991; Hanaysha, 2016; Kim & Chao, 2018), especially for FMCG (Myers, 2003). Meanwhile, Donthu and Gustafsson (2020) highlighted that despite the environmental uncertainties caused by the COVID-19 situation, some companies were still able to sustain and survive through their substantial brand equity, which as a result helped maintain their customers in the market.

However, as many brands struggle to address the difficulties inflicted by the pandemic, it is unclear if the brand equity of FMCG has any importance or influence on consumer purchase decisions in the face of COVID-19 (Niros et al., 2023). In addition, given that most of the studies on branding are Western-based, leaving a gap in knowledge on brand management and development in developing countries such as Malaysia. More so, most of the research on brand equity in Malaysia is focused on the restaurant industry, hotel industry, small and medium-sized enterprises (SMEs), fashion retail apparel, and sports brands are occasionally involved (Hanaysha, 2016; Ilias et al., 2020; Mijan et al., 2020; Raji et al., 2017; Sari et al., 2022). However, studies that look into the FMCG industry in Malaysia are still limited (Mahdzir et al., 2023). Therefore, the FMCG industry was selected as the current research context.

According to the proponents of the Signalling theory (Spence, 1973), branding attributes can reduce information asymmetry between consumers and brands (Rahman et al., 2018). Developing successful brand equity has become one of the most prominent elements in marketing and brand management. Brand equity is described as the value in the eyes of consumers which includes the brand name, brand logo, brand image, and other functional and non-functional attributes (Baalbaki & Guzmán, 2016; Brahmbhatt & Shah, 2017; Hoeffler & Keller, 2002; Keller, 2016; Stojanovic et al., 2018;). Past studies have also indicated that substantial brand equity can bring many advantages, such as improving consumers' loyalty and increasing the number of repurchases (Lesmana et al., 2020; Otero & Wilson, 2018). Additionally, Cuong (2020) highlighted that the essential attribute is its credibility in product positioning. This credibility is based on the company's willingness to fulfill its promises. Brand credibility improves customers' perceived quality, reduces the perceived risk and the cost of seeking information, thereby increasing the expected utility of customers, and enhances the consumers' decision

to purchase the brand. Even though previous researchers have argued that there is no better time for consumers to rely on brand attributes to make decisions in a time of uncertainty (Loxton et al., 2020). Nevertheless, there are numerous studies on the relationship between brand equity, brand credibility, and purchase intention (Liu et al., 2020; Nayeem, et al., 2020; Upadhyay & Tripathi, 2023; Vinh & Phuong, 2020), especially at a time when consumer's cognitive plans and expectations for a particular brand are disrupted by the COVID-19 pandemic (Dapas et al., 2019). However, studies that look into the purchase decision require further investigation (Haeruddin, 2021; Nguyen et al., 2022), as the intention and decision to purchase are different. In addition, brand credibility is highlighted by numerous past studies that it could be a potential intervening variable (Singh & Banerjee, 2021; Vidyanata et al., 2018), that applied in the various brand and marketing outcomes, which urged researchers to examine the mediating effect of it.

Considering the setbacks and uncertainties brought by the ongoing COVID-19 situation and given the fact that many companies are now caught in limbo as regards brand management (Sharma et al., 2020), this paper intends to assess whether brand equity and credibility play any significant role on consumer purchase decision of FMCG during COVID-19 in Malaysia. As of conducting and reporting this research, COVID is still ravaging the world, and Malaysia is still on conditional lockdown where this study is being carried out. Therefore, the findings reported in this study offer significant insight to brand managers of FCMG and provide a reason for not reducing their brand communication budgets and not relenting in their brand management efforts.

2. Literature Review

2.1. Theoretical Framework

The theoretical framework proposed in this study relies on the proponents of the Signalling theory, which Spence first proposed in 1973. Signaling theory explains how people reduce the information asymmetry inequality in the market (Spence, 1973; Wu & Huang, 2020;). According to Kirmani and Rao (2000), signaling theory emphasizes the main components, including the signaler, signal, and receiver. Since various signals are sensed to differing degrees by receivers, the accuracy of signals containing information about the firm, products, and the interaction between the organizations is highlighted (Spence, 2002; Wu & Huang, 2020).

