

EFFECTIVENESS OF PRODUCT PLACEMENT: THE ROLE OF PLOT
CONNECTION, VIEWER INVOLVEMENT, AND PRIOR BRAND EVALUATION

By

SEOYOON CHOI

A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ADVERTISING

UNIVERSITY OF FLORIDA

2007

Copyright 2007

by

Seoyoon Choi

To my parents, DukSoon Choi and MiOk Kim

ACKNOWLEDGMENTS

The successful completion of this study could not have been realized without the assistance of some important people. First of all, I am sincerely grateful to my chair, Dr. Michael Weigold, for his support and guidance in carrying out this thesis. I am also thankful to Dr. Chang-Hoan Cho and Dr. Jorge Villegas for serving as my committee members and for their invaluable advice and caring.

I extend my special gratitude to my parents, DukSoon Choi and MiOk Kim, my best consultants and pillars of support throughout my life. My accomplishments are the culmination of their life-long belief in me. They have stood behind me and never doubted anything I have done. Without their unwavering love and guidance, I would not have completed this thesis. I also want to give my special thanks to my brother, JaeSeo Choi, for his caring and advice.

I'd like to thank the Korean Gators in journalism and communications, who always motivated and encouraged me thorough my years at the University of Florida. Also my gratitude goes to all the people who cared for and prayed for me.

TABLE OF CONTENTS

	<u>page</u>
ACKNOWLEDGMENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	ix
CHAPTER	
1 INTRODUCTION	1
2 LITERATURE REVIEW	4
Definition of Product Placement	4
Product Placement Market.....	6
Product Placement History	7
New Territory for Product Placements	9
How Product Placement Works: The Psychological Process.....	11
Attitudes toward the Product Placement.....	12
Cross-Cultural Analysis of Attitudes toward Product Placement.....	13
Effectiveness of Product Placement	14
Memory- and Attitude-Based Effectiveness	14
Behavioral Intention Based Effectiveness.....	16
Plot Connection: Degree of Brand Integration into Plot	17
How Involvement Influences Product Placement Effectiveness	18
Hypotheses.....	20
3 METHODOLOGY	24
Pilot Study	24
Procedure.....	24
Pilot Test Results.....	24
Main Study.....	25
Sample Selection	25
Stimuli Development.....	26
Procedure.....	27

	Independent Variables	27
	Dependent Variables	28
4	RESULTS	31
	Data Analysis.....	32
	Descriptive Statistics	32
	Test of Hypothesis	32
	Plot Connection	32
	Level of Involvement	33
	Prior Brand Evaluation.....	33
	Research Question: Interaction Effects of Plot Connection, Product Involvement, and Prior Brand Evaluation.....	34
5	CONCLUSION AND DISCUSSION	41
	Summary of Results.....	41
	Managerial Implications	43
	Limitations and Future Research.....	45
	APPENDIX QUESTIONNAIRE.....	47
	LIST OF REFERENCES.....	51
	BIOGRAPHICAL SKETCH	58

LIST OF TABLES

<u>Table</u>	<u>page</u>
2-1 Experimental Design	20
4-1 Mean difference of Product Involvement.....	35
4-2 Mean Difference of Prior Brand Evaluation	36
4-3 Means and Standard Deviations of All Items.....	36
4-4 Univariate Results of Plot Connection, Product Involvement, and Prior Brand Evaluation on Placement Effectiveness Variables	37
4-5 Means and Standard Deviations by Different Treatment Condition.....	38
4-6 Multivariate Results	38

LIST OF FIGURES

<u>Figure</u>	<u>page</u>
3-1 Self Assessment Manikin	29
4-1 Significant 3-way Interactions on Attitude toward Placement.....	39
4-2 Significant 3-way Interactions on Purchase Intention.....	40

Abstract of Thesis Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Master of Advertising

EFFECTIVENESS OF PRODUCT PLACEMENT: THE ROLE OF PLOT
CONNECTION, VIEWER INVOLVEMENT, AND PRIOR BRAND EVALUATION

By

Seoyoon Choi

May 2007

Chair: Michael F. Weigold
Major Department: Advertising

Severe audience fragmentation and message clutter in traditional media outlets have led marketers and advertisers to consider alternative tools and means of communication. Among these new marketing communication approaches, product placement has been utilized frequently.

The purpose of this study is to explore how different variables impact the effectiveness of product placement in order to provide marketers with insights into planning product placement strategies.

To test the proposed hypotheses, a 2 (plot connection: high vs. low) x 2 (product involvement: high vs. low) x 2 (previous attitude toward the brand: favorable vs. unfavorable) mixed factorial design was implemented.

Results showed that the high plot-connection group exhibited higher arousal levels and more positive attitudes toward the target brand than did the low plot connection group. Also, when compared to the low product-involvement group, the high product-

involvement group exhibited higher pleasure levels, higher arousal levels, more positive attitudes toward placements, more positive attitudes towards the target brand, and higher purchase intention. In terms of prior brand evaluations, the favorable prior brand evaluation group exhibited more positive attitudes toward the target brand and higher purchase intentions than did the unfavorable prior brand evaluation. Furthermore, a significant three-way interaction effect was found for two dependent variables: consumers' attitudes toward the product placement and purchase intention.

The results of this study will provide marketers and advertising agencies with useful insights into using product placement strategies as a marketing communication tool. In addition, the results suggest that many factors should be considered when evaluating the effectiveness of a placement

CHAPTER 1 INTRODUCTION

The more severe audience fragmentation and message clutter become in traditional media outlets, the more marketers and advertisers must consider alternative ways to advertise products or services. Among the new marketing communication tools, product placement has been utilized frequently. Product placement is attractive to manufacturers because their brands are placed “in a realistic dramatic setting in which the viewer is already emotionally involved” (Maslin, 1982). As a result, audiences are exposed to products in less distracted environments and become familiar with the brands over a longer period of time (Turcotte, 1995). Product placement has been utilized for over 100 years, but grew sharply in use between 1978 and 1981 when movie producers became aware of the commercial value of product placement (Brennan et al., 1999; Segrave, 2004). After the legendary placement of Reese’s Pieces candy in the 1982 film *E.T.*, marketers’ understanding of product placement changed. Thereafter, product placement expanded to become a highly prevalent marketing tactic featured not only on television and in movies but also in books, songs, video games, and web blogs.

Previous research on product placement has focused on consumer perceptions and acceptance of product placements, or the placement of ethically charged products (d’Astous & Séguin, 1999; Gupta & Gould, 1997; Morton & Freedman, 2002). The effectiveness of product placement has also been analyzed in terms of recognition, recall, and consumer attitudes (Babin & Carder, 1996; Brennan, Dubas, & Babin, 1999). However, few studies measure the effectiveness of product placements in terms of

purchase intentions (Gould, Gupta, & Krabner-Krauter, 2000; Karrh, Frith, & Callison, 2001). Therefore, this study examined the effects of product placement in terms of consumers' purchase intentions, emotional responses, attitudes toward placement, and attitude toward the target brand.

Researchers have manipulated a variety of variables in an effort to understand the effectiveness of product placements. Those variables contain prominence and mode (i.e., audio, visual, and audiovisual) (Gupta & Lord, 1998); product category (Gupta & Gould, 1997); sponsor image (i.e., positive, negative, or neutral); program genre (i.e., quiz/variety, mini-series/drama, and information/service); and sponsor-program congruity (d' Astous & Séguin, 1999). Gupta and Gould (1997) studied the impact of individual differences, such as gender and movie-viewing frequency, on the acceptability of product placements.

