



Moviegoers in Malaysia: The mediating effect of brand recall on product placement and purchase intentions

Clarence Anthony Puspanathan*
Universiti Tunku Abdul Rahman (UTAR), Malaysia
clarencan@utar.edu.my

Khor Kheng Kia and Charles Ramendran SPR
Universiti Tunku Abdul Rahman (UTAR), Malaysia

ABSTRACT

This deductive research investigated brand recall effect as a mediator in the relationship between plot-integrated product placement, auditory-stimulated product placement, and the consumer purchase intentions of the multi-ethnic cinema patrons in Peninsular Malaysia. Product placement has been a significant factor in shaping the purchasing decisions of moviegoers from a variety of ethnic backgrounds in Malaysia. The theoretical framework for this research was derived from Tripartite Typology of Product Placement and Theory of Planned Behaviour (TPB). The research respondents were Malay, Chinese, Indian, and other ethnic groups that frequented movie theatres (cinemagoers) in Peninsular Malaysia. All the states that make up Peninsular Malaysia were represented, except for Kelantan and Perlis. This was because both states did not have any theatres that are currently operational. Respondents were approached by interviewers after they had finished watching movies at the theatre. In total, 513 respondents participated in the survey. For this research, the survey questionnaire was adapted from the research instruments of past studies. To analyse and evaluate the relationship between the study hypotheses, data was analysed with the Smart (PLS) Partial Least Squares: Structural Equation Model (SEM) software using the Multi Group Analysis (MGA). The findings demonstrate that brand recall does play the role of mediator in the relationship between plot-integrated product placement, audio-stimulated product placement, and the consumer purchase intentions of all ethnic groups from Peninsular Malaysia.

Keywords: *Product placement, consumer purchase intentions, cinema patrons, brand recall and movies*

INTRODUCTION

Product placement marketing, which inserts products into movies and TV shows, has a tremendous impact on consumers, according to Srivastava (2020). Over the last two decades, various studies have investigated product placement in movies (PQ Media, 2020). Natarajan et al. (2018) found that affinity for movie stars and inventiveness are two important factors affecting product placement efficacy, and Hollywood films tend to be enjoyed by many people. Further, product placements in creative, plot-related movies have been shown to increase brand awareness by 29% (Chaney et al., 2018).

Thus, product placement in Hollywood films is becoming more popular as a cost-effective (though not the greatest) approach to sell to a worldwide audience (Yee Chan, 2016). Li and Deng (2020) stated that Hollywood produces the highest number of movies per annum. Further, Hollywood films have had many successful product placements (Vogel et al., 2021). In terms of product placement, sales of Reese's Pieces surged by 65% in three months following the 1982 debut of *E.T.*, sales of Ray-Ban sunglasses jumped by 40% after *Top Gun*, and Audi demand increased by more than 30% after *Iron Man 2* in April 2010. Hood (2022) highlighted that after *Top Gun: Maverick* came out, Ray-Ban RB3025 Aviator has risen to become the most popular pair of sunglasses. This includes sales in Malaysia.

To appeal to audiences, Abdul Latif and Abu Hassan (2020) contended that a movie must be cinematic and creative. According to a Concavebt (2021) survey, Hollywood films have had a substantial amount of sponsored product placements, and the figure has been rising significantly over the years. Malaysian viewers have seen more product placements in Hollywood films than in any other media. Malaysians like Hollywood movies, as illustrated in Table 1, which presents income from Hollywood movie screenings in Malaysia (2016–2020).

Table 1. Revenue generated from Malaysian screenings of Hollywood movies

Year	Amount	Notes
1 2016	USD \$ 144,203,434	
2 2017	USD \$ 145,089,098	
3 2018	USD \$ 147,857,237	
4 2019	USD \$ 151,326.685	
5 2020	USD \$ 51,326,685	(Figures from the 1st quarter of the year. Cinemas ceased operations temporarily from the 2nd quarter onwards due to COVID-19 restrictions).

Source: National Film Development Corporation Malaysia (2020)

Based on the figures in Table 1, one can agree that Malaysian viewers spend a lot of money on Hollywood films and are unwittingly exposed to product placements. In this regard, product placements in Hollywood films are a powerful marketing tool that can influence Malaysian viewers' shopping decisions. According to Nielsen (2018), the more a client watches movies containing product placements, the more likely they are to buy the products shown (Vogel et al., 2021).

Filmmakers and marketers use auditory and visual effects to boost product placement and brand recall. As such, only cinemagoers can experience these sound and visual effects in the placements within movies in cinemas with Dolby stereo, DTS, and Panavision systems. Movies watched on television and computer cannot provide these similar experiences with extraordinary effects. As such, Peninsular Malaysia moviegoers of various ethnicities were the target group for the study, and they were surveyed as they left the cinema after watching a movie.

Studies show that ethnicity influences customer attitudes and behaviours (Nguyen et al., 2020) and clients with similar ethnic backgrounds have similar buying habits. For instance, Hashim et al. (2018) found that ethnicity affects home gadget purchases. Kristanto & Brahmana (2016) also found that ethnicity and products affect purchasing decisions differently, and therefore, marketers may target different ethnic groups with different products. Khan et al. (2015) found that ethnic signals increase brand and commercial likeability among ethnic customers (Armstrong et al., 2014; Hedstal et al., 2022). Therefore, marketing strategies must include unknown aspects like ethnic-based promotion and marketing (Armstrong et al., 2014; Hedstal et al., 2022). Culture also affects behaviour while community influences values, beliefs, goals, and behaviour. Thus, marketers must deliberate how much to change their goods and campaigns for distinct markets. Ethnic marketing helps firms to sell their products as corroborated by Armstrong et al. (2014) and Moro et al. (2019) who found that ethnic factors, including social, emotional, cultural, and physiological factors, can influence consumer purchasing. Based on this, marketers can find different appeals to attract multi-ethnic customers.

Consumer purchase intention involves the customer's choice to buy a product after evaluating it (Younus et al., 2015). A customer's willingness to pay and attitude towards buying determine his or her purchase intention (Zhang et al., 2020). Customers are different everywhere, and their buying habits and intentions are influenced by the region's prosperity as well as other social and economic factors (Boone, 2015). In this regard, this study examined how Hollywood product placements affect the shopping decisions of Peninsular Malaysia's main ethnic groups (e.g., Malays, Chinese, Indians & others). There are many studies that have investigated product placement in Malaysian cinemas. For example, Omar et al. (2017) discovered that product placement in Malaysian movies acts as a stimulant for consumer purchasing intentions. In another study, KPD Balakrishnan et al. (2012) explained the relationship between brand memory, brand choice, loyalty, and intention to purchase among Malaysian young moviegoers and brand placement acceptability based on consumers' views. Mohd Nordin and Baharom (2018) also examined Malaysian filmgoers' product placement awareness.

Brand recall also mediates product placement and purchasing intention. A mediator variable can explain how an independent variable and a dependent variable are linked (Calder et al., 2021). According to Calder et al. (2021), mediation research investigates whether the independent variable affects the (non-observable) mediator variable, which in turn influences the dependent variable. Brand recall is the mental recreation of a target product (Hertzberg & Rask et al., 2021). Corkindale et al. (2021) mentioned that "the proportion of customers who recall marketing and other communications provided about a brand." A buyer recognises a brand by memorising its facts while brand recall requires people to accurately recall a brand when provided brand-related cues (Sharma & Bumb, 2022).

Product placement, according to Balasubramaniam and Gistri (2021), has the compelling potential to elicit memory recall from viewers who have experienced the placement activity. Similarly, viewers can reliably recognise and recall things that have been prominently shown in product placement initiatives, according to Kuenang et al. (2022). Simply put, product placement causes brand recall, which triggers the audience's memory, allowing them to favourably recognise product placements in films and, in turn, influencing their buying intentions.

Pires and Stanton (2019) argued that consumer culture affects how they use goods and services. Thus, before establishing marketing strategies, marketers must research their target audience's cultures, languages, habits, beliefs, and experiences. "One size fits all" no longer applies to marketing. In this respect, the findings of this study can help advertisers and marketers to create personalised strategies, messaging, and programmes to engage with various ethnic groups, notably in Malaysia.