In this case, signals are epitomized through the characteristics and the overall perceptions of a brand that can help consumers bridge the gap between what they already know and what they want to know. The crucial part is that the signal's interpretation affects the signal receivers' decision-making process (Rahman et al., 2018). As such, this study argues that consumers will rely heavily on their perception of brand equity and brand credibility in making purchase decisions about FMCGs primarily due to the uncertainties caused by the COVID-19 situation. On the one hand, Keller (2001) explained brand equity as the entirety of consumers' mindsets ranging from feelings, experiences, images, perceptions, beliefs, attitudes, and thoughts about the performance and functionalities of a brand.

Brand credibility operationalizes consumers' sense of belief and acceptance of product communications (Jun, 2020). Numerous studies have documented how strong and successful brand equity positively influences consumers' decisions and purchase behavior (Raji et al., 2020). Similarly, brand credibility has also been demonstrated as a crucial determinant of consumers' favorable behavior, especially when consumers are grappling with uncertainties and risks. In other words, the theoretical framework proposed in Figure 1 depicts consumers' purchase decisions of FMCGs as an outcome of brand equity and brand credibility. Meanwhile, consumers' perceived brand credibility is expected to be strongly influenced by brand equity. More so, brand credibility is also proposed to indirectly impact the relationship between brand equity and consumers' purchase decisions of FMCGs.

2.2. Hypotheses Development

Brand equity is a prominent concept in brand management, according to Keller (2016), brand equity is

described as the value of a brand in the eyes of consumers, or the perceived utility and overall superiority of a product due to its brand name compared with other brands.

Brand equity is considered one of the most valuable intangible assets of the company, the higher the level of brand assets, the consumer' preferences, and purchase intentions will also be improved accordingly (Seo et al., 2020). Previous research also confirmed that establishing good brand assets is one of the effective ways to improve the performance of the company and powerful brand equity can build a brand that can resist competition (Ilias et al., 2020; Jeon, 2017).

Prior research has confirmed a positive relationship between brand equity and purchase decisions (Adam & Akber, 2016; Binangkitsari & Sulistiono, 2018; Haeruddin, 2021; Husain et al., 2022; Nguyen et al., 2022; Rizwan et al., 2021). Several researchers have conducted surveys and studies on different industries in different countries and cities. To examine the relationship between brand equity and consumer purchase decisions of footwear brands, Siali, et al., (2016) sent a questionnaire to 384 respondents in Sarawak, Malaysia. The results showed that brand equity is constructed by four dimensions, brand awareness, brand association, perceived quality and brand loyalty, and a positive association between brand equity and purchase decision.

Rahmah et al., (2018) investigated 271 coffee consumers in a coffee shop in Bogor, Indonesia, and concluded that brand equity has a direct and significant impact on purchase decisions because consumers can easily differentiate the products they buy from others, brand equity is helpful in the purchasing decision-making process.

Adam and Akber (2016) aimed to investigate the impact of brand equity on consumers' purchasing decisions. The researchers selected five mobile phone brands, Samsung, Apple, Nokia, HTC, and Q-mobile, and surveyed 300 respondents in Karachi and Lahore in Pakistan. The majority of respondents felt that brand association, brand awareness, brand quality, and brand loyalty as the elements of brand equity guided and affected their purchase decision of mobile phones. Based on the previous discussion, the following hypothesis is proposed:

H1: Brand equity has a positive impact on the purchase decision.

Takaya (2019) conducted exploratory research on the influence of brand equity, price, and consumers on the brand credibility of Vivo and found that price has a significant impact on consumer brand credibility, and brand equity also has a significant effect on consumer brand credibility. The brand equity of the study refers to consumers' brand loyalty, brand recognition, brand trademarks, patents, etc. These brand assets provide value to consumers and companies in various ways, and consumers' perceived products with high brand equity would have more credibility.

Kalra (2016) believes that brand equity is produced by consumers' different responses to brand marketing activities. The main reason for this difference is the different perceptions of the brand in consumers' minds. This brand equity model has several critical implications. Brand equity originates from the differentiated responses of consumers, and one of the dominant responses of this differentiated response is the difference in consumers' brand credibility (Purani & Jeesha, 2021).

Perera et al., (2020) chose undergraduates from Sri Lanka Higher Education Institutions (HEIs) to study the relationship between brand equity and brand credibility of HEIs. Research shows that there is a positive relationship between brand equity and brand credibility. Brand equity is beneficial to improving the understanding of the brand, encouraging students to improve their learning ability, increase their trust in HEIs, and continue to study further. The influence of brand credibility varies in market environments and different industries, thus, the following hypothesis is proposed:

H2: Brand equity has a positive impact on brand credibility.