Audience involvement also influences the effectiveness of a product placement. Higher product involvement in the plot of a television program tends to reduce viewer involvement with the commercial (Park & McClung, 1986). One might expect a product that is highly involved in the storyline to enhance the effects of product placement, since the audience's involvement in the story would translate to their involvement with a product that is important to the plot (McCarty, 2003). Therefore, product involvement was examined in this study to identify its moderating effect on product placement.

Limited research has analyzed how consumer attitudes toward brands affect product placements. However, researchers in the advertising field have studied how prior consumer attitudes towards brands impact the effectiveness of advertising. For instance, Chattopadhyay and Basu (1990a) studied the relationship between viewers' prior brand

evaluations and the use of humor in advertising. The results revealed that when a consumer's prior brand evaluation is favorable, a humorous ad is more effective in enhancing brand attitude and choice behavior as compared to a non-humorous ad. When a consumer's prior brand evaluation is unfavorable, however, humorous ads were less likely to enhance brand attitude and choice behavior. Likewise, consumers' prior brand evaluations seem to impact the effectiveness of product placements.

Marketers focus on finding the best vehicle to feature products or brands that will ensure a high return on investment. Thus, it is important for marketers to know how audience responses to products differ depending on movie genre, the duration of product exposure, the modality of product placement (audio/visual), and varying degrees of product connection to the plot. More variables are likely to affect audience responses to product placements, such as product involvement, viewers' moods while watching the movie, and whether or not the viewer saw the film in a theater or at home. Among these variables, the degree of a product's integration into a storyline, audience involvement, and prior brand evaluations were selected to understand the effectiveness of product placements.

Thus, the purpose of this study is to identify a) how the degree of product-plot connection affects consumer reactions to product placements b) how product involvement affects viewer reactions to product placements c) how viewers' previous brand evaluations influence their reactions to placements.

CHAPTER 2 LITERATURE REVIEW

Definition of Product Placement

Product placement is defined as “a paid product message aimed at influencing movie (or television) audiences via the planned and unobtrusive entry of a branded product into a movie (or television program)” (Balasubramanian, 1994, p. 29). The advertising encyclopedia *AdAge* defines product or brand placement as a “form of advertising in which brand-name products, packages, signs and corporate names are intentionally positioned in motion pictures and TV programs.” Karrh (1998) broadened the territory of product placements to include all forms of mass media when he defined product placements as a “paid inclusion of branded products or brand identifiers, through audio and/or visual means, within mass media programming.”

Though integrated or branded entertainment is used interchangeably with product placements, some researchers distinguish one from the other. According to Caraciolli-Davis (2005), product placement is mere product exposure via a simple visual/audio presence in a program, while brand integration involves product participation in a program's story as a device to enhance plot or character interactions or provide a sense of realism. Ultimately, “brands are irreplaceably woven into entertaining content—across any number of contact points—and are invited by audiences as welcome components of media consumption and interaction” in branded entertainment (Caraciolli-Davis, 2005, p.11).

Some researchers have compared product placements to conventional advertising methods (Balasubramanian, 1994; DeLorme & Reid, 1999; Wasko & Phillips, 1993), but product placements differ from traditional advertising in that they do not interrupt the consumer's media experience (Balasubramanian, 1994), are not always paid for (Wasko & Phillips, 1993), and may not be perceived by consumers as commercial messages (DeLorme & Reid, 1999). According to Nebenzahl and Jaffe (1998), product placement is different from conventional advertising in two ways: a) the extent to which the sponsor of the message is disguised and b) the extent to which the persuasive message is secondary to the main message. In traditional modes of advertising, the sponsor is clear to the audience and the persuasive message is primary to the communication. In product placement, a product is presented in the context of a story without an explicit attempt to persuade the audience and the persuasive effort is secondary to communication.

The three types of product placements—gratis arrangements, barter arrangements, and paid placements—are distinguished by financial compensation. Gratis arrangements refer to product placements that strengthen character images or increase the level of credibility or realism in a narrative. An example of a gratis arrangement can be found in the use of Raid, an ant killer brand by SC Johnson Company, in the HBO series *The Sopranos* (Neer, 2003). According to Therese Van Ryne, a spokesperson for SC Johnson, the company did not arrange for the use of their product on the show (McCarty, 2002). This arrangement differs from the traditional definition of a product placement which typically requires marketers to organize such an agreement. Because the manufacturer cannot control how the product is featured or when and where the placement will occur, the product could be portrayed negatively.

In barter or trade agreements, the product itself serves as compensation for brand placement. This kind of trade-off is found in the film *The Terminal*, in which United Airlines plays a supporting role in the movie. The airline provided the use of their brand and advice on how to make airport announcements and uniforms more realistic. This provided the airline with exposure and the filmmakers saved on production costs (Kirsner, 2006)

In paid placements, product integration is arranged in advance by marketers and financial compensation is provided. Prices can vary depending on the nature and the prominence of the product's placement in the movie (McCarthy, 1994). More prominent placements, such as the inclusion of Reese's chocolate in *E.T.* and the use of Ray-Ban sunglasses in *Top Gun*, are examples of paid placements. Among the three types of product placements, paid placements increased from 18% in 1974 to 29.2% in 2004, while the share of gratis placements decreased from 24.3% to 6.6% during same period. The share of trade arrangements increased from 57.7% to 64.2 %, representing the most frequently used form of product placement since 1974 (PQ Media, 2005).

Product Placement Market

Although product placements have existed for 100 years, their popularity and attractively to marketers as a marketing tactic has soared in recent years. A series in *Business Week* titled "Product Placement Hall of Fame" reflects the fact that product placements have been perceived as a major marketing tool since 1998.

According to a report by PQ Media (2005), which investigates the historical trends of product placements from 1974 to 2004 in the U.S., the value of product placements grew at a compound annual rate of 10.5%. The total value of product placements climbed 30% in 2004 to reach \$3.46 billion. Specifically, television placements soared 46.4% to

\$1.87 billion and film placements grew 14.6% to \$1.25 billion. Furthermore, the product placements market is projected to expand more in the future. PQ Media projects the 14.9% compound growth rate to reach \$6.94 billion between 2004 and 2009. Placements in the food and beverage, house and home, and health and beauty categories account for more than half of all product placements. These categories will continue to be the leading marketing categories over the next 5 years (PQ Media, 2005).

There are three explanations for this rapid growth in product placements: a) the growing popularity of ad-skipping technologies; b) the development of interactive television; and c) audience fragmentation. As ad-skipping technologies, or personal video recorders (PVRs) such as TiVo and Sky +, became more prevalent, television ads became less effective at reaching target audiences. These devices are expected to be in 55 million homes in the U.S. by 2010. In contrast, interactive television made it easier to integrate product placements into programs by allowing marketers to feature different products at different times and for different regions (PQ Media, 2005). Finally, the development of new media like the Internet has led to cluttered media environments and skepticism of traditional advertising among marketers. As a result, advertisers began questioning the effectiveness of television spot ads, which became harder to feature prominently within cluttered media environments or feature at all due to digital video recorders. This forced more advertisers to turn to alternative means of reaching audiences, such as product placements.

