

Antecedents of Brand Recall and Brand Attitude towards Purchase Intention in advergames.

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Abstract

Research on purchase intention had showed remarkable work in contributing to the theory of buyer behaviour. However, the impact of brand recall and brand attitude on purchase intention in advergames has not yet been well explored especially in a developing economic country such as Malaysia. Furthermore, the influences of self-brand congruity, entertainment and brand placement acceptance as antecedents to brand recall and brand attitude are expecting to put more “value added” to the brand recall, brand attitude and purchase intention relationships. This paper aims to investigate the impact of brand recall and brand attitude on purchase intention in advergames among Malaysian gamers. Also, the antecedents towards brand recall and brand attitude were examined to measure their influences on purchase intention. A total of 350 Malaysian gamers have been interviewed through an online survey for this study. The results showed that self-brand congruity, entertainment and brand placement acceptance were found to have significant relationship with brand attitude and purchase intention. Also, both entertainment and brand placement acceptance were found to have significant relationship with brand recall. As expected, brand recall and brand attitude have positive relationship with consumer purchase intention in advergames. Applications of the study are discussed.

Keywords: Self-congruity, Entertainment, Brand placement acceptance, Brand recall, Brand attitude, Purchase intention, Advergames.

1. Introduction

Advergaming is a cross between advertising and computer games. It combines the word ‘advertising’ and ‘video games’ (Grossman, 2005). Advergaming are a particular form of branded entertainment with insertion of a brand within an entertainment property. It embeds product related messages from companies in the form of game piece, hidden treasures and other parts of the games (Neuborne, 2001; Nelson, 2002). An ‘advergaming’ website can be a place to play and explore and most importantly, it is generally free of charge (Obringer, 2007). In recent years, advergaming have been using persuasive media to promote companys’ new and existing products to end users. In other words, aggressive marketers take advantage of placing their product or brand in programs such as games in order to build product awareness. In conjunction to that, there has been increasing interest in practicing using advergaming to influence customer intention to purchase companys’ brands exposed in the games.

Advergaming is definitely a promising segment which is expanding very rapidly with an estimated five-fold increase by 2009 (Betrim, 2005). Many organisations are starting to use advergaming as a part of their marketing strategy (Winker and Buckner, 2006) to improve branding, to boost product awareness and collect detailed data about existing and potential customers, clients and supporters (Afshar *et al.*, 2004; Buckner *et al.*, 2002; Van der Graaf and Nieborg, 2003). For example, the major advertising agencies such as Young & Rubicam and Starcom Media have set up their new videogame divisions to serve this emerging need.

Advergaming are normally commissioned by the marketing department of an organisation to promote its own brand or product and the game can frequently be accessed via the organisation’s corporate website (Winkler and Buckner, 2006). In-game advertising, on the other hand, is increasingly being coordinated through independent gaming organisations, such as Massive Incorporated (<http://www.massiveincorporated.com/>) (Winkler and Buckner, 2006).

Advergaming is a new marketing concept that has appeared due to the fact that the young generation are always connected to the Internet; using mobile services such as SMS and MMS, chatting with instant messenger services and spending too much time just playing in a stand-alone way or in a network game (Santos *et al.*, 2007). Due to this, marketers take advantage of this opportunity to provide new ways to advertise their product in the

game. This is due to a new revolutionary service, 'advergaming' which is a game with advertisement capabilities (Santos *et al.*, 2007).

Research on purchase intention showed remarkable work in contributing to the theory of buyer behaviour. There are many studies focused on brand recall and attitude towards purchase intention (see Chi *et al.*, 2009; Balakrishnan *et al.*, 2012; Shah *et al.*, 2012). However, its impact in particular towards advergaming have not yet been explored well especially in a developing economic country such as Malaysia. Previous domestic research has found that advertising position, games experience (Ing and Azizi, 2009), telepresence, product and interactive experience in advergaming (Hussein *et al.*, 2010), features of online advertising (Wei *et al.*, 2010) was significantly related to purchase intention. The study of the effect of self-brand congruity on game usage and purchase has been well researched by previous scholars (Davis and Lang, 2013; Davis *et al.*, 2013; Davis and Lang, 2012) and also the effect of self-efficacy on game usage and purchase behaviour (Davis and Lang, 2012). However, the effects of self-brand congruity on purchase behaviour, especially on advergaming has not been well presented in academic research.