LITERATURE REVIEW

Theory of planned behaviour

The theory of planned behaviour (TPB) links thoughts and actions. According to Icek Ajzen (1985), an individual's behavioural intentions are determined by three main factors: attitude, subjective norms, and perceived behavioural control. TPB holds that human social behaviour is largely influenced by behavioural purposes. The theory has six constructs that reflect the true behaviour of an individual. The constructs are attitudes, behavioural intentions, subjective norms, social norms, perceived power and perceived behavioural control. This research used the idea of planned behaviour to describe and test its phenomenon. The construct of attitudes was measured, as this construct of the theory states that one may undertake a desired activity of interest, which supports the idea of cinemagoers, the respondents of this research who have watched movies in a cinema. The central thrust of this research is purchase intentions.

Multi-ethnic moviegoers' purchase intentions are supported by the theory's behavioural intention construct. Buyers want goods and services quickly (Shalender & Sharma, 2021). Dong et al. (2020) discovered that brand recall, as the mediator variable which triggers purchase intentions, is supported by the theory's perceived behavioural control construct. Essentially, numerous purchase intention studies have employed TPB (Liu et al., 2020; Jebarajakirthy & Lobo, 2014; Nimri et al., 2020; Aboelmaged, 2021; Dong et al., 2020; Lim & An, 2021; Shalender & Sharma, 2021).

The tripartite product placement typology

The tripartite product placement typology is a model for understanding the efficacy of product placement initiatives. Product placements have three primary qualities as a marketing approach. Tripartite typology divides product placement into visual, aural, and narrative integration (Russell, 2019). The three-dimensional or tripartite model refers to the combination of these elements. These three product placement dimensions can be used on their own or in combination.

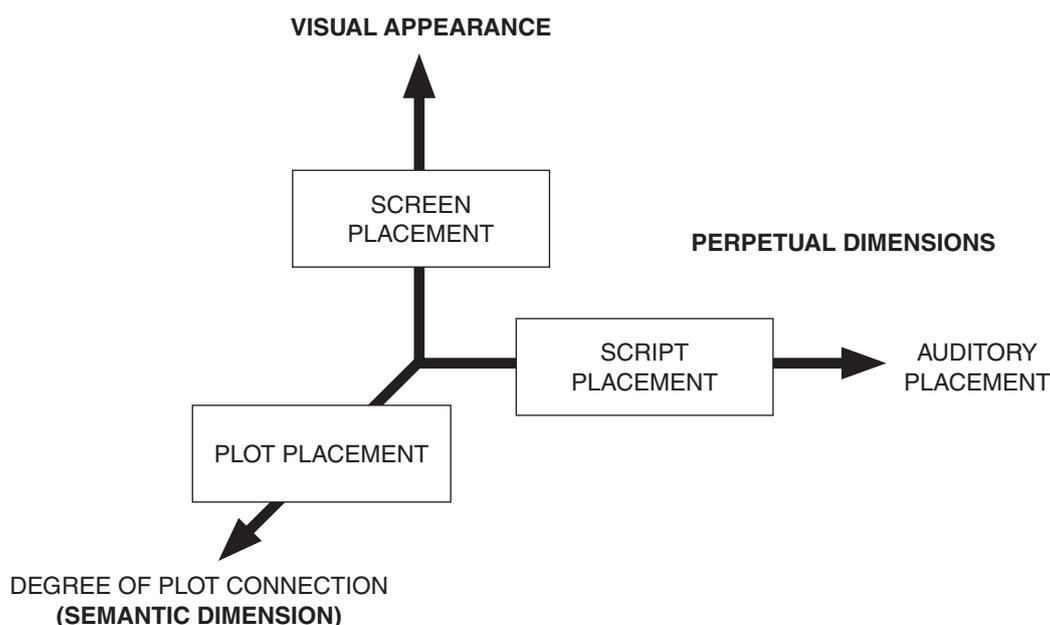


Figure 1. Russell's tripartite typology of product placement (Russell, 2019)

Product placement plot integration

This modality of product placement is extremely common in Hollywood movies, and multiple studies have shown that incorporating the product in the narrative of a movie considerably enhances the probability that the movie will be an economic success (Russell, 2019; Iyer, 2018). At one point, the plot of the movie centres almost entirely on the item being indirectly sold in the scenario. Gillespie et al. (2018) noted that a successful example of product placement that makes use of storyline integration can be found in the film *The Italian Job* which was released in 2003. The film centres on a bunch of crooks who intend to steal money from an old partner of theirs, and the film included the classic Mini Cooper as the getaway vehicles that the thieves used. The car serves as the focal point of the movie plot. Thus, the audience is tied to events that play a significant role in the narrative; connections to the storyline require the actual handling of objects and can have a significant bearing on the outcome (Russell, 2019).

Audio product placement

This concept takes place when a character in the movie audibly mentions the product's name as part of the dialogue of the movie (Laban et al., 2020). The product itself does not appear. Three elements have an impact on the significance of the audio placement: the area or context in which a brand is alluded to or acknowledged, the frequency of the brand being mentioned, and how important the brand name itself (Russell, 2019). Hearing information has a larger effect than viewing it since people may integrate information even when they are not looking at a television or movie screen. People are more intrigued in the character's conversation. "The public will pat themselves on the back saying, 'See how clever I am for using the same item as the hero,' when a celebrity promotes a well-known product," (Laban et al., 2020).

Visual product placement

When a company's logo, product, or service is displayed in the background or within the set of a television programme or in the movies, this element is known as visual product placement (Russell, 2019). As an illustration, a can of Pringles left on the kitchen table in a scene of one of the movies or television shows is a form of visual product placement (Seipel et al., 2018). It has been proven, however, that a bigger number of product placement displays on screen leads to a greater number of individuals being aware of the product. On the other hand, some marketers employ "screen placement strategies" to boost the product's recognition and reputation (Parengkuan et al., 2020). Most marketers believe that displaying the product repeatedly during presentations will increase customer awareness.

The tripartite typology of product placement was chosen since it supports the independent variables of this study (Gillespie & Joireman, 2016; Kristanto & Brahmana, 2016; Shen et al., 2018; Parengkuan et al., 2020; Hertzberg & Rask, 2021; Kembuan et al., 2021). For this study, plot-integrated product placement and audio stimulus product placement were tested as independent variables.

Plot integrated product placement and consumer purchase intentions

A key modality that needs to be given considerable amount of attention is plot-integrated product placement in movies. The incorporation of products into a film's plot or storyline is called storyline integration (Russell, 2019). In this respect, Gerhards (2019) discovered that product placement enhanced customers' purchasing intentions for the highlighted product.

Product placements that are well-integrated increase audience's attention and demand, according to a study by Russell (2019). A well-connected and integrated product placement plot indirectly generates a character for the film, and if it is well-developed, it may draw viewers' attention. Users like to relate to storyline items, especially if they have a big impact (Kristanto & Brahmana, 2016). According to Srivastava (2020), people like being linked with items inside the storyline, especially if the product has a strong effect, which may make them buy it or leave a lasting memory.

Audio product placement and consumer purchase intentions

According to Russell (2019), verbal or auditory placement involves the movie cast discussing the brand or product without the product appearing in the scenes. According to Kakkar and Nayak (2019), the more a product is mentioned, the more likely it is to impact viewers' purchasing intention. "Audible placement" means spoken placement. It is when a movie character mentions the product or discusses it with other characters. Frequent mentions of the product may influence viewer purchases (Sharma & Bumb, 2022).

Three factors that affect audio placement are brand mentions, brand name, and brand recall (Russell, 2019; Laban et al., 2020). Studies have shown that audiences do prefer products being mentioned within the dialogue of a movie. "When a celebrity promotes a well-known product, the general audience will be more inclined to purchase the product as it gives them a sense of satisfaction for utilising the same product used by their idols" (Laban et al., 2020).

Brand recall mediates the causal relationship between plot integrated product placement and consumer purchase intentions

Balasubramaniam and Gistri (2021) defined brand recall as the customer's capacity to recall a specific brand within a category. People will remember a brand when it appears in a movie and is integrated into the plot. Alternatively, brand recall is based on the viewer's memory ability, that is, the consumer's capacity to recognise and recall a brand in various scenarios (Gamble et al., 2014).