Product Placement History

The history of product placements can be divided into three phases (DeLorme, 1998; Brennan et al., 1999). The first phase is the period between the 1920s and mid 1970s, when product placement was not yet a major industry. The product placement

process in this early stage was informal and mostly consisted of barter arrangements (DeLorme, 1998). This barter arrangement illustrates the original motivation for product placements, which was to add a greater level of reality to movies by featuring real brands (Brennan et al., 1999). Product placement has become more prevalent since the mid 1970s when the concept of brand management developed and motion picture producers became aware of the commercial value of these placement opportunities (Brennan et al., 1999; Moser, Bryant, & Sylvester, 2004).

The second phase of product placement history is the period between the late 1980s and the early 1990s. This phase included the famous placement of Reese's Pieces candy in the movie *E.T.* The success of this placement in the 1982 film changed marketers' views of product placement and became a milestone in product placement history. Following the success of *E.T.*, the placement of Ray-Ban sunglasses in the 1983 film *Risky Business* resulted in a major sales increase after the film's release (Fournier & Dolan, 1997). However, consumer advocate groups perceived the product placement as a deceptive practice and raised concerns (DeLorme, 1998). In response to these concerns, the product placement industry founded the Entertainment Resources and Marketing Association, which plays an important role in the self-regulation and preemption of government regulations (Moser et al., 2004).

The third phase, which includes the mid 1990s through today, marks the period where product placement became a huge industry. Today, marketers develop joint advertising and promotion programs along with product placements to enlarge the impact of placements. For example, television advertising for Sprint, which featured alien characters from the movie *Men in Black II*, ran during the movie's opening week. Burger

King products also appeared in *Men in Black II* and at the movie's release, Burger King introduced a special burger tied to the movie's theme (Karrh, 1998). Furthermore, product placements are now featured in songs, books, and video games. These new frontiers in the product placement industry will be explained in more detail in the next chapter.

New Territory for Product Placements

Product placements are no longer exclusive to film and television, now appearing in video games, books, and music. USA Today reports that product placements in video games began in the 1980s, and the potential of video games as marketing tools continues to grow. Advertisers now have three different approaches to marketing products through video games. The first is a traditional product placement in the form of signs or billboard ads that appear in games and cannot be modified. For instance, a Marlboro banner appears in Sega's auto-racing game from the late 80s, while Sega's newer game, *Super Monkey Ball*, features Dole bananas. The downfall to this approach is that advertisers have to commit to video game publishers months before the games are released to the public. The second approach is the dynamic advertisement, a new technology with online capability that allows publishers to insert new ads into games at anytime. The third advertising approach is advergaming, or games produced for the sole purpose of promoting a product. An example of an advergaming is an online game made by Unilever's Axe deodorant business division (Yi, 2005). Inserting songs in video games is another popular form of product placement, as the repetition involved in mastering a video game provides an effective means for launching new songs.

Product placements in books are not as common as other media, but a famous example of this form of placement can be seen in the book *The Bulgari Connection*. The titular Bulgari company paid British author Faye Weldon to write a novel about their

products in 2001. During the summer of 2004, Carole Matthews, another popular British author, made a deal with Ford and integrated the Ford Fiesta into her latest work, *The Sweetest Taboo*. Aside from these examples, one of the largest book genres to feature product placements is children's learning books. A textbook used in the mathematics department of the University of Texas in Arlington features the restaurant Waffle House on its cover and in problems within the book. However, it was reported that the publisher did not receive financial compensation from Waffle House for this placement (Marsilio, 2004). Examples like these are becoming more and more frequent, as companies like Nike and Oreo make their way into textbooks even at the high school level.

According to Agenda Inc., which tracked all brand references in the Billboard Top 20 singles chart since 2003, 35% of songs (37 out of 106) mentioned at least one brand in their lyrics in 2005. Altogether, 64 different brands have been mentioned a total of 1129 times, which represents a tremendous number. Most of these references are of high-end designer brands, such as Gucci, Mercedes, and Cartier as well as alcohol brands like Hennessy and Seagram's that represent the luxury lifestyles of hip-hop artists (Agenda Inc., 2005). An article in *AdAge* reports that "In almost all cases, a brand has found its way into a rap song because of artist preference or through an organic, creative predilection and not because of a record label dictate to appease an advertiser." The fast food restaurant chain McDonald's also began using music placements in 2005 (Wasserman, 2005), paying hip-hop musicians anywhere from \$1 to \$5 each time their songs featuring the McDonald's Big Mac played on the radio.

Most recently, blogs have entered the product placement market. Marqui, a marketing communication firm, launched their "Blogosphere Program" on December 1,

2004 which contracts individual bloggers to mention Marqui and link to their site once a week in their blogs for \$800 a month in compensation. Starting in October 2005, the company is expanding its blogging module to corporate bloggers (Jesdanun, 2005).

How Product Placement Works: The Psychological Process

Sales of Reese's Pieces candy jumped 65% within one month of the release of *E.T.* (Reed, 1989) and placements of Jaguar's "Shaguar" model in *Austin Powers: Goldmember* resulted in a 70% increase in its sales in the U.S. (Diamond, 2002). Likewise, Red Stripe beer sales in the U.S increased by more than 50% within one month of the release of the film *The Firm* (Buss, 1998). The apparent success of product placements in films has led researchers to investigate why this marketing method is so effective.

Sutherland (1981) associated the mechanism of product placement with agenda-setting theory. According to Sutherland, "if something appears frequently in the media, it is raised up on our agenda of things to think about." In effect, consumers infer what is popular from movies, television programs, and pop songs without the media explicitly calling attention to specific products. Furthermore, product placements render brands more instantly accessible in memory, which is a key component of brand development (Sutherland, 2005).

McCarty (2003) noted three levels in the psychological process of product placement. At the most basic level, the process may be akin to affective classical conditioning, especially when a product placement is merely seen or mentioned in a story. Affective classical conditioning is pairing an unconditioned stimulus with a conditioned stimulus so that good feelings associated with the scene are transferred to the brand (Baker, 1999). A second explanation is the mere exposure theory. Mere exposure

suggests that viewers will develop favorable feelings toward a brand simply because they are repeatedly exposed to the brand (Baker, 1999). This seems especially true for brands presented as props in several movie scenes (McCarty, 2003).

The transformational process is another, higher-order process which may explain how consumers process product placements. Transformation advertising is advertising that transforms or changes the experience of using a product so that the product becomes “richer, warmer, more exciting, and/or more enjoyable” (Puto & Wells, 1984, p.638). Likewise, product experiences may be influenced by product placements, because the product is not merely seen in a functional sense but becomes part of the story context and is endowed with characteristics associated with the movie (McCarty, 2003).

Another approach to explaining the mechanism of product placement is Friestad and Wright’s (1994) persuasion knowledge model. The persuasion knowledge model posits that when users recognize and identify a message as a persuasive communication attempt, they process it differently than they would if they were unaware of its commercial intent. Compared to classical advertising, product placement is less likely to be recognized as persuasive, and thus prevents viewers from counterarguing, scrutinizing, or rejecting the message (Grigorovici & Constantin, 2004).

Attitudes toward the Product Placement

Several researchers have studied the ethical issues involved in product placements (Gupta & Gould, 1997; Morton & Friedman, 2002; Nebenzahl & Secunda, 1993; Ong & Meri, 1994). Results from Nebenzahl and Secunda’s (1993) study showed that respondents generally do not object to product placements in film and tend to prefer product placements to overt forms of in-cinema advertising. Only 25% of respondents indicated that placements should be banned or strongly restricted on ethical grounds. Ong

and Meri (1994) conducted exit surveys in theaters to gather viewer perceptions on the ethics of product placements. Respondents generally disagreed with the statements “product placement is unethical” and “I am opposed to product placement”. Gupta and Gould (1997) studied audience attitudes toward product placements for different product types and found that audiences generally exhibit positive attitudes toward placements, with the exception of ethically charged products like alcohol, guns, and tobacco.