In addition, the influence of self-brand congruity, entertainment and brand placement as antecedents to brand recall and brand attitude in advergaming are still lacking and need further examination on how these factors influence consumer's brand recall and brand attitude in the context of advergaming. Therefore, self-brand congruity, entertainment and brand placement are expecting to put more "value added" in the brand recall, brand attitude and purchase intention relationships.

This study's objectives are twofold. Firstly, to investigate the impact of brand recall and brand attitude on purchase intention in advergaming among Malaysian gamers. Secondly, to examine the influence of self-brand congruity, entertainment and brand placement acceptance towards brand recall and brand attitude, as well as their influences on purchase intention in advergaming. It is expected that self-brand congruity, entertainment value and brand placement acceptance have effects on game players' behaviour in their physical activities.

2. Literature review and hypotheses development

This section synthesises relevant literature on self-brand congruity, entertainment and brand placement on brand recall and brand attitude. It describes how these variables influence consumer purchase intention.

2.1 Self-brand congruity

Self-congruity is important to hedonic consumption because the subjective experience of imagination is often led by the evaluation of the product/service image vs the consumer's self-concept (Sirgy, 1982). Self-brand congruity can be conceptualised as the match between a brand's value-expressive attributes (e.g., product/ user images) and the consumer or user's image of self (Sirgy, 1985). Liu *et al.*, (2012) describes brand self-congruity into three important concepts namely brand personality congruity, brand user imagery congruity and brand usage imagery congruity. They suggested that user and usage imagery congruity are stronger predictors for brand attitude and brand loyalty than brand personality congruity in the context of the luxury fashion brands (Liu *et al.*, 2012). According to Davis *et al.*, (2013), self-congruity is important in the context of game due to its impact on imagination and experience. Gamers always seek a significant gap in the congruity between their own actual perceived self-concept and the ideal self (Davis *et al.*, 2013). Gaming generates high levels of emotion and excitement (Fiore *et al.*, 2005) which provide a platform for the experiential amplification of the internal-self (Childers *et al.*, 2001; Scarpi, 2012).

There were remarkable findings in discussing the relationship between self-congruity and purchase intention. For example Sirgy (1985) found that ideal congruity and self-congruity significantly influenced purchase motivation. Recent study by Taylor *et al.*, (2011) on SNS advertisement showed that internal self-congruity was found as important factor in facilitating greater attitudinal acceptance of advertisements designed to appear in the SNS context. They assumed that consumers frequently compare imagery that has been associated with a brand with images they hold about themselves. The greater the congruity, the more positive the consumer's attitude is toward the brand in question (Escalas and Bettman, 2005). Consistently, a study by Sirgy *et al.*, (2008) in extending self-image congruence research into corporate sponsorship suggested that self-congruity with a sponsorship event has a positive influence on brand loyalty. This is when customers are aware of the firm sponsoring the event and when they become involved with the event. These findings showed the importance of self-congruity in determining brand attitude.

Much research in consumer behaviour has demonstrated that actual self-congruity is positively related to consumer behaviour constructs. Examples of these are: brand attitude, brand preference, brand choice, purchase motivation, purchase intention, brand purchase, brand satisfaction, and brand loyalty (see Sirgy *et al.*, 2008; Sirgy, 1982, 1985; Sirgy *et al.*, 2000; Sirgy and Su, 2000). Liu *et al.*, (2012) suggested that user and usage imagery congruity are stronger predictors for brand attitude and brand loyalty in the context of the luxury fashion brands. Also, self-congruity was positively related to game usage and purchase (Davis and Lang, 2013).

Therefore, it is proposed:

- H1a: Self-brand congruity positively influences brand recall in advergames.
H1b: Self-brand congruity positively influences brand attitude in advergames.
H1c: Self-brand congruity positively influences consumer purchase intention in advergames.

