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Effects of Game-Product Congruence on Game-Players’ Brand Attitude in Mobile Games: A Review

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Abstract
Advertising is a marketing communication tool used by marketers to convey their brand messages to targeted consumers. Over the years, the effectiveness of traditional advertising has greatly diminished due to the clutter of advertisements that impede consumers’ ability to process and retain advertising messages. As such, marketers are always seeking creative advertising strategies such as product placements, to capture consumers’ attention and break away from the clutter of advertising messages. In the era of digital technology, product placements are no longer restricted to traditional entertainment medium such as reality TV shows or movies. Thanks to innovations in smartphone and digital gaming technologies, the use of mobile games as an advertising platform has also become a reality in recent years. As a relatively new phenomenon, there are ample research opportunities on product and brand placements in mobile games since many areas have not yet been fully explored. Furthermore, several past studies examining the influence of different product placement strategies on advertising effectiveness have reported mixed findings thereby suggesting the need for further research. The findings of these studies are expected to provide valuable insights to the academic...
community as well as marketing practitioners considering mobile games as an alternative medium to advertise and promote their brands.

**Keywords**: Game-product congruity; Brand attitude; Product involvement; Mobile games; Product placement

### Introduction

Marketers rely heavily on advertising to communicate their messages across to their target audiences (Kushwaha & Agrawal, 2014; Kotler, Keller, Ang, Leong, & Tan, 2009; Ivy, 2008). Unfortunately, many organisations face the problem of advertising clutter when consumers are exposed to countless advertising messages every day and as such, they may be unable to remember the advertisements that they come across. Indeed, it has been reported that the average consumer is exposed to more than 3,600 advertising messages on a daily basis (Nelson, 2002). Furthermore, prior studies have shown that most consumers tend to react negatively to advertisements and may even look for ways to avoid or resist commercials (Redondo, 2012; Tsang, Ho, & Liang, 2004). According to advertising literature, clutter is defined as the “amount of advertising in a medium” (Belch & Belch, 2012, p. 209) and will often inhibit advertising effectiveness, resulting in wastage of company resources. It is therefore not surprising that advertisers are always seeking newer and more creative ways to communicate their brand messages across to their customers effectively. For instance, instead of relying solely on traditional advertising platforms such as broadcast and print media, marketers are shifting towards other forms of non-traditional media such as the Internet and even digital games to advertise and promote their brands (McKinsey & Company, 2015).

### Product Placement Advertising Strategies

A more creative method of advertising that has captured the attention of researchers in recent years is product placement, as evidenced by the growing number of scholarly articles published in academic journals on the subject. Traditionally, product placement is a common practice in movies and television programs. While it is no longer considered a new concept in advertising, the placement of company logos and brands in digital games is still considered relatively new (Huang & Yang, 2012; Glass, 2007).

According to Chen and Deterding (2013, p. 42), product placement is defined as the “intentional, paid inclusion of products, services, brands or/and brand identifiers into media content”. Over the years, the practice of product placement has evolved from a mere “placement” of products in movies and/or television programs to an effective communication tool that many organisations use to reach out to their potential customers. Today, advertisers see product placements as an effective way to create awareness and develop favourable attitude towards a product or brand (Glass, 2007). Unlike traditional advertising methods, product placements can potentially be effective to overcome consumer resistance towards advertisements and new technologies that allow people to avoid watching commercials (Hudson & Hudson, 2006). Researchers in the field acknowledge the importance of product placements as a significant element of the promotion mix, evidenced by the growing body of research on the topic (Kureshi & Sood, 2009).

Scholars had previously examined the influence of in-game product / brand placement strategies on advertising effectiveness (Huang & Yang, 2012). More specifically, studies examining the effects of
different product placement strategies, such as brand placement prominence, placement location, types of placement, and thematic relevance, has been well-documented in the literature on advertising and media strategies (Wise, Bolts, Kim, Venkataraman, & Meyer, 2008; Lee & Faber, 2007). However, in reviewing the extant literature, it is found that several past studies had reported inconsistent findings, thereby raising the need for further research.

The growth of product placement is also spurred by the changes that have taken place over the years. Firstly, the entertainment industry flourished and society became more affluent. Next, due to rapid technological advancements such as the Internet, entertainment is now being made available through a wide variety of media. As society advances toward the digital age, the use of digital games as an avenue for advertising has also become a reality. Digital games have the potential to reach out to millions of people with online gaming and other social features embedded in those games. Although digital games are used to be geared towards younger players, it is reported that the average game player in the United States fall between the age range of 18 to 35 years, implying that even mature adults partake in such leisure activities (Entertainment Software Association, 2016). The report further indicated that 47% of game players in the United States are women, suggesting that digital gaming can no longer be stereotyped as being a child-or-male-dominated pastime.