Cross-Cultural Analysis of Attitudes toward Product Placement

Although Karrh (1998) asserted a lower likelihood of cross-cultural differences with respect to attitudes toward product placements, other research indicates attitude differences across cultures. Gould, Gupta, and Grabner-Kräuter (2000) were the first to study product placements on a cross-national basis by studying consumer attitudes toward product placements in the U.S., Austria, and France. Though some variables remained consistent, such as the fact that women were generally less positive than men and that most respondents were less accepting of ethically-charged product placements, attitudes were generally different in each country. For example, U.S. viewers are more likely to accept and purchase products shown in movies than consumers in Austria and France.

Karrh, Frith, and Callison’s (2001) study also supported cross-national differences in consumer attitudes. When compared to American respondents, Singaporean respondents were less likely to report self-monitoring activity, less likely to perceive brand appearances as paid advertising, had greater concerns about the ethics of brand placements, and were more supportive of government restrictions on placements. Both American and Singaporean respondents, however, reported that they paid attention to

featured brands and that their purchasing patterns were similarly affected by product placements in films and television programs.

McKechnie and Zhou (2003) also compared Chinese and American consumer attitudes toward product placements in movies. Their results were consistent with previous research in that Chinese consumers were generally less accepting of product placements than American consumers. You's (2005) study of South Korean and American consumer attitudes toward product placements and usage behavior was also consistent with previous research. South Korean respondents were more concerned about the ethics of product placements, were less likely to accept product placements, and were less supportive of featuring ethically-charged products in movies than U.S. consumers.

Likewise, Brennan, Rosenberger, and Hementera's (2004) study compared Australian consumer attitudes with those identified previously in Gupta, Gould, and Grabner-Kräuter's research (2000) and found similar evidence of cross-cultural attitude differences.

Effectiveness of Product Placement

Since product placements became a highly popular marketing tool in the late 1990s, much research has focused on the effectiveness of product placements. Prior results on the effectiveness of product placements were mixed, especially regarding attitude changes and behavioral influences.

Memory- and Attitude-Based Effectiveness

Free and aided recall are the most common measures of product placement effectiveness (Babin & Carder, 1995; d'Astous & Séguin, 1999; Gupta & Lord 1998; Karrh, 1995; Nelson, 2002), followed by recognition (Babin & Carder, 1996; d'Astous & Chartier, 2000; Law & Braun, 2000). Ong and Meri's (1994) study on the recall of placed

products showed that most placements generate weak recall. Babin and Carder (1996a) investigated viewer recognition of brands and found that people generally recognized the brands they saw in films. Another Babin and Carder study (1996b) showed that product placements do not affect consumer attitudes toward brands. Vollmers and Mizerski's (1994) study reflected similar results, illustrating that product placements affect brand recall but do not influence brand evaluation. McCarty (2003) concluded that these results were due to a failure to consider the multidimensional nature of product placements.

Gupta and Lord (1998) distinguished different levels of prominence and mode in evaluating the effectiveness of product placements on audience recall. Their results showed that audience recall was highest in prominent placements, followed by traditional advertising and subtle placements. In terms of modality, audio presentations generated higher recall than purely visual presentations.

Brennan, Dubas, and Babin (1999) investigated the impact of different placements and exposure times on brand recognition and found that placements integral to a storyline are remembered more frequently than others. Exposure time did not affect recognition for background placements but did influence recognition when the product placements were central to the story.

D'Astous and Séguin (1999) studied the effects of placement type, sponsor image, sponsor-program congruity, and program genre on evaluative and ethical reactions to product placements. Implicit and explicit placements did not generate different evaluation results, but high congruity lead to better evaluations and ethical judgments than lower congruity, with the exception of mini-series/dramas. Furthermore, sponsor image had no significant impact on consumers' evaluative and ethical judgments.

According to d'Astous and Chartier (2000), consumer memory is enhanced when the principal actor is present and the product placement is positively evaluated. When the placement is visible and well integrated in the movie scene, consumer evaluations of placements are generally more positive.

Russell (2002) investigated the congruency effect of modality and plot connection on brand memory and attitude. According to Russell, congruent placements would be auditory placements with high plot connection or visual placements with low plot connection, because spoken information is typically more significant to story development than visual information. The results of the study showed that viewers were more likely to remember incongruent placements over congruent placements, but that congruent placements had a greater influence on attitude changes.

Nelson (2002) studied the effectiveness of brand placements in racing games, measuring the free-recall of brands featured in games directly after game-play and after a five-month period. Respondents recalled about 25-30% of featured brands over the short-term period and 10-15% after the five-month delay. Brand recall was enhanced when the brands played a major role in the game, were relevant to the consumer, or were local or new brands.

In sum, the various characteristics of product placements can garner either negative or positive effects on memory and consumer evaluations of placed brands. Therefore, the effectiveness of the product placement as a communication strategy must be measured by specific objectives.

Behavioral Intention Based Effectiveness

Previous studies investigated the impact of product placements on consumer purchase intentions, with few studies noting limited usage behavior (Baker & Crawford

1995; Gould et al. 2000; Karrh et al. 2001; Morton & Friedman 2002; Nelson et al., 2004). Baker and Crawford (1995) found that consumers exhibited higher levels of short-term purchase intention for products embedded in movies. Gould, Gupta, and Grabner-Kräuter (2000) and Karrh, Frith, and Callison (2001) also supported the result that product placements positively influenced purchase intentions.

Morton and Friedman (2002) explored the relationship between audience beliefs towards product placements and reported usage behavior. Their findings indicated a correlation between consumer evaluations and purchase intentions, while ethical beliefs were less likely to affect consumer behaviors. Nelson, Keum, and Yaros (2004) noted that attitudes toward product placements in games were found to have significant positive effects on the perceived influence of purchase intentions.

Plot Connection: Degree of Brand Integration into Plot

Russell (1998) developed a three-dimensional framework for characterizing product placements: a) the level of visual placement, b) the level of auditory or verbal placement, and c) plot connection. The visual dimension, or screen placements, refers to the on-screen appearance of a brand, such as a corporate logo featured on a vehicle or billboard, the use of a brand as a set decoration, or even the appearance of real television commercials in the movie. The auditory or verbal dimension includes the mention of brands in a character's dialog. Auditory placements can range from no mention at all several references within the dialog. The third dimension is plot connection, or the degree to which the brand is integrated in the plot of the story. While lower plot placements do not contribute much to the story, higher plot placements play an important role in the storyline (Holbrook & Grayson 1986). Examples of higher plot placement are the use of AOL in the film *You've Got Mail*, which was intimately tied to the plot and closely

connected to the characters, much like use of BMWs in James Bond films (Russell, 1998). Russell also studied plot connection in relation to other variables. When high plot connection is combined with auditory placements, the effect is a higher level of persuasion. However, the effect is more memorable but less persuasive when high plot connections are combined with visual placements. Thus, the level of plot connection determines the significance of product placement in a narrative (Russell, 2002).