2.2 Entertainment

The entertainment aspect of advergames is an important source of value for gamers. It is expected to reflect advergames ability to enhance the experience of gamers to advergames. Uses and gratifications research indicates that the entertainment value of commercial exchange lies in its ability to fulfill the audience's needs for escapism, diversion, aesthetic enjoyment, or emotional release (Ducoffe, 1996). (Ducoffe, 1995; 1996) found a significant positive relationship between entertainment and advertising value in traditional media and in Web advertising. A study of SNS users' perceptions of SNS advertisements as being entertaining and positively would influence their attitudes toward advertising appearing on these SNSs (Taylor *et al.*, 2011). This also supported by Gao and Koufaris (2006) and Brackett and Carr (2001) which mention that perceived entertainment has been identified as one of the determinant influences on consumers' attitudes toward advertising in electronic commerce.

In this study, an entertainment factor is expected to influence brand recall and brand attitude as entertainment is an important element leading consumers' feeling of enjoyment and fun when playing games. If they feel entertained with the in-game advertising, they may recall the brand exposed and react positively towards the brand. This may lead consumers' to further behavioral decision of purchase intention.

Therefore, it is proposed:

- H2a: Entertainment positively influences brand recall in advergames.
H2b: Entertainment positively influences brand attitude in advergames.
H2c: Entertainment positively influences consumer purchase intention in advergames.

2.3 Brand placement acceptance

Although the phenomenon of placing products into the entertainment media began in the very early days of silent movies that progressed into the medium of television in the 1950s, the online environment only prevailed in the 1990s (Vilafranco and Zeltzer, 2006). Brand placement refers to the practice of including a brand name product, package, signage, or other trademark merchandise within a communication medium (Hernandez *et al.* 2004). Balasubramanian (1994) and Schneider (2005) defined product placement as 'a paid product message aimed at influencing movie (and television) audiences via the planned and unobtrusive entry of a branded product into a movie (or television programme)'. There are several limitations to this definition. It is bound to only specific media, movie or television programmes and is only when payment is taking place (Schneider, 2005). Karrh (1998) also argued whether product placement could always be viewed as 'obtrusive'.

In movies, the recent study by Balakrishnan *et al.*, (2012) suggests that brand placement was positively related to brand recall on advertisements in the movies. Since the study only focused on movies, different effects may exist in games. Some suggest that brand placement in games could destroy the fantasy world of games (Nelson, 2002; Nelson *et al.*, 2004) and those who are negative about product placement would also be negative about other types of advertisement (Hernandez *et al.*, 2004; Nelson *et al.*, 2004). Contrasting views were discussed by Molesworth (2005), in which most of the respondents were positive about brand placement, partly because it added realism and help finance the game developers. This was supported by Ho (2006) who concluded respondents' attitudes towards product placement in video games are more positive compared to placement in movies. This is due to the fact that video games are not as realistic as movies, and therefore the quality of video games is dependent on its level of realism.

In games specifically, brand recall was reported to amount to 30% (Nelson, 2002), and through the arousal and valence experienced by the game, brand attitudes were found to be positively influenced (Grigorovici and Constantin, 2004). The strength of placing a brand in an advergame does influence the advertising effects in terms of brand recall and brand attitude (Cauberghe and Pelsmacker, 2010). In terms of brand placement and brand memory, Yang *et al.*, (2006) looked at comparing college students' explicit and implicit memory for brand names. They found that college students had low levels of explicit memory (recognition test) for the brands, but they showed implicit memory (word-fragment test) for the brand names placed in the video games. This result leads to consumer intention to purchase the product after brand exposure. Ing and Azizi (2009) in their study on Malaysian consumers found that advertising position in advergaming had significant relationship on purchase intention.

Therefore, it is proposed:

- H3a: Brand placement acceptance positively influences brand recall in advergames.
H3b: Brand placement acceptance positively influences brand attitude in advergames.
H3c: Brand placement acceptance positively influences consumer purchase intention in advergames.