Apart from this, whenever a moviegoer sees a product, they will be able to recognise it in the future when the product is referenced. For example, Ray-Ban aviator sunglasses come to mind when one recalls *Top Gun* (Balasubramaniam & Gistri, 2021). Customers are more inclined to purchase known products and audiences' purchase decisions are influenced by the products they can recall (Parengkuan et al., 2020). Thus, customers' brand recall successfully mediates their brand purchase preferences (Calder et al., 2021).

Brand recall mediates the causal relationship between audio product placement and consumer purchase intentions

Pancaningrum and Ulani (2020) defined "brand recall" as consumers' capacity to mentally recall a brand within a category that they have viewed previously. In other words, consumers will recall a brand when a product is mentioned. Even though it should be easy, remembering a brand is not. Brand recall in the most basic degree of brand awareness and is characterised by a large amount of information used to identify a brand, according to Gamble et al. (2014).

Srivastava (2020) highlighted that marketers and companies may utilise several product placement tactics to sell a product in movies and TV shows. One of the most famous audio placements in movies is: "Get your hands off my Jordans," which Jamie Fox tells an assailant in *White House Down* (Guo et al., 2019). Brand recall helps moviegoers remember promotional spots and purchase the related goods. Thus, audio placement and

purchase intention depend on brand recall to have a significant impact on the viewers' purchase intentions (Srivastava, 2020).

The following hypotheses were developed from the literature discussed earlier:

- H1: Product placement plot integration has a positive relationship with consumer purchase intentions.*
- H2: Product placement audio placement has a positive relationship with consumer purchase intentions.*
- H3: Brand recall mediates the causal relationship between plot integrated product placement and customer purchase intentions.*
- H4: Brand recall mediates causal relationship between audio placement product placement and customer purchasing intentions.*

RESEARCH FRAMEWORK

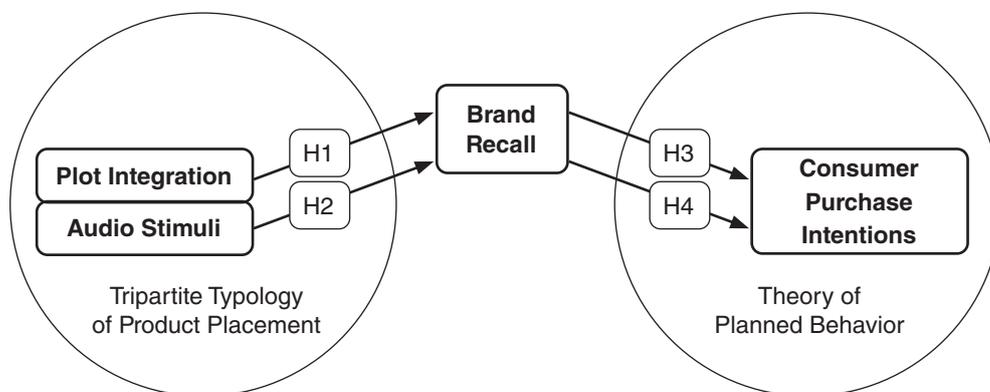


Figure 2. Research framework for study

METHODOLOGY

This research adopted a quantitative method, using statistical data. This approach is used to find patterns, forecast outcomes, explore causal links, and derive results for numerous populations (Mehrad & Zangeneh, 2019).

Data collection

The study's target group was moviegoers from all Peninsular Malaysian states except Perlis and Kelantan, which do not have any operating cinema theatres. To determine the sample size needed to generalise the outcome, this study employed the sample size guidelines set by Krejcie and Morgan (1970, as cited in Rahi, 2017). These guidelines are still used by social science researchers today (Wahab et al., 2019). Moviegoers who were leaving a screening were approached to participate in this study. They were given a cover letter and briefed about the study's objectives and the protection of their data (Mukesh et al, 2013). This study used stratified sampling, a probability sampling approach to sample moviegoers from several states. This approach used strata to randomly choose individuals from a range of dissimilar groupings. Each individual represented a particular stratum (Sekaran & Bougie, 2016). A total of 283 women (55.2%) and 230 men (44.8%) were sampled. Of these, 52% were full-time workers while 36.5% were Malay, 34.9% Chinese, 26.9% Indian, and 1.8% other ethnicities.

Table 2. Sampling size according to states

State	Population	%	Respondents	B	C	I	O
Johor	3,318,283	16	105	73	24	7	1
Kelantan	1,890,098	9	59	41	13	4	1
Kedah	1,459,994	7	46	31	10	3	1
Malacca	788,706	4	26	18	5	2	1
N. Sembilan	997,071	5	33	23	7	2	1
Pahang	1,443,315	8	52	36	12	3	1
Penang	1,520,143	8	52	36	12	3	1
Perak	2,258,428	11	72	50	15	5	1
Perlis	227,025	1	7	4	1	1	1
Selangor	5,411,324	26	170	118	38	10	1
Terengganu	1,015,776	5	33	23	7	2	1
TOTAL	20,360,213.00	100	655	452	148	44	11

Note: B*(Bumiputra), C*(Chinese), I*(Indian) & O* (other ethnicities). The figures in the table above are based on the population size of Peninsular Malaysian states and then divided into various ethnicities.

Table 3. Number of operating cineplexes in Malaysia

Location	Total cineplexes
Peninsular Malaysia	145
Eastern Malaysia	21
TOTAL	166

Source: National Film Development Corporation Malaysia (2020)

Sampling method

The sampling process was divided into two parts. The researcher adopted the following sampling methods for this research.

Sampling method 1: Stratified sampling

In the first part, Malaysia's total population of 32,047,698 was calculated based on the results of stratified sampling percentage. Stratified sampling was used to obtain a random proportionate sample size. This method was used to randomly identify participants from a variety of unique groups by establishing strata and selecting individuals at random from each tier (Rahi, 2017). This technique organised the population for research purposes (Sekaran & Bougie, 2016). A stratified sample refers to a sample that has been separated into groups, examined, and sampled using a stratified methodology, gender, and ethnicity, for instance. Then, a random sample of each will be collected (Sekaran & Bougie, 2016).

Sampling method 2: Random sampling

The second component of the sampling was a compilation of strategies for selecting an appropriate research sample. An example of this would be a baseline sample where samples were selected from those who meet the baseline requirements. In the context of this research, the baseline requirement was moviegoers of multiple ethnicities (Rahi, 2017). This sampling strategy was used since the respondents were accessible and within the vicinity of the researchers (Sekaran & Bougie, 2016). Random sampling was carried out to randomly select the sample (Rahi, 2017). This technique offers an advantage in that all those eligible have equal opportunities of being selected from the complete region. While time-consuming and costly, this approach ensures a representative sample (Rahi, 2017).

Methods of approaching the target population

As stated earlier, the study's target group was Malay, Chinese, Indian & other ethnicity moviegoers who went to see Hollywood movies of their choice at cinemas. Since the data was collected in the public space outside the cinema, no formal authorization from the cinema operators were required.

Data collection location

Data was collected at TGV, GSC, MBO, and Lotus Five Star movie theatres in several states, including Kedah, Penang, Perak, Selangor, Negeri Sembilan, Malacca, Johor, Pahang, and Terengganu (newly opened cinema).

Data collection time frame

All the data needed for the study was gathered prior to the execution of the Movement Control Order, and in person. Data collection was carried out from July 1, 2019 to February 26, 2020.

Translation and content validity

The study questionnaire was first evaluated in two stages before it was administered to respondents. In the first stage, the questionnaire was evaluated by English language experts. In the second stage, an assessment of the instrument was conducted by a marketing expert. A pilot test was also conducted.

Measurement scales

The Likert scale is suitable for analyzing a person's ideas, attitudes, behaviors, beliefs, and other personality characteristics. Positive (Strongly Agree, Agree), negative (Strongly Disagree, Disagree), and neutral (Undecided) Likert scale options offer unbiased responses (Willits et al., 2016). Ho (2017) noted that Likert-type scales also save time and money in research. Further, closed-ended questions are better because respondents and researchers favor them (Omwancha, 2020). It improves questionnaire responses and aids researchers in data analysis. All respondents understood the study's survey and provided correct responses. Only respondents who understood product placement were given the opportunity to participate in the survey. The data obtained validated the hypothesis.

Research instrument

A closed-ended survey questionnaire was utilized for data collection. The questionnaire was developed by adapting survey instruments from previous research. It was designed with questions to help the researcher obtain data pertaining to the research phenomenon. Appendix A presents the list of questions in the survey.