How Involvement Influences Product Placement Effectiveness

The concept of involvement has been explored by many scholars. Involvement is defined as a consumer's perceived relevance of an object based on his/her inherent needs, values, and interests (Zaichokowsky, 1985); the psychological experiences of the motivated consumer (Celsi & Olson, 1988); or the consumer's feelings of interest, enthusiasm, and excitement about specific product categories (Bloch, 1986). People may be involved with product categories (Zaichkowsky, 1985; Laurent & Kapferer, 1985), brands, ads (Andrews, Akhter, Durvasula, & Muehling, 1992; Muehling & Laczniak, 1991), media (Feltham & Arnold, 1994; Tavassoli, Shultz, & Fitzsimons, 1995), and purchase decisions (Houston & Rothschild, 1978).

Involvement has been divided into three categories: a) personal involvement, including inherent interests and values; b) physical involvement, such as object characteristics that increase interest; and c) situational involvement, or something that temporarily increases relevance or interest in the object (Bloch & Richins, 1983; Houston & Rothschild, 1978; Zaichkowsky, 1985).

Krugman (1965) was the first to distinguish between high and low involvement and propose that individuals may process information differently under each condition. As the

level of involvement increased, consumers produced more elaborations and inferences and pay closer attention and exhibit a greater degree of interest (Celsi & Olson, 1988).

Researchers support the view that different variables affect persuasion under high and low involvement conditions. For example, when recipients have the motivation and ability to evaluate a message, they respond to the quality of the arguments presented (Petty & Cacioppo, 1979). This process is considered the central route of persuasion. In contrast, if consumers are motivated but lack the ability to evaluate a message, they are likely to respond to the cues associated with messages, such as expertise or attractiveness of a message source (Petty, Cacioppo, & Goldman, 1981). This form of persuasion is called the peripheral route (Cacioppo & Petty, 1985). Weak messages are more persuasive in high-involvement conditions, while strong messages are more persuasive in low-involvement conditions (Anand & Sternthal, 1992). Similarly, strong arguments were found to be more persuasive and weak arguments less persuasive under moderate levels of physiological arousal (Sanbonmatsu & Kardes, 1988). The reasoning is that high involvement or arousal reduces the ability to think, thereby inhibiting the formation of counterarguments for weak messages as opposed to inhibiting supporting arguments for strong messages (Cacioppo & Petty, 1985).

Researchers have examined how the context in which an advertisement appears affects consumer perceptions. Soldow and Principe (1981) studied the effect of the audience involvement with programs on their response to the commercials and found that ads aired during a high involvement program were less effective than those aired during low involvement programs. Park and McClung (1986) identified the curvilinear relationship between program involvement and advertising involvement. However, as the

viewer's degree of involvement with the program increased beyond a certain point, the degree of ad involvement decreased. In low to medium program involvement conditions, higher viewer involvement with commercials was reported. However, as the viewer's degree of involvement with the program increased beyond a certain point, the degree of ad involvement decreased. On the other hand, Feltham and Arnold (1994) found that greater program involvement correlated with greater ad involvement.

Hypotheses

Table 2-1 shows the factorial design of the experiment. As noted before, plot connection is defined as the degree to which a brand is integrated into the plot of a story.

Table2-1. Experimental Design

Plot Connection (X1 & X2)	Involvement (Y1 & Y2)				Main Effects for Plot Connection
	Higher		Lower		
	Prior Brand Evaluation	Favorable Unfavorable	Prior Brand Evaluation	Favorable Unfavorable	
Higher (Cellular)	A	B	C	D	X1>
Lower (Kangaroo Jack)	E	F	G	H	X2
Main Effects for Involvement	Y1 >		Y2		
Main Effects for Previous Brand Evaluation	Z1>Z2		Z1>Z2		

Previous research asserted that the level of plot connection determines the role and significance of a product placement within a narrative (Russell, 2002). Product placements that are seamlessly integrated into movie scenes yield positive consumer evaluations (d'Astous & Chartier, 2000) and consumers better evaluate product

placements within television programs when the product is clearly related to the contents of the program (d'Astous and Séguin, 1999). Nelson (2002) reported that brand placement recall was high for computer games, and that recall was enhanced when featured brands were a major part of the game. The following hypothesis was developed based on the existing literature:

H1: Subjects exposed to product placements with higher plot connection (X1) would exhibit more positive reactions to the placed products than those exposed to product placements with lower plot connection (X2).

- **H1a:** Pleasure is higher in subjects exposed to higher plot connection placements.
- **H1b:** Arousal is higher in subjects exposed to higher plot connection placements.
- **H1c:** Attitude toward the placement is more positive in subjects exposed to higher plot connection placements.
- **H1d:** Attitude toward the target brand is more positive in subjects exposed to higher plot connection placements.
- **H1e:** Purchase intention is higher in subjects exposed to higher plot connection placements.

Previous research has hypothesized that high involvement leads to positive consumer evaluations of advertising. Involved consumers feel that the products are especially relevant to their lives (Flynn & Goldsmith, 1993), and participants pay greater attention to and show greater interest in ads under high involvement conditions. Higher levels of involvement produce more elaboration, and led to positive attitudes toward the advertisement and the brand (Celsi & Olson, 1988).

When applied to product placements, highly involved with consumers are more likely to pay attention to movie scenes featuring a target product and tend to exhibit more

positive reactions to the target brand than consumers with low product involvement.

Thus, the following hypothesis was made.

H2: Subjects with high product involvement (Y1) would exhibit more positive reactions to the placed products than those with low product involvement (Y2).

- **H2a:** Pleasure is higher in subjects with relatively high involvement conditions.
- **H2b:** Arousal is higher in subjects with relatively high involvement conditions.
- **H2c:** Attitude toward the placement is more positive in subjects with relatively high involvement conditions.
- **H2d:** Attitude toward the target brand is more positive in subjects with relatively high involvement conditions.
- **H2e:** Purchase intention is higher in subjects with relatively high involvement conditions.

Chattopadhyay and Basu (1990) studied the relationship between viewers' prior brand evaluations and the effects of humor in advertising. The results showed that when prior brand evaluations are favorable, a humorous ad is more effective at enhancing brand attitude and choice behavior than a non-humorous ad. However, a non-humorous ad is more effective than a humorous ad when prior brand evaluations are unfavorable. In the same context, prior brand evaluation seems to impact the effectiveness of product placements.

H3: Subjects who expressed previously favorable attitudes toward the target brand (Z1) would exhibit more positive reactions to the placed products than those with previously unfavorable attitudes toward the target brand (Z2).

- **H3a:** Pleasure is higher in subjects with favorable attitudes toward the target brand.
- **H3b:** Arousal is higher in subjects with favorable attitudes toward the target brand.

- **H3c:** Attitude toward the placement is more positive in subjects with favorable attitudes toward the target brand.
- **H3d:** Attitude toward the target brand is more positive in subjects with favorable attitudes toward the target brand.
- **H3e:** Purchase intention is higher in subjects with favorable attitudes toward the target brand.

RQ1: How do plot connection, consumer involvement, and prior brand evaluation interact to influence the effectiveness of product placement?

Few results are available on the interactive effects of plot connection, product involvement, and prior brand evaluation. Since it is difficult to find locate research or any theoretical accounts that might explain the interaction effect of those variables, the research question was proposed.