Although advertising in digital games have captured the interests of the academic community in recent years, existing studies mainly focused on product and brand placement advertising in conventional computer (PC) and console games (Terlutter & Capella, 2013; Winkler & Buckner, 2006). Furthermore, it is noted that interests in the field of digital games advertising have only gained momentum in the last few years (probably due to the rapid growth in digital gaming technology) as evidenced by the increase in the number of scholarly articles by academicians / researchers. In this regard, many areas have not yet been fully explored, offering ample research opportunities to be carried out in this field.

For example, in line with the popularity of social media, the number of games offered in social networking sites has also been rising rapidly, opening windows of opportunities for marketing practitioners and advertisers to place and promote their products or brands in these games. Besides social network games, the growth of mobile gaming had also been experienced in recent years thanks to innovations in smartphone technology (Salo & Karjaluoto, 2007). Its popularity is evident with the steady rise in the number of games offered in major smartphone operating systems (i.e. iOS and Android). More interestingly, downloads of some mobile games surpass millions. Indeed, a recent study by Wei and Lu (2014) reported that “Angry Birds” had successfully received more than one billion downloads shortly after its launch. Therefore, the popularity of mobile games do offer exciting opportunities to advertise and feature products/brands in these games.

**Game-Product Congruity**

Congruence of product/brand placements in digital game refers to the relevance of the advertisement to the game. For example, some advertisements do not fit well with the content of the game (low relevance/congruity) while others integrate the advertised product with the content of the game to reinforce brand propositions and convey experiences about that product (high
relevance/congruity). A typical scenario of a highly congruent ad placement would be the inclusion of billboard advertisements on Dunlop brand in a car-racing game. Lee and Faber (2007, p. 79) defines game-product congruity as the “extent to which the product category of the embedded brand is related to the content of the game”. In their study, the researchers found that there is a direct relationship between game-product congruity and consumers’ processing of information and brand memory. Based on their findings, highly incongruent brands were better recalled as compared to either moderately incongruent brands or highly congruent brands (Lee & Faber, 2007). Similarly, the study by Nelson (2002) found that novel or unique brands that do not match the surrounding context produced better brand recall and is therefore consistent with the findings of Lee and Faber (2007). However, these results are inconsistent with the findings of other research (Gross, 2010). In examining the effects of game-product congruity on the participants’ brand memory, Gross (2010) had found that highly congruent advertisements produced better implicit and explicit brand memory.

In past studies, brand congruity was found to contribute positively to game-play experiences leading to favourable attitudes towards the game and the brand (Peters & Leshner, 2013; Nelson, 2002). These findings are also consistent with Hernandez and Chapa’s (2010) study. These studies found that the lack of brand congruence led to intrusiveness of the advertisement and consequently, negative attitude towards the game and the brand. However, the results are not unanimous. In her study, Gross (2010) had found that the incongruent game is favoured over the congruent game suggesting inconsistency with the findings of other researchers.

**Product Placement Effectiveness**

Existing literature on advertising strategies have suggested that product placement effectiveness can be measured by consumers’ attitude towards the product or brand (Waiguny, Nelson, & Marko, 2013; Redondo, 2012), consumers’ attitude towards the advertisement (Tsang, Ho, & Liang, 2004), brand recall (Gross, 2010; Kureshi & Sood, 2009) and brand recognition (Vashisht & Sreejesh, 2015; Schneider & Cornwell, 2005), purchase intention (Kamleitner & Jyote, 2013), and word-of-mouth intention (Tuten & Ashley, 2013). However, scholars have pointed out that many previous studies on product placement effectiveness have largely concentrated research efforts on cognitive measures such as brand recall and brand recognition (Vashisht & Sreejesh, 2015; Kamleitner & Jyote, 2013; Kureshi & Sood, 2009; Newell & Henderson, 1998). As mentioned earlier, memory effects such as brand recall and brand recognition are not the only indicators of product placement effectiveness. With regards to in-game product and brand placement advertising strategies, there are only a handful of attitudinal studies in the existing body of literature. Nelson (2002) stated that most academic studies typically advocated memory-based test to assess advertising effectiveness. And although consumers’ cognitive, affective, and conative responses are all important indicators of advertising effectiveness, it has been argued that there are relatively fewer studies examining consumers’ affective and conative responses (i.e. brand attitude) (Balasubramanian, Karrh, & Patwardhan, 2006) in comparison to studies measuring cognitive effects. Previous studies have also shown that high levels of recall do not necessarily guarantee liking or actual purchase (van Reijmersdal, 2009; Russell, 2002). For instance, although past research have shown that congruent games produced high brand memory, it simultaneously led to negative
attitudes toward the game (Gross, 2010) and attitudes toward the brand (van Reijmersdal, 2009).