Survey questionnaire

Table 4. Adaptations of study constructs

Construct	Adapted from	No of Items
Plot Integration	da Silva Oliveira Barroso (2011); Advincula et al. (2021);	4
	Abrahamsson & Lindblom (2012)	4
Audio Stimulation	da Silva Oliveira Barroso (2011); Advincula et al. (2021);	4
	Abrahamsson & Lindblom (2012)	3

Table 4. (con't)

Construct	Adapted from	No of Items
Visual Stimulation	da Silva Oliveira Barroso (2011); Advincula et al. (2021);	4
	Abrahamsson & Lindblom (2012)	3
Brand Recall	KPD Balakrishnan et al. (2012); Abrahamsson & Lindblom	6
	(2012)	1
Purchase Intentions	KPD Balakrishnan et al. (2012); Abrahamsson & Lindblom	6
	(2012)	2

FINDINGS AND DISCUSSION

Findings

Table 5. Demography of respondents

		Frequency	Percentage (%)	Cumulative Percentage (%)
Age	20-30	263	51.3	51.3
	31-40	141	27.5	78.8
	41-50	69	13.5	92.3
	51-60	40	7.7	100.0
		513	100	
Gender	Male	230	44.8	44.8
	Female	283	55.2	100.0
		513	100	
Academic Qualification	SPM	111	21.6	21.6
	STPM/Foundation	104	20.3	41.9
	Diploma	166	32.4	74.3
	Degree	97	18.9	93.2
	Masters	23	4.5	97.7
	PhD	12	2.3	100.0
	513	100		
Race	Malay	187	36.5	36.5
	Chinese	179	34.9	71.4
	Indian	138	26.9	98.3
	Others	9	1.7	100.0
	513	100		
Marital Status	Married	187	36.5	36.5
	Single	287	55.9	92.4
	Divorced	28	5.5	97.9
	Widowed	11	2.1	100.0
	513	100		
Employment Status	Fulltime	267	52	52
	Part-time	52	10.1	62.1
	Contract	17	3.3	65.4
	Freelance	35	6.8	72.2
	Unemployed	142	27.8	100.0
	513	100		
State Of Origin	Kedah	42	8.2	8.2
	Penang	53	10.3	18.5
	Perak	85	16.6	35.1
	Selangor	77	15.0	50.1

Table 5. (con't)

	Frequency	Percentage (%)	Cumulative Percentage (%)
Negeri Sembilan	45	8.8	58.9
Melaka	71	13.8	72.7
Johor	51	9.9	82.6
Pahang	10	1.9	84.5
Terengganu	17	3.3	87.8
Kuala Lumpur	62	12.2	100.0
	513	100	

Table 5 provides details of respondents who participated in the survey. Respondents came from all Peninsular Malaysian states except for Perlis and Kelantan due to lack of operating cinemas in these states. Malays contributed 187 responses out of 513 (36.5%), 34.9% or 179 of the 513 respondents were Chinese, 138 out of 513 (26.9%) were Indians while other ethnicities represented just 1.8% of responses (9 respondents).

Measurement model

The researcher analyzed vital information using SMART PLS. The study hypothesis was tested using the PLS SEM software which computes research data statistically. Hair et al. (2014) explained that the PLS outer model is used to determine reliability, content validity (loading and cross loading), AVE, and discriminant validity. The common method bias of this study was calculated at 38.88%, below the 50% threshold, which suggests that this research fulfills the common method bias requirement (Sarstedt et al., 2014). Table 6 shows that the measurement model's loadings are larger than 0.70, which is Hair, Sarstedt et al.'s (2017) criterion. The composite reliability score and AVE of all constructs also surpass 0.5 (Dijkstra & Henseler, 2015). Thus, convergence is achieved. The variance inflation factor determines multicollinearity (VIF). Hair et al. (2018) found no collinearity with a variance inflation factor (VIF) of five or less. Multicollinearity across constructs makes evaluations unstable and makes it hard to differentiate the effects of different dimensions on the construct (Ramayah et al., 2018).

Table 6. Results of measurement model analysis (reliability of constructs)

Items	Loadings	Cronbach's Alpha	rho_A	CR	AVE	VIF
c1pi2	0.754	0.824	0.828	0.877	0.588	1.626
c1pi3	0.802					1.993
c1pi4	0.811					1.988
c1pi6	0.714					1.511
c1pi8	0.748					1.561
c3as1	0.746	0.857	0.862	0.897	0.637	1.791
c3as2	0.823					2.174
c3as3	0.801					1.847
c3as6	0.818					2.066
c3as7	0.798					1.947
d1br1	0.793	0.885	0.886	0.912	0.634	2.073
d2br2	0.82					2.432
d4br4	0.802					2.09
d5br5	0.785					2.011
d6br6	0.807					2.178
d7br7	0.77					1.895

Table 6. (con't)

Items	Loadings	Cronbach's Alpha	rho_A	CR	AVE	VIF
e1cpi1	0.789	0.918	0.921	0.934	0.638	2.296
e2cpi2	0.817					2.62
e3cpi3	0.834					2.733
e4cpi4	0.776					2.209
e5cpi5	0.861					2.985
e6cpi6	0.821					2.501
e7cpi7	0.734					1.914
e8cpi8	0.749					2.022

Note: Audio Stimuli (c3as1-c3as7), Plot Integration (c1pi2-c1pi8), Brand Recall (d1br1-d7br7) and Consumer Purchase Intentions (e1cpi1-e8cpi8).

Ghozali (2014) suggested that reliability tests should produce values of more than 0.70 to meet the required standards for reliability. Based on the outcome of the reliability test, all variables achieved loadings greater than 0.70. Thus, the results are trustworthy and satisfy the requirements. For discriminant validity, it was determined that all constructs are different from one another. When the HTMT value exceeds 0.85 (Ramayah et al., 2018) or 0.90, discriminant validity becomes problematic (Falahat et al., 2020). Table 6 demonstrates that every build value was less than 0.85. Therefore, this study demonstrates discriminant validity between all constructs and most items.

Table 7. Results of (HTMT) ratio

	AS	BR	PI	PLI
AS	0.798			
BR	0.723	0.796		
PI	0.699	0.681	0.799	
PLI	0.624	0.548	0.621	0.767

The results of direct relationship and mediation effect presented in Table 7 demonstrate that all hypotheses are explicit from H1 to H4, and the table also includes the T-statistics value for each hypothesis. When the hypothesis is significant, the *t*-value is more than 1.64 at $p < 0.05$, 2.33 at $p < 0.01$ for a one-tail test, 1.96 at $p < 0.05$, or 2.58 at $p < 0.01$. The table indicates that there are eight significant hypotheses, H1, H2, H3 and H4 as both the lower limit (LL) and the upper limit (UL) have positive values.

Table 8. Hypothesis bootstrapping results

Hypothesis	Beta value	Std. error	<i>t</i> -value	<i>p</i> -value	LL	UL	<i>R</i> ²	<i>F</i> ²	Decision
AS → BR	0.584	0.073	8.052	0	0.458	0.698	0.541	0.325	Decision
AS → PI	0.291	0.077	3.809	0	0.17	0.421	0.591	0.069	Supported
BR → PI	0.313	0.073	4.299	0	0.187	0.427		0.11	Supported
PLI → BR	0.144	0.059	2.424	0.008	0.051	0.245		0.026	Supported
PLI → PI	0.244	0.055	4.482	0	0.154	0.334		0.082	Supported
AS → BR → PI	0.373	0.056	6.664	0	0.275	0.46			Supported

Table 8. (con't)

Hypothesis	Beta value	Std. error	t-value	p-value	LL	UL	R ²	F ²	Decision
PLI → BR → PI	0.082	0.042	1.966	0.025	0.016	0.15			Supported
PLI	0.624	0.624	0.624	0.624	0.624	0.624	0.624		Supported

Several empirical thresholds, such as effect size and R^2 values, should be used to assess the structural model (inner model). According to Hair, Hollingsworth et al. (2017), there are various phases in analysing the structural model, starting with collinearity, then path coefficients, R^2 value, f^2 effect size, and Q^2 (predictive relevance). They also proposed a t-statistics threshold of 1.65 with $p < 0.1$ as the confidence interval.