2.4 Brand recall

Many have argued that the use of advergaming as more persuasive than traditional advertising, especially among

young children (Pavlou and Stewart, 2000; Oanh Ha, 2004; Wade, 2004). This is due to engaging children with rich and animated imagery of a brand, and capturing their attention for extended periods of time (Edwards, 2003). This was further supported by Nelson (2002) study both on familiar brand and non-familiar brands placement in advergames. The findings stated that there was almost 30 percent brand recall of all respondents and 90 percent of the sample remembered at least one brand when asked immediately after the game. Advergaming is a cost effective way to deliver brand messages (Betrin, 2005). It costs less than USD2 per thousand users (Pereira, 2004) compared to television commercials which generally cost USD7 – 30 per thousand viewers.

Different people may experience different things forming different perceptions and attitudes. For example, in a research carried out for college students, compared to their woman counterpart, men were found significantly more likely to play video games two or more hours a week and which indicated that playing video games interfered with sleeping and with class preparation (Ogletree and Drake, 2007). In terms of brand placement and brand memory, Yang *et al.*, (2006) in comparing college students' explicit and implicit memory for brand names, they found that college students had low levels of explicit memory (recognition test) for the brands. However, they showed implicit memory (word-fragment test) for the brand names placed in the video games. This result leads to consumer intention to purchase the product after brand exposure.

The impact of brand recall towards consumer attitude can be different according to the factors involved in the relationship. It was confirmed that highly congruent games lead to superior memory for sponsoring brand in advergames (Gross, 2010). Lee and Faber (2007) in their study in on-line games found that the degree of congruity between the product category of brand and game content influences brand memory. They discovered that highly incongruent brands are better recalled than either moderately incongruent brands or highly congruent brands. Besides that, when the physiological arousal increased, cognitive performance (i.e., memory scores) also increased (Jeong and Biocca, 2012). Chi *et al.*, (2009) suggests that brand recall of brand awareness was positively related to purchase intention.

Thus, it is proposed:

H4: Brand recall positively influences purchase intention in advergames.

2.5 Brand attitude

Most scholarly interest in attitudes toward the advertisement, results from its theorised relationship with attitude toward the brand (Muehling and McCann, 1993). Brand attitude is a necessary communication effect if brand purchase is to occur (Percy and Rossiter, 1992). It is a consumer attitude in an undimensional sense as the sum of the products of beliefs times evaluations, it may be fruitful to examine attitudes as multidimensional constructs consisting of networks of interconnected beliefs and evaluations (Bagozzi and Recall, 1983).

The change in brand attitude attributable to game enjoyment has a stronger relevance to advergames than for product-irrelevant advergames (Wise *et al.*, 2008). Attitudes toward the brand found, leads to purchase intention that is recipients' affective reactions toward the advertised brand (Lutz *et al.*, 1983). Brand attitude strategy is seen as reflecting an interaction between a potential consumer's involvement with the purchase decision and the underlying motivation to purchase (Percy and Rossiter, 1992). Studies have suggested that brand attitude has positive impact on the purchasing intention of customers (Shah *et al.*, 2012; Teng, 2007; Shwu-Lng and Chen-Lien, 2009).

Therefore, it is proposed:

H5: Brand attitude positively influences purchase intention in advergames.

2.6 Purchase intention

The probability that a consumer plans to buy a certain brand or product during a certain period of time is higher, after the consumers simplified the tasks by storing relevant information to establish the purchase decision (Howard and Sheth, 1971; Mathieson, 1991).

Research on purchase intention showed remarkable work in contributing to the theory of buyer behaviour. Although there are many studies focused on brand recall and brand attitude towards purchase intention (see Chi *et al.*, 2009; Balakrishnan *et al.*, 2012; Shah *et al.*, 2012), Chi *et al.*, (2009) suggested that brand recall of brand awareness was positively related to purchase intention. Furthermore, brand attitude strategy is seen as reflecting an interaction between a potential consumer's involvement with the purchase decision and the underlying motivation to purchase (Percy and Rossiter, 1992). These indicate that brand is one of the important factors that determine consumer's purchase decision in consumer buying behaviour process.