Furthermore, most research on product placement advertising pertains to awareness of the brand, but such information is only useful to a certain extent. Getting people to see and recognise the advertisement is only the first hurdle, but a substantial body of research already addresses the various cognitive responses such as brand recall and brand recognition (Kureshi & Sood, 2009; Lee & Faber, 2007; Glass, 2007). At present, there are only a handful of attitudinal studies in the existing body of literature. It is therefore crucial for researchers to further examine consumers’ affective and conative responses arising from product placement advertising strategies.

Brand Attitude

Attitude is defined as an individual’s “internal evaluation of an object” which includes products, services, and ideas (Mitchell & Olson, 1981). Based on the existing literature on advertising and media strategy, consumers’ attitude towards the brand is one of the many indication of advertising effectiveness. Indeed, many scholars have also previously used brand memory (Peters & Leshner, 2013; Gross, 2010; Schneider & Cornwell, 2005), attitude towards the advertising message (Wang, Sun, Lei, & Toncar, 2009), brand advocacy (Tuten & Ashley, 2013), and purchase intention (Kamleitner & Jyote, 2013) to measure advertising effectiveness.

Previous studies have investigated the relationship between game-product congruity and game-players’ attitude towards the brand. However, the findings of these studies were inconclusive. A fairly recent study by Huang and Yang (2012) had reported that high game-ad relevance (congruent advertisement) significantly improved game-players’ attitude towards the game and the brand. Their findings are also supported by Peters and Lesner’s (2013) study which found that highly congruent ads produced positive brand attitude. These results were not unanimous. The study by Gross (2010) on the other hand reported that while high game-product congruity produced better brand recall, incongruent advertisements produced better brand-and-game attitude.

The inconsistencies reported by previous studies raises the need for further research on in-game product placements that can offer more conclusive evidence in regards to its effectiveness as an advertising strategy. More specifically, it allows scholars the opportunity to investigate the inconsistencies reported by previous studies, and examine the conditions under which product placement strategies are effective in the digital gaming environment.

Product Involvement

According to Warrington and Shim (2000, p. 763), product involvement refers to “the perceived relevance of a product class based on a consumer’s inherent needs, interests, and values”. The level of product involvement varies according to product type and also consumers’ perception towards the purchase of the product. For instance, a bar of soap may be classified as low-involvement product whereas a luxury watch may be classified as a high-involvement product. To date, studies examining the effect of product involvement on advertising effectiveness in the digital gaming context is limited. However, scholars have previously argued that product involvement play an important role in advertising effectiveness, particularly on advertising in digital games (Gross, 2010; Lee & Youn, 2008). Although Gross (2010) had previously investigated the effect of product involvement on game-product congruity, she argued that further studies are needed to validate and expand on the study’s
findings. Therefore, her study offered a suggestion to use product involvement in future studies on in-game product placement advertising. To the author’s knowledge, there is currently a dearth of studies examining the effect of product involvement on advertising effectiveness in the digital gaming environment.

**Forms of Advertising in Digital Games**

In-game advertising (IGA) involves the intentional placement of products or brands in a digital game. In the case of IGA, marketers/advertisers buy slots and place their products or brands within the digital game. For example, marketers may collaborate with game developers to purchase a slot to feature and advertise their products or brands in a car-racing digital game. On the other hand, advergames are custom online games developed specifically to promote a particular brand (Gross, 2010). Unlike IGA, advergames are usually found on company websites for visitors to play. These advergames are actually part of an organisation’s advertising and promotion strategy. Advergames are free to play and are often casual in nature (Redondo, 2012), characterised by their ease of play, low-involvement, and short time-requirement.

A trend that has recently surfaced and piqued the interest of the academic community is advertising in social network games and it involves the placement of products/brands in digital games that are played via social media such as Facebook (Terlutter & Capella, 2013). Social network games differ from IGA and advergames in terms of social interactivity. In the case of social network games, social features are embedded into the game that allow game-players to interact and build relationships with other players. Similar to advergames, social network games are usually casual in nature and can be played on personal computers, mobile phones, or other portable communication devices.

**7.1 Mobile Games**

The rapid growth of the Internet and mobile technologies over the past few decades have played a major role in the development and introduction of more and more mobile devices, such as smartphones and portable tablets, to the world. Today, mobile phones, portable tablets, and laptops are some of the indispensable device that people from all walks of life use in their daily activities. For example, ever since the first introduction of smartphones slightly over a decade ago, people have started to use these devices to communicate with each other, take photographs, browse the web, play games, and so on.