Jun (2020) investigates Airbnb (a leading platform in the home-sharing lodging industry) and tests the study empirically from a Signaling theory perspective. In a market with asymmetric information,

companies need to deliver reliable information to consumers. The brand positioning information used by the company should make consumers feel credible and dependable, and the company must be able and willing to fulfill its promise (Chin et al., 2020). A trustworthy brand makes it easier for purchase decisions, particularly when it comes to intangible and heterogeneous items like lodging, and thus increases purchase intention. Therefore, credibility can drive consumers to have confidence in the company's products, thereby affecting consumers' purchase decisions (Nilasari & Handayani, 2021).

Sheeraz et al., (2016) chose the transport service industry and catering industry in the Punjab province of Pakistan, as the previous research on brand credibility only focused on physical product form (goods) rather than service. The results showed that there is a positive relationship between brand credibility and purchase decisions which aligned with the study of Liu and Zheng (2024). If the brand can fulfill its promise, consumers are willing to pay for the services. If they cannot realize the promises, it will tarnish the brand value. Clear and credible brand signals will reduce consumers' perceived risk and information cost, and make consumers willing to buy more, hence, the following hypothesis is formulated:

H3: Brand credibility has a positive impact on the purchase decision.

2.3. Brand credibility as a mediator

In prior studies, brand credibility can be affected by brand equity, and brand credibility can also influence purchase decisions (Martín-Consuegra et al., 2018). Therefore, brand credibility can be used as a mediator (Perera et al., 2022). For instance, Singh and Banerjee (2021) aim to examine the mediating role of brand credibility on the relationship between celebrity credibility on brand equity and customers' relationship continuity in the smartphone industry. The results have proven a significant relationship between brand credibility as a mediator between celebrity credibility, brand equity, and relationship continuity. This has also aligned with the study of Alrwashdeh et al., (2022) where they found brand credibility mediates the social media influencers and customer patronage in an electronic service company in Jordan. Furthermore, numerous past studies (see Chin et al., 2020; Karahan, 2022; Vidyanata et al., 2018) also confirmed that brand credibility is a mediator in the relationship between perception of celebrity endorsements and related outcome variables, which include purchase intentions.

Vidyanata et al., (2018) research confirmed the mediating role of brand credibility between celebrity endorsement and purchase intention. In the e-commerce scenario, consumers tend to consider a brand's credibility to reduce the risk as much as possible, and endorsers can enhance brand credibility. The brand credibility that consumers perceive through endorsers can drive their purchase decisions. Similarly, the results of Bakhshaei and Fallahi (2016) also confirmed the mediating role of brand credibility. Because it is more difficult for consumers to be satisfied with the service, enterprises should respond to the needs of consumers and make changes. If consumers are satisfied, their brand loyalty will also increase. The results show that brand credibility plays a mediating role between the perceived quality of services and brand loyalty. Therefore, better service can boost the credibility of the brand. Based on the above notion, the study hypothesized:

H4: Brand credibility mediates the impact between brand equity and purchase decision.
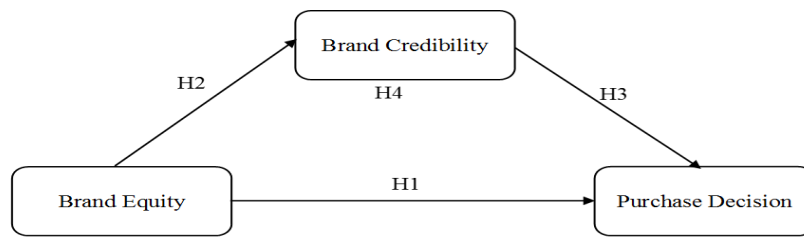
Fig 1. Proposed Conceptual Framework

3. Methodology

3.1. Research design

This study adopts a quantitative (survey) design, whereby a structured questionnaire was distributed to consumers who have purchased the particular FMCG products to answer the survey. With the use of a structured questionnaire, the researchers can effectively understand the respondent's views (Babbie, 2020). Quantitative research focuses on collecting data objectively and systematically using structured procedures and formal instruments. Accurate data facilitates subsequent statistical analysis (Queirós et al., 2017). Quantitative research can quickly collect a large amount of information and provide data support for the study.