R -squared (R^2) reflects the number of variances accounted for in a relationship between two or more variables and the coefficient for determination in dependent constructs. According to Hair, Sarstedt et al. (2017), endogenous R^2 values are 0.75 (substantial), 0.50 (moderate), and 0.25 (weak). On the other hand, Ramayah et al. (2018) claimed R^2 values of 0.67(substantial), 0.33(moderate), and 0.19 (weak).

Hair, Sarstedt et al. (2017) used 5,000 subsamples to establish significance using consistent PLS bootstrapping. According to Dijkstra & Henseler et al. (2015), based on Table 8, R^2 is modest at 0.552 and 0.463. Cohen offered a significant model with R^2 values of 0.552 on BR and 0.463 on PI above 0.26 (1988).

Next, we should comprehend the F square (effect size) value to establish a good model's power. Results in Table 8 show 0.281, 0.018, 0.019, and BR is 0.863. Hair, Sarstedt et al. (2017) found a high effect size based on Cohen's standards. Henseler et al. (2016) interpreted impact sizes as 0.02 (small), 0.15 (medium), and 0.35 (large). Thus, the model satisfied the measuring requirements of the structural model.

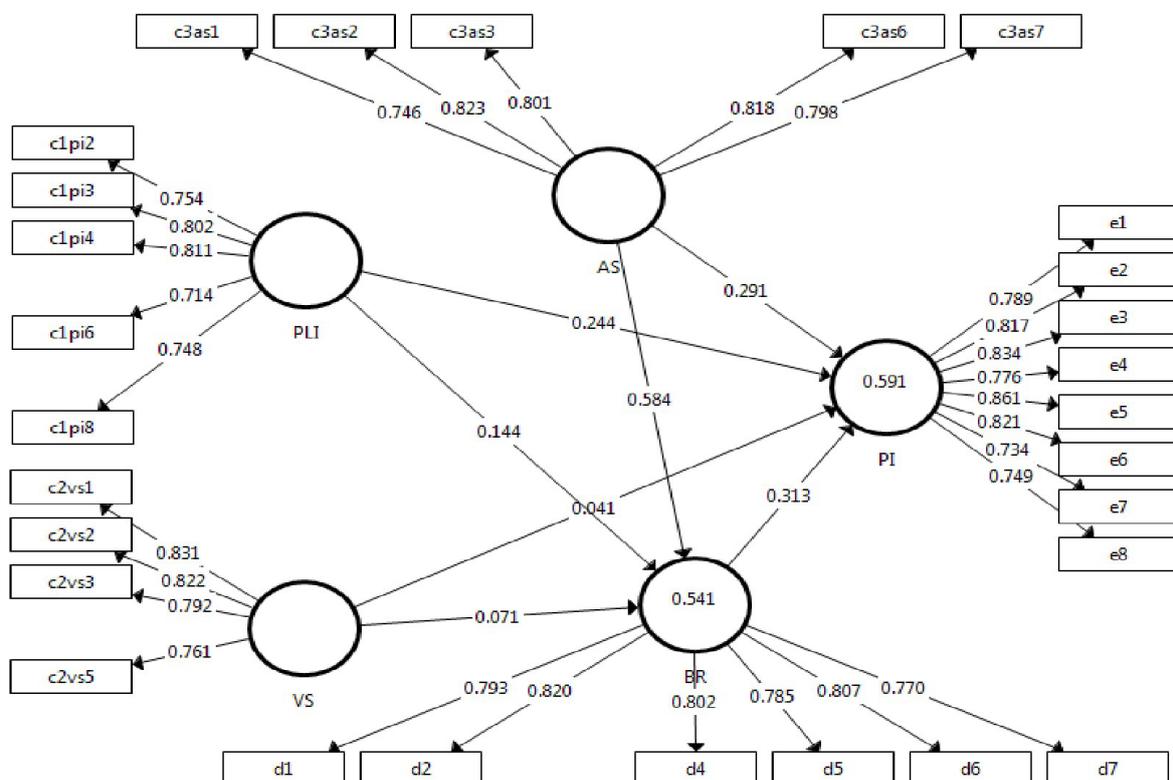


Figure 3. Measurement model

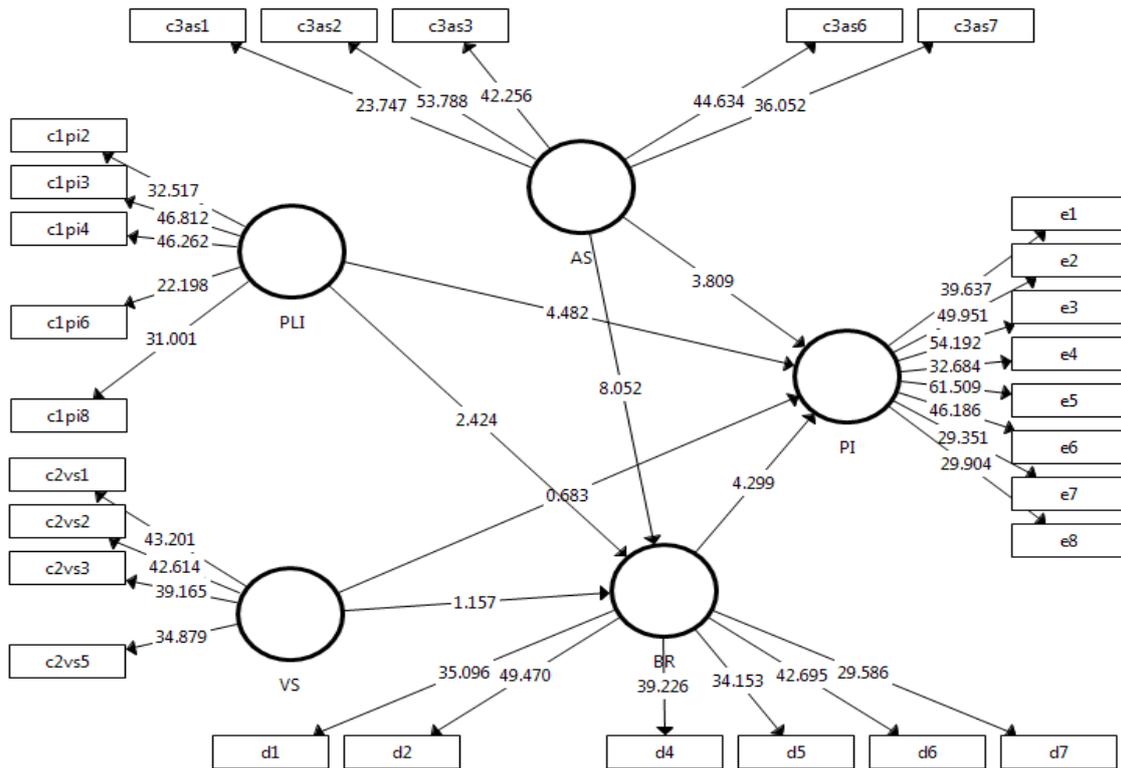


Figure 4. Structural model

Discussion

This study aims to help marketers to better engage with Malaysia’s multi-ethnic target segments by investigating and evaluating the effectiveness of brand recall in product placement (for example, plot integration and auditory stimulation) in Hollywood movies, as well as how they affect the purchase intentions of various ethnicities in Peninsular Malaysia.

The results for hypothesis 1, as illustrated in Table 8, demonstrate that consumers’ purchase intentions can be influenced in favour of a product by using the plot-integrated product placement modality. The fact that these placements are included and embedded in the storylines of the movies has impacted the respondents’ behaviour regarding the marketed product. The theory of planned behaviour explains how humans are influenced to behave in a certain way. The findings of this study are in line with that of Natarajan et al. (2018) who discovered that in the most prominent case of plot-integrated product placement, where Ray-Ban’s Aviator sunglasses appears in *Top Gun*, resulted in an increase in sales of Ray-Ban aviators.