Mobile games are a form of digital games that are played on a mobile device (Wei & Lu, 2014; Terlutter & Capella, 2013). And thanks to the growing number of features embedded in these mobile devices, game developers have begun to create games that are popular and well-received by the consumers and device users. For example, downloads of Draw Something, one of the most successful mobile games, was reported to have exceeded 35 million shortly after being launched (Wei & Lu, 2014). The fairly recent mobile game, Pokemon Go, was a roaring success and very well-received by the mobile gaming community. Indeed, the touch screen features and continuous improvements in graphics display of these devices have significantly contributed to innovations in mobile gaming that heightened gaming quality and enrich user experience. Figure 1 provides an example of a fairly recent mobile game.
Mobile gaming can be considered a relatively new phenomenon in the digital game industry that has gained worldwide popularity ever since the launch of the first smartphone in 2007 (Wei & Lu, 2014). At present, there are limited studies on how mobile gaming platform can influence consumers’ response to advertised brands. Furthermore, despite its immense potential, there are also very few studies particularly on the effectiveness of in-game placements in mobile games as an advertising tool (Terlutter & Capella, 2013).

The evolution of mobile games is facilitated by the development of more powerful smartphones and tablet computers that possess high computing power, storage capacity, and graphical and audio capabilities. With this, a myriad of mobile gaming applications is made available for different operating systems (i.e. Apple’s IOS and Google’s Android operating system). With mobile gaming, game-players typically engage in higher playing frequency but with shorter playing duration – characteristics that differentiate mobile gaming platforms from other conventional gaming platforms such as personal computers (PC) and gaming consoles. Further research should therefore be carried out to investigate the effects of product placements in mobile gaming platform, as these area are currently under-researched in the field of advertising in digital games. With this, it is hoped that these studies would offer useful insights to marketers and advertisers on the effectiveness of mobile gaming as an avenue for brand advertising.

**Summary of Research Gaps**

Based on a review of the extant literature, a number of research gaps has been identified. Table 1 provides a summary of these gaps.
Table 1: Summary of Research Gaps

<table>
<thead>
<tr>
<th>Item</th>
<th>Research Gap</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Past researches examining the effectiveness of product placement advertising strategies have mostly focused on cognitive effects such as brand recall and brand recognition. There is presently a dearth of research examining other aspects of product placement effectiveness such as brand attitude.</td>
<td>Kamleitner &amp; Jyote (2013); Balasubramanian et al. (2006)</td>
</tr>
<tr>
<td>2</td>
<td>Previous studies examining the effects of game-product congruence on brand attitude have reported mixed findings.</td>
<td>Peters &amp; Leshner (2013); Gross (2010)</td>
</tr>
<tr>
<td>3</td>
<td>At present, there is a lack of research examining the effects of product involvement on advertising effectiveness in the realm of digital games. It has been suggested that the effects of product involvement be included in future studies.</td>
<td>Gross (2010)</td>
</tr>
</tbody>
</table>

(Source: Compiled by the Author)

Conclusion
In this study, several issues on product placement advertising in digital games were identified from a review of past literature. This section provides an overview of the key findings and offer appropriate recommendations for future studies on this relatively new phenomenon. The theoretical and practical contributions of these studies are also explained in the process. Product placement effectiveness can be measured in many ways. In reviewing previous literature, this paper found that the majority of past related studies have mostly relied on consumers’ cognitive responses, such as explicit and implicit memory, to measure product placement effectiveness. However, good memory alone does not necessarily mean that consumers like or will actually purchase the advertised product/brand. Thus, relying solely on memory effects, does not provide an all-round indication of product placement effectiveness (Kamleitner & Jyote, 2013). It is therefore suggested that more research be undertaken to investigate the attitudinal component of product placement effectiveness in mobile games. The findings of these studies are expected to provide a more thorough understanding to the academic community and marketing practitioners on the effectiveness of in-game product and brand placement advertising strategies.

Previous researches on the effects of different in-game placement strategies, such as game-product congruence, on consumers’ brand attitude have reported mixed findings. As such, further studies are proposed to address this research gap and facilitate better understanding on the conditions that positively or negatively influences brand attitude. These findings offer valuable insights to industry practitioners as well as academicians because past research has shown that when product placement strategies are implemented inappropriately, consumers are likely to reject or resist these advertising and marketing efforts (Winkler & Buckner, 2006). The proposed studies are expected to provide more conclusive scientific evidence on the effectiveness of in-game product/brand placement advertising thereby contributing to the corpus of knowledge on advertising and media strategies.

As mentioned earlier, mobile phones and other portable communication devices possess unique features that differ from other gaming platforms. Additionally, the nature of mobile games and how it is played by mobile gaming consumers also differ from other digital games that are played on
conventional gaming devices. In light of these differences, consumers may respond differently towards the advertisements that they encounter during game-play. As research on placement advertising in the mobile gaming context is still in its infancy, many areas have yet to be explored in regards to its effectiveness as an advertising medium. Therefore, more studies are needed to validate the effectiveness of product and brand placement advertising in mobile games. These studies will promote better understanding on the effectiveness of mobile games as a marketing communication tool.

References