3.2. Sampling procedure

G*Power software was used to perform the power analysis to identify the minimum sample size required in this study (Erdfelder et al., 1996). G*Power developed by Faul et al., (2007, 2009) is suitable for determining the appropriate sample size. Based on this study, the minimum sample size calculated by G*Power is 89. 140 customers who have experience in buying FMCGs of a company were surveyed.

After the sample size was determined, the appropriate sampling method should be applied to select the respondents. This study chose non-probability sampling, whereas purposive sampling was utilized in this study. Researchers need to identify and find people who have the knowledge or experience to provide information. (Etikan et al., 2016). In this sampling technique, the sample collection process does not include all participants or units in the population equally as the respondents need to fulfill the criteria set before they can answer the survey. Hence, for this study, the respondents must be a customer who has experience purchasing X FMCG brands/ products, so that they can perceive the brand equity much more accurately compared to those who are not.

3.3. Instrument/ Measurement

A questionnaire was developed for data collection. The questionnaire was written in English. The instrument comprised four (4) sections with 17 items. Section A asked about the respondents' demographic profile, including the respondents' gender, age, race, education, income level, and whether they have ever purchased X FMCG's products before. Section B consists of the exogenous variable, namely brand equity, and the four items used in this section are adapted from Mathew, et al., (2012). Section C includes three items related to brand credibility (mediating variable), which are adapted from Sadek et al., (2018). Section D comprises four items about the purchase decision, where the items are adapted from O'Cass (2000) (see Appendix 1). The survey items for Section B, Section C, and Section D are measured based on the five-point Likert-type scale, 1 denotes "Strongly Disagree," 2 represents "Disagree," 3 indicates "Somewhat Agree," 4 illustrates "Agree," and 5 denotes "Strongly Agree."

3.4. Common Methods Bias (CMV)

Common Method Variance (CMV) is the systematic error variance shared among variables calculated

with the same source or method (Richardson et al., 2009). According to Podsakoff, et al., (2003), Harman's Single-Factor was used in this study to check on the CMV. If the Harman test results show that the total variance was less than 50%, CMV is not considered an issue. The total variance from Harman's Single Factor in this study was 45.202%. Thus, CMV is not an issue in this study.

3.5. Data collection procedures

The researchers distributed an online questionnaire through Google Forms. The online questionnaire included a brief introduction of the intention to conduct the study, the voluntary essence of participation, anonymity, and confidentiality declarations. The online questionnaire links were sent to the respondents through WhatsApp, WeChat, and Facebook. Researchers included a screening question "Do you/ have you ever purchased any X FMGC's products before?" to assist in filtering out the invalid responses. The questionnaire was collected from March 01 to March 31, 2021. The data collection is still in the period of the COVID-19 pandemic and at the phase of the Recovery Movement Control Order (RMCO).

3.6. Data Screening Procedures

Since the data were collected using an online survey, all the responses received were captured automatically in the database. No missing value was identified since the survey was designed to prevent the respondents from missing out on any items when answering the questionnaire, where the respondents were only able to move to the next page of questions, once they had answered the current one. The data cleaning was carried out, including the elimination of the outliers and straight-line responses, which happens when the respondents give the same responses across the questionnaire, such as respondents ticked the same answer for the 5-point Likert-type scale for the constructs. After the data cleaning process, the final number of 140 valid data was used for the data analysis.

4. Results

4.1. Profile of Respondents

Table 1 explains the demographic data of 140 respondents. Out of 140 respondents in the study, relative equality of gender, where 47.1% were male, and 52.9% were female. The highest respondents' age was between 31-35 (23.6%). Since the study was conducted in Malaysia, the race of the respondents has various categories. Among them, more than half (53.6%) were Chinese, accounting for the most significant proportion, while the rest were Malays (22.1%), Indians (16.4%), and others (7.9%). More than half (57.0%) of the respondents have a Bachelor's degree, which indicates that the respondents are well-educated and able to make rational judgments. A quarter of the respondents had a monthly income between RM 2001 and RM 4000 (35.0%), which shows the respondents are financially well and have buying power in the market.