CHAPTER 3 METHODOLOGY

To test the proposed hypotheses, a 2 (plot connection: high vs. low) x 2 (product involvement: high vs. low) x 2 (previous attitude toward the brand: favorable vs. unfavorable) one between- and two within-subject factorial design was implemented. Plot connection was manipulated by selecting two movies that featured the same brand. In a higher plot connection condition, brands were fully integrated into the storyline and played a significant role in the plot, while lower plot connection conditions consisted of mere background brand exposure.

Pilot Study

Procedure

A total of 36 college students from the University of Florida participated in a pilot test to ensure that the plot connections worked successfully. Four movies, *Kangaroo Jack*, *Cellular*, *Panic Room*, and *Heartbreaker*, were selected as stimuli. All movies included a scene in which the cell phone brand Nokia was used by an actor or exposed. Exposure times of the target brand were not significantly different, and the total length of each movie scene was 90 seconds. Participants completed surveys that asked them to identify the degree of brand integration into the movie.

Pilot Test Results

Because scales measuring plot connection have not yet been established, three seven-point Likert-type items anchored by “strongly agree” and “strongly disagree” responses were invented: 1) Placed brand in the movie scene plays an important role in

the movie plot; 2) Placed brand in the movie scene is well integrated into the storyline; and 3) Placed brand in the movie scene constitutes a major thematic element. These items were invented based on the definition of plot connection, or the degree to which the brand is integrated into the plot (Russell, 1998). Mean scores for each movie were computed (Cronbach's alpha = .89) and are as follows: *Cellular* (M= 6.23), *Heartbreaker* (M= 3.65), *Panic Room* (M= 4.92), and *Kangaroo Jack* (M=3.23). One-way ANOVA was conducted to see if the mean difference of four movies is significant and significant result has been found [$F(3, 144) = 11.75, p < .001$]. The movie with the highest mean score, *Cellular*, was identified as having a high product-plot connection while the movie with the lowest score, *Kangaroo Jack*, was identified as having a low product-plot connection.

Main Study

A 2 x 2 x 2 factorial experiment was designed with one between- and two within-subject variables: plot connection (high vs. low), product involvement (high vs. low), and previous brand evaluation (favorable vs. unfavorable). The five key dependent variables were: a) arousal, b) pleasure, c) attitude toward the brand (A_B), d) attitude toward the placements (A_{PPL}) and, e) purchase intention (PI).

Sample Selection

The experiment was conducted with undergraduates enrolled in advertising classes at the University of Florida. As an accessible and large population, students are considered appropriate subjects. Furthermore, they are a target market that watches between 20 and 36 movies a year, according to SMRB data. A total of 221 students (165 females and 56 males) participated in the study. Participants completed the experiment during their class session and received extra credit as compensation for their participation.

Stimuli Development

The cell phone brand Nokia was selected as the target brand because students in the subject pool were familiar with this product category and college students frequently use and show more interest in cell phones than any other group. High and low plot connection movies were selected from a pilot study and a series of pretests. The films *Cellular* and *Kangaroo Jack*, were identified as high and low product-plot connections respectively. Total exposure time to both movie scenes was limited to 90 seconds.

In the selected 90-second scene from the movie *Cellular*, the main actor uses his cell phone to view a video clip of his girlfriend that he had previously recorded using the phone. While he is watching the image, he receives a call from a kidnapped woman who says she is in danger and asks for his help. Because she made a phone call from a scattered phone after many hours of attempting to reach anyone, neither she nor he can hang up the phone. This situation combined with the tense atmosphere implies that the cell phone will play an important role in the whole storyline of the movie. While the actor is watching the video clip and receiving a phone call, the Nokia brand name is clearly shown.

In the movie clip from *Kangaroo Jack*, the two main actors have found the phone number of a pilot who will play an important role in solving their problems and saving their lives. While they are making a phone call to the pilot, a drunken man passes by them and falls to the ground. While they are making fun of the drunkard, they hear a ringing from the man's pocket and discover that he is the pilot they are trying to call. When one of the main actors pulls the cell phone out of a drunken pilot's pocket, the Nokia brand is displayed.

Procedure

Students were informed in a previous class session that there would be an extra credit opportunity if they completed the study. To ensure the consistency of testing procedures in all the sessions, proctors followed detailed written directions. To measure participants' prior attitudes toward the target brand, the first proctor explained the purpose of the study and then distributed the survey including semantic differential scales of 20 brands including the target brand. To ensure that the first and second study were totally different, a second proctor explained the procedures of the study after the first proctor collected the survey, and randomly assigned students into two groups according to last digit of their student ID numbers. Students with odd numbers were placed in Group 1 and shown the high product-plot connection film *Cellular*, and students with even numbers were placed in Group 2 and shown the low product-plot connection movie *Kangaroo Jack*.

A total of 221 subjects (110 viewing the high product-plot connection movie and 111 viewing the low product-plot connection movie) participated in this study. Students were given the dependent measures booklet upon arriving for the film screenings. After completing the consent forms, the proctor showed them the selected 90 second movie scene. After watching the movie scene, subjects began an emotional response task, and then described their attitudes toward the product placement, attitudes toward the target brand, and purchase intentions. After completing the questionnaire, subjects were debriefed and thanked for their participation.

Independent Variables

Product involvement. Viewers' product involvement was used as a measured variable in this experiment. Five seven-point semantic differential items were used to

measure audience involvement (useless/useful, uninterested/interested, worthless/valuable, unwanted/wanted, undesirable/desirable) and a mean score was computed (Cronbach's alpha = .93). Scales are adapted from Zaichkowsky's (1985) Personal Involvement Inventory (PII) and McQuarrie and Munson's (1986) Revised Personal Involvement Inventory (RPII). Subjects in the upper scale of the median (5.00/7) were categorized as the high involvement group and those in the lower scale of the median were categorized as the low involvement group.

Prior brand evaluation. Previous brand attitudes were measured using four Likert-type scale items ("I think the quality of the product is good;" "I think the price of the product is satisfactory;" "I think the design of the product is excellent;" "My evaluation of Nokia is favorable.") which were obtained from a different questionnaire administrated by a different investigator before the experiment. A mean score was computed (Cronbach's alpha = .81) and then identified as favorable/unfavorable according to the upper/lower scale (Median=5.22/7).

Dependent Variables

The measurement tools used in this study are based on the literature review related to brand evaluation and plot connection as independent variables. The research used previously-developed scales, modified when necessary, to measure the following variables in the study: emotional response, attitude toward the placement, attitude toward the target brand, and purchase intention.

Emotional response. To measure emotional response, both the verbal emotional scale suggested by Mehrabian and Russell (1974) and the Self-Assessment Manikin (SAM) developed by Lang (1984) were used. The measure consists of three different scales: a) Pleasure (measures the positive/negative aspect of the feeling), b) Arousal

(measures the level of intensity or involvement in the feeling), and c) Dominance (measures the degree of empowerment the respondent feels). The PAD is composed of 18 semantic differential items representing 6 items in each dimension (Mehrabian & Russell, 1974). In this study, 3 items in each dimension were selected: happy/unhappy, pleased/annoyed, and satisfied/unsatisfied in the Pleasure dimension; stimulated/relaxed, excited/calm, and aroused/unaroused in the Arousal dimension; and controlling/controlled, influenced/influential, and cared-for/in control in the Dominance dimension.

The SAM (Lang, 1984) is a graphic character used to represent the three dimensions of PAD (Figure 3-1). Initially, SAM was compared to verbal PAD employed by Mehrabian and Russell (1974) to standardize the three PAD dimensions. The results indicated that SAM “generated a similar pattern of scale values for these situations as was obtained for the semantic differential” (Lang, 1980).