An additional technique of product placement that may be utilised by marketers is known as audio stimuli product placement. In this type of placement, the product is mentioned verbally in the movie’s dialogue, although it is not featured physically as part of the placement and demands the audience to pay careful attention to every line of dialogue in the movie. The results for hypothesis 2, as shown in Table 8, suggest that the positioning of audio placement has a positive effect on the respondents’ intentions to make a purchase. The respondents indicated favourable benefits from the use of audio positioning on their intentions to make a purchase. This conclusion is corroborated by Parengkuan et al. (2020), who found that auditory product placements might affect customer purchases when the precise cinematic banter or placement is recalled. This also

serves as a representation of the subjective norm construct that is a part of Ajzen's (1985) Theory of Planned Behaviour. This refers to the idea that anything may be normalised via repeated exposure and can affect the thoughts and actions of a person.

Plot-integrated product placement is the process of incorporating a product into a movie storyline (Russell, 2019) where the product becomes part of the film's identity. The product is neither used by the actors nor is a prop of the movie, yet it is crucial to the film's narrative (Nimri et al., 2020). As illustrated in Table 8, results for hypothesis 3 implies that brand recall is strongly linked to purchase intentions and suggest that participants' capacity to recall a plot-integrated product may affect their intentions to buy. Similarly, the finding is consistent with earlier studies on brand recall, which demonstrate that it can occur when a client is subjected to placement activity (KPD Balakrishnan et al., 2012; Coskun, 2021). When product placement is linked to consumer purchase intentions, a person's capacity to recall a product or service affects their ability to resist buying. This is compatible with the theory of planned behaviour, which analyses the motivating elements that affect human behaviour (KPD Balakrishnan et al., 2012; Coskun, 2021).

Another typology of product placement consists of unique audio stimuli (Russell, 2019; Nimri et al., 2020). Throughout the movie, a character or actor references the product many times, or the product is pronounced audibly. The product does not appear physically but is only verbally mentioned. The test results for hypothesis 4 confirm that when audio stimuli product placement is integrated with brand recall, it does have a significant influence on customers' purchase intentions. Therefore, while making a purchasing choice, buyers often evaluate their familiarity with the products. According to Coskun (2021), at the conclusion of a movie, the audience will be able to identify the product that has been mentioned or heard several times. This is also an example of the subjective norms construct, in which individuals accept or reject a certain action depending on their perception of whether an influential person values the action or object.

CONTRIBUTIONS AND IMPLICATIONS

Theoretical Contributions

According to Pires and Stanton (2019), ethnicity affects purchase intentions and marketing strategies. Moro et al. (2019) also confirmed that as a multi-ethnic nation, Malaysia's commercial market relies heavily on the various ethnicities that comprise its population. Each ethnicity has different beliefs, customs, feelings, traits, and tastes, therefore one-size-fits-all marketing may not work for all (Licsandru & Cui, 2019). All the aforementioned factors affect ethnicity-specific buying intentions (Nguyen et al., 2020). This is consistent with Russel's tripartite typology of segregating product placement into ethnic-based product placement marketing, finding the correct modality for each ethnicity, and expanding the concept of behavioural intent into multi-ethnic behavioural intent, although the theory is hardly used to study ethnicity. In this respect, this research will contribute to the ethnic marketing literature and assist Malaysian marketers in designing innovative ethnic-based marketing tactics. The research also illuminates the commonalities and key distinctions across ethnicities, allowing marketers to create ethnic-specific marketing efforts.

Managerial implications

Malaysian companies spent USD 1.30 billion on marketing in 2017, according to eMarketer (2017). However, not many organisation could evaluate nor identify which modality is suitable for the different ethnicities. Marketers desire product placement because many

famous movies have applied this approach (Russell, 2019) and product placements in Hollywood movies have helped viewers remember brands (Bajwa et al., 2022).

In Malaysia, product placement research is very scarce. While the majority of the available studies have researched the impact of product placement on consumer buying behaviour or intentions, none has addressed the impact of product placements on the purchase intentions of multi-ethnic moviegoers. Abu Bakar (2020) examined product placement in ads, while Mohd Nordin and Baharom (2018) examined product placement awareness in Malaysian films. Similarly, Omar et al. (2017) examined product placement and consumer behaviour in Malaysian films, while Liew and Lim (2014) examined adolescents' buying patterns. Most research examined product placement and consumer behaviour or purchase intent but none looked at how product placement impacts multi-ethnic moviegoers.

LIMITATIONS OF STUDY

Since the study was investigating the special effects of auditory, visual, and storyline integration, which can only be experienced in a theatre due to improved screening and audio technology, only multi-ethnic cinemagoers (those who watch Hollywood films in theatres) were selected as respondents and this is deemed as a limitation.

Since most of the operating cinemas were in Peninsula Malaysia, the researcher did not include respondents from East Malaysian states like Sabah, Sarawak, and Labuan. Thus, the respondents were limited to Peninsular Malaysians only.

CONCLUSION

Brand recall is vital for the efficacy of product placement marketing since viewers should remember previous product placements. Brand recall tends to help audiences to recall product placements they have viewed. When it comes to influencing consumer purchase intentions, product placement audio stimuli, brand recall, and customer purchase intentions are all interrelated. In conclusion, brand recall does mediate the relationship between auditory stimuli, product placement and Malaysian moviegoers' consumer purchase intentions. The findings also advance the product placement literature and which academics, local marketers, academics, and industry can adopt, expand, refer to as points of reference to better target the multi-ethnic Malaysian target population for future marketing activities.

ACKNOWLEDGEMENT

This research was supported by grants obtained from UTAR Research Fund (UTARRF) IPSR/RMC/UTARRF/2019-C1/C08.

Open Access: This article is distributed under the terms of the Creative Commons Attribution License (CC-BY 4.0) which permits any use, distribution and reproduction in any medium, provided the original author(s) and the source are credited.

References

- Abdul Latif, R., & Abu Hassan, B. R. (2020). Filmic education of borderland texts in Jogho and Bunohan. *SEARCH Journal of Media and Communication Research*, 12(1), 125-139.
- Aboelmaged, M. (2021). E-waste recycling behaviour: An integration of recycling habits into the theory of planned behaviour. *Journal of Cleaner Production*, 278, 124182.
- Abrahamsson, J., & Lindblom, L. (2012). *Product placement: A study about Swede's attitude towards product placements in movies and tv-shows* [Unpublished undergraduate thesis]. Linnaeus University, Sweden.
- Abu Bakar, R.. (2020). Effectiveness of Product Placement. *Asian Journal of Research in Business and Management*, 2(4), 22–25.
- Advincula, B. A., Bernardo, M., & Soriano, A. N. (2021). Measuring the influence of product placements in Korean dramas on the act of purchase of Filipino audiences. *Journal of Business and Management Studies*, 3(2), 268–275.
- Armstrong, G., Adam, S., Denize, S., & Kotler, P. (2014). *Principles of marketing*. Pearson.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckmann (Eds), *Action Control. SSSP Springer Series in Social Psychology* (pp. 11–39). Springer.
- Balasubramanian, S. K., & Gistri, G. (2021). Priming movie product placements: New insights from a cross-national case study. *International Journal of Advertising*, 41(6), 1064–1094..
- Bajwa, A. M., Farooq, T., & Bukhari, S. F. (2022). Analyzing viewers' perception about brand placement in Hollywood, Indian and Pakistani movies. *Indian Journal of Economics and Business*, 21(3), 93–106.
- Boone, L. E. (2015). *Contemporary marketing*. Cengage Learning Inc.
- Calder, B. J., Brendl, C. M., Tybout, A. M., & Sternthal, B. (2021). Distinguishing constructs from variables in designing research. *Journal of Consumer Psychology*, 31(1), 188–208.
- Chan, F. F. Y. (2020). Prior disclosure of product placement: The more explicit the disclosure, the better the brand recall and brand attitude. *Journal of Business Research*, 120, 31–41.
- Concavebt. (2021). *2020 top 10 products placements in movies*. Concave. <https://concavebt.com/top-10-products-placements-in-2020-movies/>
- Corkindale, D., Neale, M., & Bellman, S. (2021). Product placement and integrated marketing communications effects on an informational TV program. *Journal of Advertising*. doi: 10.1080/00913367.2021.1981500 1-19.
- Coskun, S. (2021). An evaluation on the product placement regulations of Turkish audio-visual broadcasting services. In R. Škrijelj & E. Duzgun (Eds), *Academic Studies in Humanities and Social Sciences* (pp. 97–116). Livre de Lyon.
- Chaney, I., Hosany, S., Wu, M. S. S., Chen, C. H. S., & Nguyen, B. (2018). Size does matter: Effects of in-game advertising stimuli on brand recall and brand recognition. *Computers in Human Behavior*, 86, 311–318.
- da Silva Oliveira Barroso, N. A. G. (2011). *The effects of product placement, in films, on the consumers' purchase intentions* [Unpublished master's thesis]. Instituto Universitario de Lisboa, Portugal.
- Dong, X., Zhang, B., Wang, B., & Wang, Z. (2020). Urban households' purchase intentions for pure electric vehicles under subsidy contexts in China: Do cost factors matter? *Transportation Research Part A: Policy and Practice*, 135, 183–197.
- Dijkstra, T. K., & Henseler, J. (2015). Consistent and asymptotically normal PLS estimators for linear structural equations. *Computational Statistics & Data Analysis*, 81, 10–23.
- EMarketer. (2017). Marketing performance metrics, Malaysia. *Insider Intelligence*. <https://www.emarketer.com/performance/channel/59ea3d4bbf9e890eb411eff5/59e6>
- Falahat, M., Ramayah, T., Soto-Acosta, P., & Lee, Y. Y. (2020). SMEs internationalization: The role of product innovation, market intelligence, pricing and marketing communication capabilities as drivers of SMEs' international performance. *Technological Forecasting and Social Change*, 152, 119908.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20.
- Gamble, J., Thompson, A., & Peteraf, M. (2014). *Essentials of Strategic Management* (4th Ed). McGraw Hill.
- Ghozali, I. (2014). An efficiency determinant of banking industry in Indonesia. *Research Journal of Finance and Accounting*, 5(3), 18–26.
- Gillespie, B., & Joireman, J. (2016). The role of consumer narrative enjoyment and persuasion awareness in product placement advertising. *American Behavioral Scientist*, 60(12), 1510–1528.