Table 1. Demographic Profile of the Respondents (n=140)

Variable(s)	Frequency	%
Gender		
Male	66	47.1
Female	74	52.9
Age		
<20	9	6.4
21-25	25	17.9
26-30	30	21.4
31-35	33	23.6
36-40	22	15.7
41-45	12	8.6
>45	9	6.4

Race
Malay	31	22.1
Chinese	75	53.6
Indian	23	16.4
Others	11	7.9

Education
STPM/HSC/Diploma	28	20.0
Bachelor Degree	57	40.7
Master Degree	46	32.9
Ph.D	9	6.4

Income level
< RM 2,000	17	12.1
RM 2,001- RM 4,000	49	35.0
RM 4,001- RM 6,000	48	34.3
RM 6,001 and above	26	18.6

4.2. Measurement model

According to Hair et al., (2019), Smart-PLS (v. 3.3.9) software is suitable for studying predictive nature. Therefore, the study's hypotheses were evaluated using structural equation modeling through Smart-PLS (v. 3.3.9). For this study, Cronbach's alpha (CA) and composite reliability (CR) were used to determine indicator reliability, while convergent validity (AVE) and discriminant validity were investigated for validity.

The criterion to test whether a model is reliable is whether its Cronbach's alpha is more significant than the 0.7 value. If the result is greater than 0.7, it is reliable (Hair et al., 2016). Cronbach's alpha values for all variables are greater than 0.7, as shown in Table 2. Item reliability of each variable (outer loadings), the composite reliability (CR), and average variance extract (AVE) are used to determine the model's convergence validity (Fornell & Larcker, 1981).

Hair et al. (2016) state that if the loading is greater than or equal to 0.708, the CR and the AVE are greater than or equal to 0.7 and 0.5 respectively, the convergent validity is established. Table 2 shows that the loading values are all in the range of 0.734 to 0.840 and greater than 0.708. All of the items passed the threshold of 0.7, with CR values ranging from 0.835 to 0.859 and AVE being greater than 0.5. Hence, all the criterion of the measurement model was met.

Table 2. Assessment of Measurement Model

Construct	*Items*	*Loadings*	*CA*	*CR*	*AVE*
Brand equity (BE)	BE1	0.800	0.766	0.850	0.587
	BE2	0.759			
	BE3	0.767			
	BE4	0.737			
Brand credibility (BC)	BC1	0.734	0.703	0.835	0.629
	BC2	0.840			
	BC3	0.801			
Purchase decision (PD)	PD1	0.737	0.782	0.859	0.604
	PD2	0.766			
	PD3	0.794			
	PD4	0.810			

Note: CA = Cronbach's alpha; CR = Composite reliability; AVE = Average Variance Extraction

Henseler et al., (2015) propose the multitrait-multimethod matrix, often known as the Heterotrait–Monotrait ratio (HTMT) of correlations. HTMT is used to ascertain discriminant validity. This study

used a complete bootstrapping procedure with 5,000 resamples confidence intervals. As shown in Table 3, the upper bound of HTMT confidence intervals does not exceed the value of 1. Hence, discriminant validity was ascertained based on HTMT $_{inference}$ criteria (Henseler et al., 2015).

Table 3. HTMT ratio

Construct	BE	BC	PD
BE			
BC	1.017 CI$_{95}$[0.66-0.81]		
PD	0.984 CI$_{95}$[0.36-0.68]	0.951 CI$_{95}$[0.14-0.47]	

4.3. Structural model

When the measurement model is verified and confirmed to have validity and reliability, the structural model can be evaluated. The path coefficient, t-values, coefficient of determination (R^2), cross-validated redundancy (Q^2), and effect size (f^2) were all investigated in the structural model.

Table 4 and Figure 2 show the results. For H1, the results show that brand equity positively affects the purchase decision ($\beta = 0.534$, $t = 5.661$, $p < 0.001$), thus supporting H1. For H2, the results reveal that brand equity has a positive impact on brand credibility. Therefore, H2 is supported ($\beta = 0.751$, $t = 16.100$, $p < 0.001$). For H3, all of the results confirmed that brand credibility positively affects purchase decisions, thus supporting H3 ($\beta = 0.308$, $t = 3.064$, $p < 0.05$).

R^2, which reflects the model's explanatory power, was then analyzed in this study (Henseler et al., 2009). According to Cohen (1988), R^2 value of 0.02 is weak, a value of 0.13 is moderate, and a value of 0.26 is substantial. This study discovered that brand equity and brand credibility explain significant variance in the purchase decision of particular FMCG products ($R^2 = 62.7\%$). Furthermore, brand equity explained a substantial variance in brand credibility ($R^2 = 56.4\%$). Cohen (1988) divided the effect size of f^2 into small, medium, and large, with corresponding values of 0.02, 0.15, and 0.35, respectively. As shown in Table 4, brand equity has a medium impact on purchase decisions ($f^2 = 0.334$), brand equity has a greater impact on brand credibility ($f^2 = 1.294$), and brand credibility has a weak effect on purchase decisions ($f^2 = 0.111$).