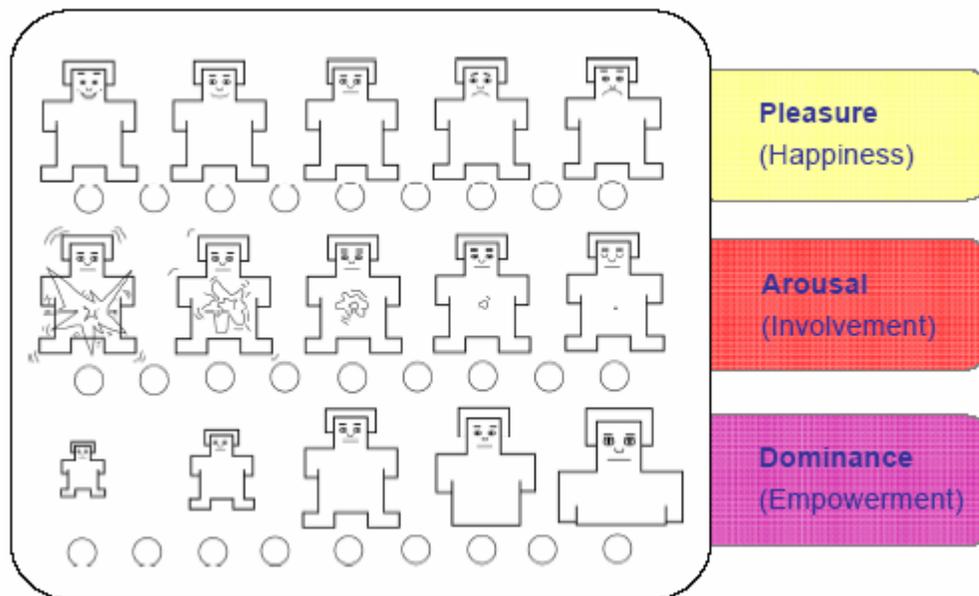


Figure 3-1. Self Assessment Manikin

Significant correlation for pleasure (.94), arousal (.93), and dominance (.83) were found between ratings generated by SAM and by the semantic differential scales used by Mehrabian and Russell (1974). Therefore, only SAM scores were used in this study. Much of the attention given to the PAD framework has centered on the importance of the pleasure and arousal dimensions. This is because most advertising primarily affects these dimensions. Therefore, only pleasure and arousal scores were considered.

Attitude toward the brand. Attitudes toward the target brand were measured using four nine-point semantic differential scales (good/bad, beneficial/harmful, desirable/undesirable, and nice/awful) developed by Ahluwalia et al (2000). The brand attitude scale was consolidated into a single measure by computing a mean (Cronbach's alpha = .93).

Attitude toward the placement. Attitudes toward the product placements were measured using four seven-point semantic differential scales (unfavorable/favorable, unlikable/likable, bad/good, and unpleasant/pleasant). A mean score was computed using these four items (Cronbach's alpha = .95).

Purchase intention. Purchase intent was measured using Haley and Case's (1979) Verbal Purchase Intent Scale. The scale is a three-item Likert-type scale (unlikely/likely, impossible/possible, and improbable/probable). In the analysis the average score will be used (Cronbach's alpha = .93).

CHAPTER 4 RESULTS

Independent sample t-tests were conducted to ensure that subjects in the two groups categorized by their levels of product involvement (high/low) are significantly different. The results indicated that high and low involvement groups are different. Also, t-tests showed that favorable and unfavorable prior brand evaluation groups are significantly different. Therefore, product involvement and prior brand evaluation functioned as intended independent variables.

Group Differences

Product Involvement

Table 4-1 shows that the mean scores for the high and low involvement groups were significantly different ($M_{\text{low}} = 4.09$, $SD = .97$; $M_{\text{high}} = 5.93$, $SD = .56$; $t = -15.67$, $df = 219$, $p < .001$).

Prior Brand Evaluation

Table 4-2 shows that the mean scores for the favorable and unfavorable brand attitude groups were significantly different ($M_{\text{unfavorable}} = 4.64$, $SD = .70$; $M_{\text{favorable}} = 6.07$, $SD = .51$; $t = -16.86$, $df = 219$, $p < .001$).

The number of subjects in the unfavorable prior brand evaluation group ($n = 122$) was higher than the number of people in the favorable prior brand evaluation group ($n = 99$). This suggests that subjects in this study held generally favorable attitudes toward the Nokia brand.

Data Analysis

Our purpose was to see how plot connection, consumer product involvement, and prior brand evaluations impact the effectiveness of product placement in terms of emotional response, attitudes toward the placement, attitude toward the target brand, and purchase intentions.

Descriptive Statistics

Table 4-3 shows descriptive statistics of all items in questionnaires. The descriptive results provide a summary of variables that are important in later analyses.

Test of Hypothesis

Plot Connection

Hypothesis 1: Subjects exposed to product placements with higher plot connection would exhibit more positive reactions to the placed products than those exposed to product placements with lower plot connection.

Based on the literature review, it was assumed that plot connection would affect emotional response, attitudes toward the placement, attitude changes, and purchase intentions. ANOVA was conducted to test the effect of plot connection on dependent variables. As Table 4-4 shows, statistical differences in plot connection between high and low plot connection groups were found for arousal ($p < .001$) and attitude toward the target brand ($p < .001$).

As shown in Table 4-5, the high plot connection group exhibited higher arousal levels than the low plot connection group ($M_{\text{high}} = 6.28$, $SD = 1.75$, $M_{\text{low}} = 4.59$, $SD = 1.68$) and more positive attitudes toward the target brand ($M_{\text{high}} = 4.97$, $SD = 1.07$, $M_{\text{low}} = 4.23$, $SD = 1.19$). Therefore, Hypotheses 1b and 1d were supported. These results

illustrate that regardless of a brand's level of integration into the plot, viewer attitudes toward product placement and purchase intentions were not affected.

Level of Involvement

Hypothesis 2: Subjects in high involvement conditions would exhibit more positive reactions to the placed products than those in low involvement conditions.

To test Hypothesis 2, ANOVA test was run to measure the influence of involvement on emotional response, attitudes toward the placement, attitude change, and purchase intentions. As Table 4-4 demonstrates, statistical differences between high and a low involvement groups were found for pleasure ($p < .001$), arousal ($p < .01$), attitudes toward placements ($p < .001$), attitude toward the target brand ($p < .001$), and purchase intentions ($p < .001$). As shown in Table 4-5, the high product involvement group exhibited higher pleasure levels than the low product involvement group ($M_{\text{high}} = 6.16$, $SD = 1.67$, $M_{\text{low}} = 5.04$, $SD = 1.59$), as well as higher arousal levels ($M_{\text{high}} = 5.97$, $SD = 1.85$, $M_{\text{low}} = 4.87$, $SD = 1.80$), more positive attitudes toward placements ($M_{\text{high}} = 5.33$, $SD = .98$, $M_{\text{low}} = 3.97$, $SD = 1.18$), more positive attitude towards the target brand ($M_{\text{high}} = 5.29$, $SD = .95$, $M_{\text{low}} = 3.89$, $SD = .98$), and higher purchase intentions ($M_{\text{high}} = 4.53$, $SD = 1.29$, $M_{\text{low}} = 3.18$, $SD = 1.28$). Thus, Hypothesis 2 was supported. These results indicate that the level of consumers' product involvement influences the effectiveness of product placement.