- Gillespie, B., Muehling, D. D., & Kareklas, I. (2018). Fitting product placements: Affective fit and cognitive fit as determinants of consumer evaluations of placed brands. *Journal of Business Research*, 82, 90–102.
- Gerhards, C. (2019). Product placement on YouTube: An explorative study on YouTube creators' experiences with advertisers. *Convergence*, 25(3), 516–533.
- Guo, F., Ye, G., Hudders, L., Lv, W., Li, M., & Duffy, V. G. (2019). Product placement in mass media: A review and bibliometric analysis. *Journal of Advertising*, 48(2), 215–231.
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442–458.
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An emerging tool for business research. *European Business Review*, 26, 106–121. 10.1108/EBR-10-2013-0128.
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. Sage publications.
- Hashim, N. H., Yahya, W. K., Abu Bakar, S., & Asrul, S. A. (2018). Social influence and eco-label factors towards purchase intention of home products: A PLS approach. *Journal of Emerging Economies and Islamic Research*, 6(3), 1–9.
- Hertzberg, J., & Rask, L. (2021). *The impact of language barriers on product placement: A qualitative study investigating Swedish consumers' brand recall and brand attitude using Netflix original series* [Unpublished master's thesis]. Jönköping University, Sweden.
- Hedstål, A., Chihabi, R., & Nganji, E. (2022). *To what extent does ethnic marketing theories apply to multi-ethnic consumers? A qualitative study examining the impact of the consumer acculturation process on ethnic marketing within a multi-ethnic country (Sweden)*. <http://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-114578>
- Ho, G. W. (2017). Examining perceptions and attitudes: A review of Likert-type scales versus Q-methodology. *Western Journal of Nursing Research*, 39(5), 674–689.
- Iyer, K. V. (2018). *A study of effectiveness of product placement in Indian web series among young consumers*. <http://nevillewadia.com/wpcontent/uploads/2019/03/M4.pdf>
- Jebarajakirthy, C., & Lobo, A. C. (2014). War affected youth as consumers of microcredit: An application and extension of the theory of planned behaviour. *Journal of Retailing and Consumer Services*, 21(3), 239–248.
- Kakkar, A., & Nayak, K. (2019). Analysis of product placement in web series and its influence on consumer buying behavior. *Global Journal of Management and Business Research*, 19(3), 21–27.
- Kembuan, K. F., Lapijan, S. L. V. J. & Wangke, S. J., (2021). The influence of Samsung product placement in Korean drama “Crash Landing on You” on brand memory. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 9(4), 95–104.
- Khan, H., Lee, R., & Lockshin, L. (2015). Do ethnic cues improve advertising effectiveness for ethnic consumers? *Australasian Marketing Journal (AMJ)*, 23(3), 218–226.
- Kuenang, C. D., Lapijan, S. L. J., & Tielung, M. V. (2022). Exploring the effectiveness of product placement in movie and tv show toward purchase decision in Manado. *Jurnal Emba: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 10(1), 1219–1226.
- KPD Balakrishnan, B., & Md. Shuaib, A. A., Dousin, O., & Permarupan, P. (2012). The impact of brand placement and brand recall in movies: Empirical evidence from Malaysia. *International Journal of Management and Marketing Research*, 5(2), 39–52. <https://ssrn.com/abstract=2145012>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607–610.
- Kristanto, H., & Brahmana, R. K. M. (2016). Pengaruh product placement pada film Indonesia terhadap brand awareness dan purchase intention masyarakat Surabaya. *Jurnal Manajemen Pemasaran*, 10(1), 20–26.
- Laban, G., Zeidler, C., & Brussee, E. (2020). Binge-watching (Netflix) product placement: A content analysis on different product placements in Netflix originals vs. non-Netflix originals, and drama vs. comedy shows. *No hxjgf, MediArXiv, Center for Open Science*. <https://EconPapers.repec.org/RePEc:osf:mediar:hxjgf>.
- Li, Q., & Deng, L. (2020). Film authorship and national cinema: An analysis of “Chineseness” in John Woo's Hollywood films. *SEARCH Journal of Media and Communication Research*, 12(2), 59–72.

- Liew, C. K., & Lim, E. Q. P. (2014). The effectiveness of product placement: The influence of product placement towards consumer behavior of the millennial generation. *International Journal of Social Science and Humanity*, 4(2), 138–142.
- Lim, H. R., & An, S. (2021). Intention to purchase wellbeing food among Korean consumers: An application of the Theory of Planned Behavior. *Food Quality and Preference*, 88, 104101.
- Licsandru, T. C., & Cui, C. C. (2019). Ethnic marketing to the global millennial consumers: Challenges and opportunities. *Journal of Business Research*, 103, 261–274.
- Liu, M. T., Liu, Y., & Mo, Z., (2020). Moral norm is the key: An extension of the theory of planned behaviour (TPB) on Chinese consumers' green purchase intention. *Asia Pacific Journal of Marketing and Logistics*, 32(8), 1823–1841.
- Mehrad, A., & Zangeneh, M. H. T. (2019). Comparison between qualitative and quantitative research approaches: Social sciences. *International Journal for Research in Educational Studies*, 5(7) 1–7.
- Mohd Nordin, M. A. S., & Baharom, S. N. (2018). A study on awareness of product placement in Malaysian movies. *Ideology*, 3(2), 235–242.
- Moro, S., Pires, G., Rita, P., & Cortez, P. (2019). A text mining and topic modelling perspective of ethnic marketing research. *Journal of Business Research*, 103, 275–285.
- National Film Development Corporation Malaysia. (2020). List of cinema Malaysia. *Finas*. <https://www.finas.gov.my/en/industry-information/cinema-list/>
- National Film Development Corporation Malaysia. (2022). Data of cinema admission by language. *Finas*. <https://www.finas.gov.my/en/industry-information/cinema-admission-by-language/>
- Natarajan, T., Balasubramaniam, S. A., Stephen, G., Jublee, D. I., & Kasilingam, D. L. (2018). The influence of audience characteristics on the effectiveness of brand placement memory. *Journal of Retailing and Consumer Services*, 44, 134–149.
- Nguyen, K. H., Glantz, S. A., Palmer, C. N., & Schmidt, L. A. (2020). Transferring racial/ethnic marketing strategies from tobacco to food corporations: Philip Morris and Kraft General Foods. *American Journal of Public Health*, 110(3), 329–336.
- Nielsen. (2018, February 7). Nielsen launches product placement measurement tool: News. *Research Live*. <https://www.research-live.com/article/news/nielsen-launches-product-placement-measurement-tool/id/5034072>
- Nimri, R., Patiar, A., & Jin, X. (2020). The determinants of consumers' intention of purchasing green hotel accommodation: Extending the theory of planned behaviour. *Journal of Hospitality and Tourism Management*, 45, 535–543.
- Omar, N. H., Sidek, J. J., & Roslan, N. W. (2017). The effects of product placement in Malaysian movies and its influence on consumer behavior. In *The Asian Conference on Arts & Humanities 2017 Official Conference Proceedings*. IAFOR.
- Omwancha, I. N. (2020). *Influence of service convenience on customer satisfaction: A case study of Kentucky Fried Chicken (KFC) in Nairobi, Kenya* [Unpublished graduate thesis]. Gretsia University, Kenya.
- Pancaningrum, E., & Ulani, T. (2020). The effect of product placement on customer interests in mediation by brand awareness. In *17th International Symposium on Management (Insyma 2020)* (pp. 177–182). Atlantis Press.
- Parengkuan, V. J., Tulung, J. E., & Arie, F. V. (2020). Influence of product placement in movies and television programs towards brand recall of millennials. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 8(1), 2085–2094.
- Pires, G., & Stanton, J. (2019). *Ethnic marketing: Theory, practice and entrepreneurship*. Routledge.
- PQ Media. (2020). Global product placement spend up 14.5% to \$20.6b in 2019, but COVID-19 impact to end 10-yr growth streak in 2020; strong rebound seen in '21 on tv, digital, music growth. report. *Cision PRWeb*. https://www.prweb.com/releases/global_product_placement_spend_up_14_5_to_20_6b_in_2019_but_covid_19_impact_to_end_10_yr_growth_streak_in_2020_strong_rebound_seen_in_21_on_tv_digital_music_growth/prweb17146134.htm
- Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). *Partial least squares structural equation modeling (PLS-SEM) using Smart PLS 3.0. An updated guide and practical guide to statistical analysis*. Pearson Malaysia.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1–5.
- Russell, C. A. (2019). Expanding the agenda of research on product placement: A commercial intertext. *Journal of Advertising*, 48(1), 38–48.

- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105–115.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach (6th Ed)*. Wiley.
- Seipel, M., Freeman, J., & Brubaker, P. (2018). Key factors in understanding trends in Hollywood product placements from 2005 to 2015. *Journal of Promotion Management*, 24(6), 755–773.
- Sharma, S., & Bumb, A. (2022). Product placement in entertainment industry: A systematic review. *Quarterly Review of Film and Video*, 39(1), 103–119.
- Shalender, K., & Sharma, N. (2021). Using extended theory of planned behaviour (TPB) to predict adoption intention of electric vehicles in India. *Environment, Development and Sustainability*, 23(1), 665–681.
- Shen, G. C., Tsai, C. H., Lee, R., & Lai, C. A. (2018). Investigating the impact of product placement on brand attitude: A case of Marvel Movies. In *2018 Global Marketing Conference* (pp. 1142–1143).
- Srivastava, R. (2020). Brand placement in a movie song and its impact on brand equity. *Journal of Promotion Management*, 26(2), 233–252.
- Vogel, C., Crozier, S., Penn-Newman, D., Ball, K., Moon, G., Lord, J., & Baird, J. (2021). Altering product placement to create a healthier layout in supermarkets: Outcomes on store sales, customer purchasing, and diet in a prospective matched controlled cluster study. *PLoS Medicine*, 18(9), e1003729.
- Wahab, S., Shah, M. F. B. M., & Faisalmein, S. N. (2019). The relationship between management competencies and internal marketing knowledge towards internal marketing performance. In *Proceedings of the Regional Conference on Science, Technology and Social Sciences (RCSTSS 2016)* (pp. 531–537). Springer.
- Willits, F. K., Theodori, G. L., & Luloff, A. E. (2016). Another look at Likert scales. *Journal of Rural Social Sciences*, 31(3), article 6.
- Yee Chan, F. F. (2016). An exploratory content analysis of product placement in top grossing films. *Journal of Promotion Management*, 22(1), 107–121.
- Younus, S., Rasheed, F., & Zia, A. (2015). Identifying the factors affecting customer purchase intention. *Global Journal of Management and Business Research*, 15(2), 9–14.
- Zhang, M., Qin, F., Wang, G. A., & Luo, C. (2020). The impact of live video streaming on online purchase intention. *The Service Industries Journal*, 40(9–10), 656–681.

Clarence Anthony Puspanathan

Currently employed as a lecturer in the Department of Public Relations, Faculty of Arts and Social Science, Universiti Tunku Abdul Rahman (UTAR), Kampar Campus. He is currently pursuing his Doctor of Philosophy in Marketing at UTAR. Graduated with a Masters of Corporate Communications from University Putra Malaysia and obtained Bachelor of Arts (Hons) Business Administration from the University of Bolton, United Kingdom.

Khor Kheng Kia

Currently serves as Assistant Professor and Deputy Dean (Academic Development and Undergraduate Programmes), at the Faculty of Arts and Social Science, Universiti Tunku Abdul Rahman (UTAR), Kampar Campus. Received his Doctor of Philosophy (Visual Arts) from University Malaya and has a Master of Science (Creative Multimedia) from Multimedia University Malaysia. He also graduated with a Bachelor of Arts (Hons) Visual Communication from the University of Central England, Birmingham, United Kingdom. His areas of expertise are in animation, computer graphic and digital puppetry.

Charles Ramendran SPR

Currently serves as Assistant Professor at the Department of Business and Public Administration, Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR), Kampar Campus. Completed his Doctor of Philosophy (Human Resource Management) from Universiti Sains Malaysia. Graduated with Master of Human Resource Management from Universiti Utara Malaysia and has a Bachelor of Social Work from Universiti Utara Malaysia.

Appendix A: Research Instrument Items

Plot Integration

- 1 The inclusion of real products in movies makes the scenes more realistic.
- 2 The use of products makes the movies more realistic.
- 3 Products play an important role in the story.
- 4 The products are well connected to the movie's plot.
- 5 I have no problem when a product is involved in the storyline of the movie.
- 6 The product that is placed in the movie should match the movie.
- 7 I buy products that I have seen movie stars using in movies.
- 8 I don't like when the product has a big part in the movie.

Visual Stimuli

- 1 I pay attention to the visual exposition of products.
- 2 The product is well integrated in movies.
- 3 The product interferes in the movie's plot.
- 4 Product position on screen distracts me from the plots of the movies I watch.
- 5 I have no problem with product placements that are visible in movies.
- 6 I like it when our favourite products are visibly used in movie.
- 7 I do not mind when a product appears too often in a movie.
- 8 I do not mind when a logo of a brand appears often.

Audio Stimuli

- 1 I pay attention to the audio mentioning product placements.
- 2 The audio mentioning the placements is well integrated in the in films.
- 3 The audio effects interfere in the film's plots.
- 4 The audio effects of the placements distract my attention.
- 5 I have no problems with product placements which is mentioned or heard (audio).
- 6 I like it when a character mentions a product name in a movie (audio).
- 7 I don't mind when a product is frequently mentioned (audio).
- 8 I can accept product placements which mention the product.

Brand Recall

- 1 I am more likely to remember a product placed in movies than placed in commercial formats.
- 2 I can remember what was said by the product that appears in movie/ what was done with the product/ where the product scene located.
- 3 I can recall at least one product placement in the movie I watched on the following day.
- 4 I can remember the product placement(s) a few weeks after I have seen the placements.
- 5 When a character that I like uses the product in a movie, I am more likely to remember the product.
- 6 When I see a particular product at a store or supermarket that had appeared in a movie, I would think of that placement scene in the movie.
- 7 Do you think that the repetition of a placement facilitates its memorisation?
- 8 Do you think that product placement in movies facilitates memorisation?

Purchase Intentions

- 1 I would purchase products I have seen in movies.
- 2 Product placements in movies make me want to buy the products being shown.
- 3 I started using a product after seeing them in movies.
- 4 I stop using the product that appeared in movie after watching it.
- 5 I buy products that I see movie stars using or holding in movies.
- 6 I would like to buy the products that appeared longer in length/ frequency in movies.
- 7 Could the vision of product used in a film influence your purchase intentions?
- 8 Could your affection for a film influence your purchase decision?