Table 4. Structural Model Result for Direct Relationships

Hypotheses	Path coefficient	Std. error	t-values	p-values	R^2	Q^2	f^2	VIF	Decision
H1) BE→PD	0.534	0.093	5.661[**]	<0.001	0.627	0.369	0.334	2.294	S
H2) BE→BC	0.751	0.047	16.100[**]	<0.001	0.564	0.347	1.294	1.000	S
H3) BC→PD	0.308	0.100	3.064[*]	<0.05			0.111	2.294	S

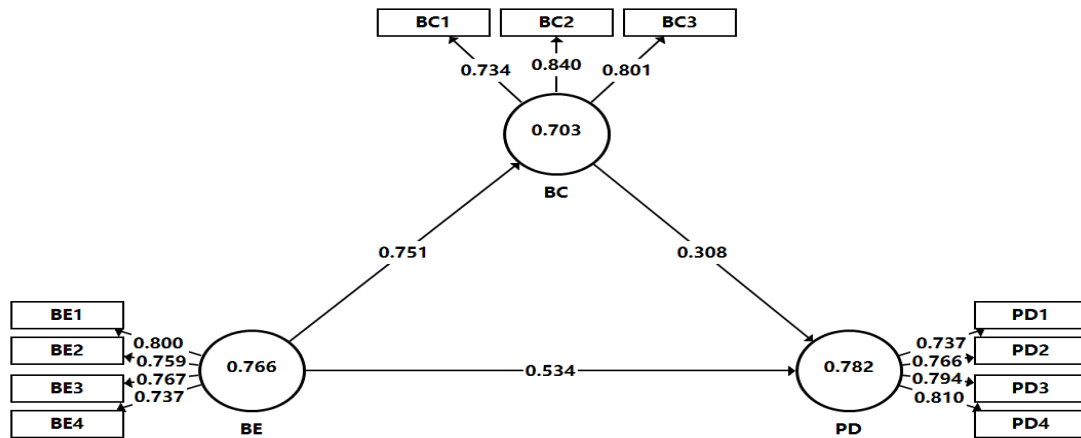Note: [**]p< 0.01, and [*]p <0.05
S= Supported
1-tailed test

Fig 2: Structural model

4.4. Mediation Analysis

Brand credibility mediates the relationship between brand equity and purchase decision ($\beta = 0.231$, $t = 2.969$, LLCI = 0.080, ULCI = 0.378). Because the lower and upper confidence intervals do not straddle a zero, it can be said that the indirect path is significant. This shows that brand credibility mediates the relationship between brand equity and purchase decision, and H4 was supported.

Table 5. Structural Model Result for Indirect Effect

Hypotheses	Indirect effect	t-values	p-values	CI: [LL-UL]	Decision
H4) BE→BC→PD	0.231	2.969[*]	<0.05	0.080-0.378	S

Note: [**]P < 0.01, and [*]P <0.05
CI= Confident interval; LL = Lower limit; UL = Upper limit; S= supported
2-tailed test

PLS-SEM was introduced as a "causal-predictive" approach to solving the apparent dichotomy between explanation and prediction (Shmueli et al., 2019). To be helpful for future studies, variables can be replaced as the study continues to evolve, and the researchers hope to assess out-of-sample prediction ability by retaining the sample (Hair, 2020). Shmueli et al., (2016) proposed the PLSpredict procedure to make this analysis easier in PLS-SEM, this holdout-sample-based procedure case-level predictions on an item or constructs level.

PLSpredict was used to verify the predictive relevance of the model in this study. The overall predictive significance of each path model endogenous construct was determined using Q^2 (Geisser, 1974; Stone, 1974). Since their resulting Q^2 values (0.347 and 0.369, respectively) are above zero (see Table 4), the Q^2 evaluation indicates that both brand credibility (BC) and purchase decision (PD) have sufficient predictive relevance effects in the model. PLSpredict was used to assess the model's predictive relevance for out-of-sample prediction. The findings can be summarized as follows: (1) brand credibility has a medium predictive power, and (2) purchase decision has a high predictive power (see Table 6).