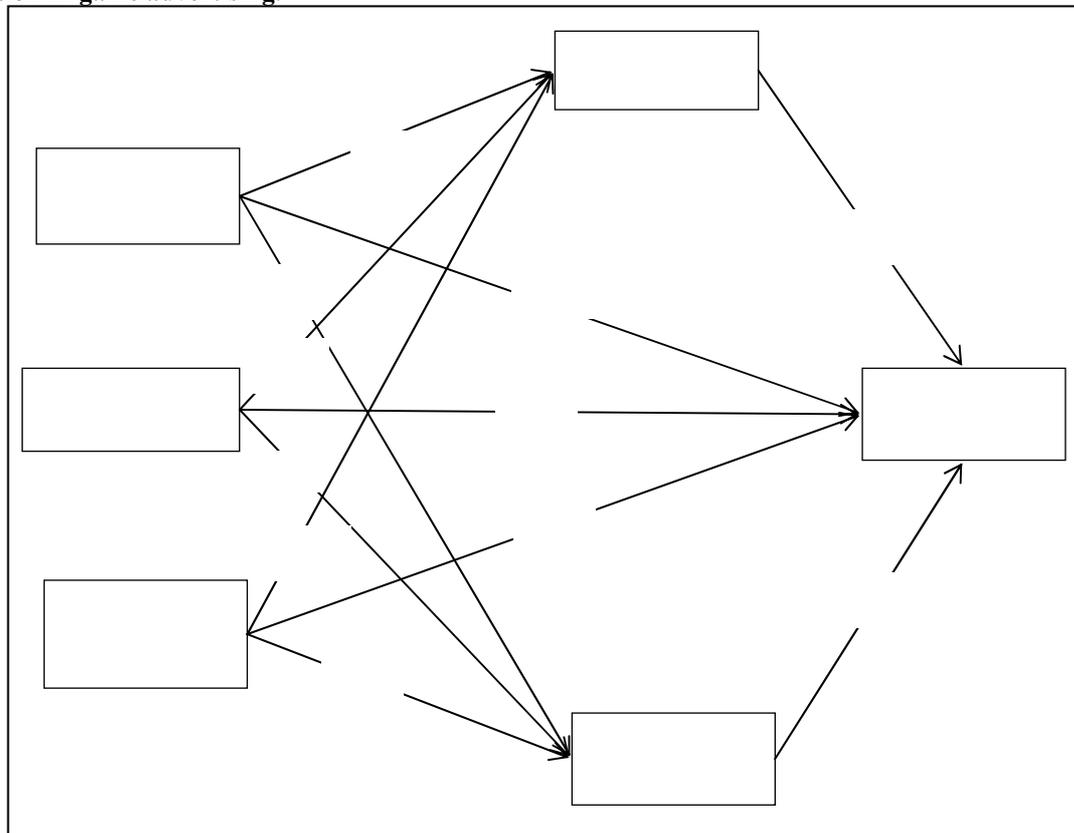
Whilst researchers found weak correlation between attitudes towards advertising and purchase behaviour (Nelson *et al.*, 2004), favorable attitudes towards advertising had a positive effect on the individuals' consumption behaviour. Researchers also claimed that attitudes towards advertising in general influenced attitudes towards advertising in games. In a recent study by Ho and Wu (2012), it was found that when game type was considered as a moderating variable, intent to purchase virtual goods was affected.

Several studies on advergames were also conducted in Malaysia. Previous domestic research found that advertising position, games experience (Ing and Azizi, 2009), telepresence, product experience and interactive

experience in advergaming (Hussein *et al.*, 2010), features of online advertising (Wei *et al.*, 2010) were significantly related to purchase intention.

Figure 1 shows the theoretical framework of the effects of brand recall, brand attitude and their antecedents towards purchase intention in-game advertising among Malaysian gamers.

Figure 1: The theoretical framework of antecedents of brand recall and brand attitude on purchase intention in-game advertising.



3. Methodology

The sample of this study was collected through an online survey of gamers in Malaysia. The respondents were contacted and invited via facebook social network services and they were asked whether they were playing video, mobile, or SNS games. After that, they were guided to a link where the online questionnaires were placed. If they were not gamers, a request was made to introduce their friends who were game players to participate in this study. The reason for using an online survey is to reduce time consumption in answering questions. This can be proven in this study where the respondents managed to answer the questionnaires below the expected time duration. In addition, online survey can reach respondents in many locations.