Table 6. PLS Predict

Construct	Items	PLS-SEM		LM		PLS-SEM - LM		Interpretation
		RMSE	Q²_predict	RMSE	Q²_predict	RMSE	Q²_predict	
BC	BC1	0.801	0.275	0.794	0.289	0.007	-0.014	Medium
	BC2	0.737	0.334	0.744	0.333	-0.007	0.001	
	BC3	0.778	0.416	0.782	0.410	-0.004	0.006	
PD	PD1	0.869	0.296	0.893	0.257	-0.024	0.039	High
	PD2	0.774	0.300	0.778	0.292	-0.004	0.008	
	PD3	0.801	0.394	0.811	0.380	-0.010	0.014	
	PD4	0.748	0.388	0.766	0.359	-0.018	0.029	

Note: High: PLS<LM for all the items; *Medium*: PLS<LM for most items; *Low:* PLS<LM for a minority of the items.

5. Discussion

The results of the study confirmed that brand equity could influence brand credibility and purchase decisions. This finding is consistent with previous studies as brand equity is a good driving factor for consumers' purchase decisions in different industries (Adam & Akber, 2016; Husain et al., 2022; Rahmah et al., 2018; Rizwan et al., 2021; Siali et al., 2016).

This result shows that brand equity can enhance the particular FMCG brand's credibility and increase the purchase decision of its product. As it has been empirically proven pre-COVID-19, the result of this study aligns with the fact that consumers' perception and mindset toward brands enhance their trustworthiness and believability of the brand performance and prepositions. Therefore, the importance of brand equity is that the brand can improve its credibility through long-term efforts and good business behavior to trust the brand more. As such, they are investing in branding and reinforcing the brand attributes of a product through consistent brand communications are particularly important during the crisis generated by the COVID-19 situation. Previous studies in recent years (Kalra, 2016; Purani & Jeesha, 2021; Singh & Banerjee, 2021) have similarly demonstrated that the enhancement of brand equity will increase consumers' decision to buy products, and consumers' evaluation of the brand will tend to be good, and increase their interest and participation in the brand so that they can reduce the time to consider when they buy the brand/ products.

Additionally, the result reported in this study demonstrated that brand credibility strongly affects consumers' purchase decisions, which means that brand credibility is an inevitable consideration when consumers make a purchase decision. As such, consumers' perception of trustworthiness and they are belief in the brand's ability to deliver on its product-communication promises will encourage consumers to make favorable purchase decisions. Recent empirical reports such as (Chin et al., 2020; Cuong, 2020; Jun, 2020) have also confirmed the importance of brand credibility on consumers' behavior, especially in the face of risk or in an uncertain situation. In addition, brand credibility is reported as a significant mediating variable between brand equity and purchase decisions. This is also consistent with previous studies (Alrwashdeh et al., 2022; Chin et al., 2020; Karahan, 2022; Singh & Banerjee, 2021; Vidyanata et al., 2018). As such, this research proves that brand credibility positively mediates the relationship between them. If the particular FMCG company's brand equity is favorable, the brand credibility will also be improved, consumers will have more trust in the brand, and ultimately enhance consumers' determination to make decisions.

Thus, the FMCG management has to educate the consumers that even though the price of the FMCG products might be affordable as they are low-involvement products, the quality of the products/ brand is still assured and credible, as FMCG retail can practice open communication with the consumers as one of the stakeholders to help form the good perception. Besides, the Ministry of International Trade and Industry (MITI) can implement a ceiling price for some of the food commodities to avoid exploitation by the FMCG companies and increase the prices during the difficult time of COVID-19.

Thus, the FMCG companies can utilize their social media as one of the efforts to disseminate transparent product information to the consumers, and this will lead to higher brand equity and favorable purchase decisions as consumerism issues such as hidden fees, higher prices, poor quality of products, deceptive/ false claims in the advertisement, misleading packaging/labeling which can deteriorate the company credibility can be minimized.

6. Conclusion

While the persisting uncertainty caused by COVID-19 has strained budgets, this research demonstrates brand equity and credibility retain importance in guiding consumer selection of FMCGs. The confirmation of credibility's mediating role spotlights the inextricable links between company reputation and product evaluations particularly in times of disruption. As such, business leaders are cautioned against myopic marketing reductions at the expense of nurturing hard-won brand perceptions that ultimately sustain through crises. Scholars also gain richer theoretical insight into the decision journey heuristics and cues amplified when usual metrics are depleted. With the likelihood of prolonged oscillations ahead, safeguarding brand assets emerges as imperative for resuming market dominance.

6.1. Theoretical Implications

The findings reported in this study advance several theoretical propositions. Most importantly, this study validates the preposition of the Signalling theory. By validating the proposed theoretical model, this study affirms the importance of brand equity and brand credibility as essential types of brand signals that can help consumers navigate through the complex journey of purchase decisions. As evident in this study, brand credibility is a crucial signal that can help consumers make purchase decisions, especially in the face of the uncertainties caused by the ongoing COVID-19 situation. Considering the permanent informational noise and fierce competition in the FMCG industry, consumers find it challenging to identify the differences in the multitude of similar products. In addition, consumers are often overwhelmed with too many details that FMCG provides. Therefore, this study asserts that consumers rely on successful brand equity and perceived brand credibility as their evaluative signal to navigate the decision-making process.

Additionally, the findings demonstrated in this study offer a holistic understanding of the relationships between brand equity, and brand credibility in the course of the consumer decision-making process of FMCGs. As such, the result of this study provides a theoretical basis and support to the ongoing argument of branding low-involvement products such as FMCG. This paper, therefore, provides the foundation to challenge further some school-of-thoughts that sometimes exist in the brand management literature. For instance, some brand management theorists have argued against developing brand equity for FMCGs. They argued that consumers only apply the simple rules of buying from the nearest store or buying the cheapest product available when evaluating and making purchase decisions related to FMCG. However, the result presented in this study offers a contrary opinion and provides reasons to argue the importance of brand equity in the FMCG industry by demonstrating its influence on brand credibility and purchase decisions.

6.2. Practical Implications

This study proffers some practical contributions. First, the study shows the critical role of brand equity in the FMCG industry. The result of this study provides specific answers to brand managers who are currently forced by the profound detriment of COVID-19 to contemplate and question if developing brand equity matters. As such, this research demonstrated that in the Malaysian FMCG industry, consumers rely on brand attributes and brand perception in evaluating their purchase decisions of FMCGs. Accordingly, brand managers in the domain of FMCGs are offered an empirical glimpse of the importance of building strong brand equity, which can enhance consumers' perception of trust and restore consumers' confidence in selecting and buying FMCGs. Therefore, brand managers and marketing communication managers are charged to exert their efforts to develop and highlight brand

elements and properties to improve the brand salience and position.

The study also identified the significant role of brand credibility as an intervening variable. The results of this study confirmed that brand credibility not only directly affects the purchase decision but also plays a mediating role between brand equity and purchase decision. Therefore, the company should strive to maintain and improve brand credibility in the eyes of consumers. For example, particular FMCG enterprises should ensure that their products or services are of high quality and meet safety standards. When consumers purchase the products, enterprises should be responsible for their products or services. When problems arise, enterprises should fulfill their commitments to consumers and cannot shirk their responsibilities. In addition, it is easy for consumers to make purchase decisions when they purchase brands with a high reputation, so managers should pay attention to establishing the relationship between brands and consumers by establishing a good reputation.

6.3. Limitations and Suggestions for Future Study

There are some limitations to this study. First of all, due to the influence of the COVID-19 pandemic, the sample size that can be collected is somewhat less, although it is enough for statistical analysis; however, it cannot be generalized due to purposive sampling. In the future, researchers can increase the sample of data collection and have diversity in the samples, which can make the study more representative.

Secondly, this study only examined one company of FMCG international brand in Malaysia. Hence, it is urged that other industries such as the automobile industry, aviation industry, and hotel industry be examined in the future.

In addition, this study only chooses brand equity as an exogenous variable, without the specific dimensions that can measure brand equity precisely. Future research can focus on the analysis of the different dimensions of brand equity and their respective impact on the purchase decision. Furthermore, it also suggested including other variables such as brand reputation, loyalty, and trust to test multiple mediation analyses and to test the demographic attributes as moderating variables to make the current model more robust and contribute to branding and marketing scholarship.

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Appendix 1

Brand Equity
1. Even if another brand/ product has the same features as X, I would prefer to buy X.
2. If I have to choose among brands/products, X is my choice.
3. Even if another brand/ product has the same price as X, I would still buy X.
4. It makes sense to buy X instead of any other brand/ product, even if they are the same.

Brand Credibility
1. X has a brand name that you can trust.
2. X products' claims are believable.
3. X is at the forefront of using technology to deliver better products.

Purchase decision
1. Making purchase decisions for X is significant to me.
2. I place great value on making the right decision when it comes to X.
3. Purchasing X is significant to me.
4. I like being involved in purchasing X.