For a data collection approach, respondents were contacted via email and social networks such as Facebook to participate in this study. Besides personal invitations by email, authors also invited participants by placing the link of the online survey about this study in the social network Facebook. We asked the respondents whether they were game players before inviting them to participate in the study. For this study, a structured online survey questionnaire was designed. There are several reasons for using an online survey in this study. Firstly, to save the cost of printing questions. Secondly, the online survey was specifically designed to encourage respondent to answer all the questions covered. For example, if the respondent did not finish answering the first question, they would not be able to move on to the next question and so on. Thirdly, to save time in answering the questions. For example, a test was conducted to compare the time spent between online surveys and offline surveys. The results showed that online surveys saved almost half of the respondent's time in completing the questionnaires than offline surveys. A total of 350 participated in this study and managed to complete an online survey. Table 1 shows the sample profile in terms of number of respondents by gender, their age, their time spent per week in playing games, their preferred game mode, their preferred game and type of game played they referred to when this survey was conducted.

The measurements used in this study were adopted from previous studies and modified to suit with the context of this study. Self-brand congruity measurement was adapted from Sirgy *et al.*, (1997), entertainment constructs

was adapted from Ducoffe, 1996, brand placement acceptance, brand recall and purchase intention from Morton and Friedman (2002), and brand attitude from Batra and Stayman (1990). All measurements were measured by 5-point likert scales of “1 = strongly disagree” to “5 = strongly agree”. The Cronbach’s alpha of all constructs were above 0.6 therefore being above accepted level (Nunnally, 1978). The Cronbach alpha estimated for self-brand congruity was 0.856, entertainment was 0.946, brand placement was 0.839, brand recall was 0.862, brand attitude was 0.874 and purchase intention was 0.828. As the Cronbach’s alpha in this study were all much higher than 0.6, the constructs were therefore deemed to have adequate reliability.

Table 1: Malaysia gamers respondent sample profile

Profile		N=350
Gender	<i>Male</i>	167
	<i>Female</i>	183
Age	19-20 years	47
	21-25 years	156
	26-30 years	95
	>30 years	52
Time spend (hours in a week)	< 1 hour	16
	1-8 Hours	259
	>8 hours	75
Game mode	Single player	250
	Multiple player	100
Preferred game	Free game	333
	Paid game	17
Type of game	Video game	114
	Mobile game	126
	SNS game	110

4. The Findings

Table 2 presents the results of a multiple regression analysis used to evaluate the strength of the proposed relationship. In model 1, revealed that H2a and H3a were found to be significant in the prediction model, which provides support for those hypotheses that is, the relationship between entertainment ($t=2.753$; $p<0.05$), and brand placement on brand recall ($t=9.755$; $p<0.001$). However, H1a that is self-brand congruity was found to have no significant relationship with brand recall ($t=3.455$; $p>0.05$). In model 2, H1b, H2b and H3b were found to be significant in the prediction model, which provide support for hypotheses H1b, H2b and H3b that is, the relationship between self-brand congruity ($t=1.838$; $p<0.10$), entertainment ($t=4.701$; $p<0.001$), and brand placement and brand attitude ($t=5.007$; $p<0.001$). In model 3 which purchase intention was considered as a dependent variable, all dependent variables were found to be significant in the prediction model, which provided support for hypotheses H1c the relationship between self-brand congruity and brand attitude ($t=3.016$; $p<0.05$), H2c, the relationship between entertainment and brand attitude ($t=2.722$; $p<0.05$), and H3c the relationship between brand placement and brand attitude ($t=6.427$; $p<0.001$).

Table 3 presents the results of a multiple regression analysis used to examine the relationship between brand recall, brand attitude and purchase intention. The model revealed that brand recall and brand attitude were found to be significant in the prediction model, that is, the relationship between brand recall ($t=9.032$; $p<0.001$), and brand attitude on purchase intention ($t=7.864$; $p<0.001$). Thus, H4 and H5 were supported.

Table 2: The relationship between self-brand congruity, entertainment, brand placement, brand recall, brand attitude and purchase intention.

Dependent variables	Model 1 (Brand recall)		Model 2 (Brand attitude)		Model 3 (Purchase intention)	
	t	P-value	t	P-value	t	P-value
(Constant)	3.455	0.001***	3.101	0.002**	4.858	0.000***
Self-brand congruity	1.179	0.239	1.838	0.067*	3.016	0.003**
Entertainment	2.753	0.006**	4.701	0.000***	2.722	0.007**
Brand placement	9.755	0.000***	5.007	0.000***	6.427	0.000***
R Square	0.409		0.294		0.302	
Adjusted R Square	0.404		0.287		0.296	
F-Statistics	79.742		47.926		49.901	
Sig.	0.00		0.000		0.000	

*p<0.10, **p<0.05, *** p<0.001

Table 3: The relationship between brand recall, brand attitude and purchase intention.

Model 4 (Dependent variable: Purchase Intention)	t	P-value
(Constant)	6.360	0.000***
Brand recall	9.032	0.000***
Brand attitude	7.864	0.000***
R Square	0.444	
Adjusted R Square	0.441	
F-Statistics	138.660	
Sig.	0.000	

*** p<0.001

5. Discussion and Conclusion

This study aims to examine the impact of brand recall and brand attitude on purchase intention in advergames among Malaysian gamers. In addition, the antecedents towards brand recall and brand attitude were examined to measure their influences on purchase intention. The results showed that except direct effects between self-brand congruity and brand recall and brand attitude, all hypotheses were supported to the Malaysian consumer.

It was found that self-brand congruity has significant relationship on brand attitude and purchase intention. When users see the brands which match with them, they tend to act positively toward the brand exposed in the game. This is consistent with Escalas and Bettman (2005) who suggested the greater the congruity, the more positive the consumer's attitude toward the brand in question. It also leads to the use of game usage and purchase (Davis and Lang, 2013).

In the advergaming context, the entertainment value is very important to determine the level of enjoyment and pleasure experiencing by the gamers when playing the game. Therefore, the more entertaining the ads, the more it will be retained with positive behaviour of the consumer towards advergames which ultimately will stimulate the intention to purchasing the brand.

This study showed the effect of brand placement acceptance on brand recall, brand attitude and purchase intention. Brand placements might not work in games due to the interactivity involved in actually playing the game as it could distract people from noticing the brand placements (Yang *et al.*, 2006). However, with the highest effect of brand placements acceptance found in this study, it may provide major promise for advertisers. Game players may or may not explicitly remember the brands they see in the games, but these accepted placements may influence their brand recall and brand attitude and could therefore influence later decisions (Yang *et al.*, 2006). In addition, this study suggests user acceptance of brand placements while they playing games.

In this study, it was found that self-brand congruity was not significantly related with brand recall. The reason for this insignificant relationship is due to the highly interactive nature of games. This enforces the gamers to focus on the game play rather than advertisements. This means that the ability to recognise the exposed brands is low. In addition, it contributes to the "miss match" of themselves with the brand exposed in the games.

Nevertheless, this study contributes to the better understanding of the antecedents of brand recall and brand attitude on purchase intention in advergames among Malaysian consumers. Academically, the brand recall and brand attitude relationship is quite well known in advergaming research but their impacts on purchase intention is still lacking. Besides that, the studies of the influence of self-brand congruity on brand recall and brand attitude and also consumer intention to purchase has not been investigated in advergames. This study contributes to fill those gaps in the advergames literature. Methodologically, this study provides an understanding on the

survey research approach which is different from most of advertising research that emphasised on experimental design. Thus, with the survey approach, the results can be generalised into other topics for future research. For practitioners, this study could suggest the use of illustrative or demonstrative placements for new products to help customers remember new brands and use associative placements for existing products to increase consumers' purchase intention (Ho *et al.*, 2011). Also, this study may give some fruitful insights to advertisers to improve their advertising strategies in the games by considering game players' congruity, entertainment value and brand placements factors. As this study considered three types of game played by the respondents namely video, mobile and SNS games, it may provide generalisation for future study of the effects of brand recall and brand attitude and their antecedents on purchase intention in advergaming.

This study is subject to several limitations. Firstly, the respondents were drawn from the researcher's list of friends' social networks. This was due to time constraints that the researchers faced while conducting this study. Secondly, since this study was conducted through surveys, it does not provide a specific type of game genre to test the effects of brand recall and brand attitude their antecedents on purchase intention.

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