Prior Brand Evaluation

Hypothesis 3: Subjects who previously expressed favorable attitudes toward the target brand would exhibit more positive reactions to the placed products than those with previously unfavorable attitudes toward the target brand.

In this experiment, only statistically significant differences in attitude toward the target brand ($p < .001$) and purchase intentions ($p < .001$) were found between the favorable and unfavorable groups. As shown in Table 4-5, the favorable prior brand evaluation group exhibited more positive attitudes toward the target brand than the unfavorable prior brand evaluation group ($M_{\text{favorable}} = 4.81$, $SD = 1.23$, $M_{\text{unfavorable}} = 4.34$, $SD = 1.10$) and higher purchase intentions ($M_{\text{favorable}} = 4.17$, $SD = 1.43$, $M_{\text{low}} = 3.48$, $SD = 1.39$). Thus, Hypotheses 3d and 3e were supported. These results showed that regardless of participant attitudes toward brands prior to product placement exposure, viewers are likely to exhibit the same amount of emotional response and attitude toward the product.

Research Question: Interaction Effects of Plot Connection, Product Involvement, and Prior Brand Evaluation

Limited previous research on the effectiveness of product placement empirically tested the three-way interaction effects of plot connection, involvement level, and prior brand evaluation. Therefore, a research question was proposed.

RQ1: How do plot connection, consumer product involvement, and prior brand evaluation interact to influence the effectiveness of product placement?

To answer this research question, a MANOVA test using emotional response, attitudes toward the placement, attitude toward the target brand, and purchase intentions as dependent variables was conducted (Table 4-6). As the results in Table 4-5 show, a significant three-way interaction effect was found for two dependent variables: attitude toward the placement ($F = 4.95$, $p < .05$), and purchase intention ($F = 3.94$, $p < .05$). Figures 4-1 and 4-2 provide a graphical representation of the three-way interaction effects.

For those under the high-involvement condition who had favorable prior brand evaluations, the high plot connection placement yielded more positive attitudes toward placements than the low plot connection placement. Under the low involvement condition, however, low plot connection placements generated more positive attitudes toward placements (Figure 4-1). The results differed for those who had unfavorable prior brand evaluations. Under the high involvement condition, the high and low plot connection placements do not lead to differences in product placement attitudes. Under the low involvement condition, however, high plot connection placements generate more positive attitudes toward the product placement than low plot connection placements.

There is an interaction effect on purchase intention. For those who had favorable prior brand evaluations, the high plot connection placement generated higher purchase intentions than low plot connection placements under both high and low involvement condition. The mean differences between high and low plot connection were very small (Figure 4-2). Results differed, however, for those who had unfavorable prior brand evaluations. In other words, under the high involvement condition, the high plot connection placement generated higher purchase intentions than the low plot connection placement; but under the low involvement condition, the low plot connection placement generated higher purchase intentions than the high plot connection placement.

Table 4-1. Mean difference of Product Involvement

Measure	Treatment	N	Mean	SD	t	df
Product Involvement	Low	112	4.09	.97	-15.67***	219
	High	109	5.93	.56		

Note. Items in the involvement scale were measured on a 7-point scale ranging from 1 (not at all) to 7 (very much). *** $p < .001$

Table 4-2. Mean Difference of Prior Brand Evaluation

Measure	Treatment	N	Mean	SD	t	df
Prior Brand Evaluation	Unfavorable	122	4.64	.70	-16.86***	219
	Favorable	99	6.07	.51		

Note. Items in the brand evaluation scale were measured on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). *** $p < .001$

Table 4-3. Means and Standard Deviations of All Items

Items	Variables	M	SD
I think the quality of Nokia is good	Prior Brand Evaluation	5.50	1.05
I think the price of Nokia is satisfactory		4.84	1.25
I think the design of Nokia is excellent		5.30	1.28
My evaluation of Nokia is favorable		5.39	1.13
Pleasure	Emotional Response	5.61	1.72
Arousal		5.43	1.90
Dominance		5.05	1.49
Useless/Useful	Product Involvement	5.11	1.29
Uninterested/Interested		4.74	1.35
Worthless/Valuable		4.89	1.39
Unwanted/Wanted		4.52	1.45
Irrelevant/Relevant		4.61	1.45
Unfavorable/Favorable	Attitude toward Placements	4.77	1.42
Unlikable/Likable		4.64	1.38
Bad/Good		4.66	1.36
Unpleasant/Pleasant	Attitude toward the Target Brand	4.57	1.30
Unattractive/Attractive		4.63	1.32
Unlikable/Likable		4.67	1.24
Bad/Good		4.63	1.25
Boring/Interesting		4.47	1.44
Unlikely/Likely	Purchase Intentions	3.70	1.57
Impossible/Possible		4.21	1.52
Improbable/Probable		3.68	1.57

Note: Scales for mean scores for Emotional Response are from 1 to 9 with 9 being most positive. All other mean scores are from 1 to 7 with 7 being most positive. $n=221$.

Table 4-4. Univariate Results of Plot Connection, Product Involvement, and Prior Brand Evaluation on Placement Effectiveness Variables

Independent Variables	Dependent Variables	MS	d.f	F
Main Effects				
Level of Plot Connection	Pleasure	0.07	1	0.02
	Arousal	116.32	1	40.70***
	A _{PPL}	1.15	1	1.01
	A _B	6.713	1	7.815**
	PI	0.53	1	0.34
Level of Involvement	Pleasure	61.12	1	22.67***
	Arousal	24.51	1	8.58**
	A _{PPL}	84.21	1	73.96***
	A _B	80.67	1	93.91***
	PI	85.24	1	55.59***
Prior Brand Evaluation	Pleasure	2.40	1	0.89
	Arousal	0.72	1	0.25
	A _{PPL}	0.47	1	0.42
	A _B	8.42	1	9.81***
	PI	16.66	1	10.87***
3-way Interaction Effects				
Level of Plot Connection X	Pleasure	4.14	1	1.54
	Arousal	1.18	1	0.41
Level of Involvement X	A _{PPL}	5.64	1	4.95*
	A _B	0.12	1	0.14
Prior Brand Evaluation	PI	6.04	1	3.94*

Note: Scales for mean scores for Pleasure and Arousal are from 1 to 9 with 9 being most positive. All other mean scores are from 1 to 7 with 7 being most positive. $n=221$.

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 4-5. Means and Standard Deviations by Different Treatment Condition

Treatment		Dependent Variables Mean (SD)				
		Pleasure	Arousal	A _{PPL}	A _B	PI
Plot connection	High	5.77(1.96)	6.28 (1.75)	4.94(1.32)	4.97 (1.07)	4.10(1.41)
	Low	5.44(1.44)	4.59 (1.68)	4.39(1.18)	4.23 (1.19)	3.63(1.45)
Involvement	High	6.16 (1.67)	5.97 (1.85)	5.33 (0.98)	5.29 (0.95)	4.53 (1.29)
	Low	5.04 (1.59)	4.87 (1.80)	3.97 (1.18)	3.89 (0.98)	3.18 (1.28)
Previous Brand Evaluation	Favorable	5.68(1.80)	5.40(1.90)	4.77(1.42)	4.81 (1.23)	4.17 (1.43)
	Unfavorable	5.52(1.62)	5.46(1.92)	4.52(1.07)	4.34 (1.10)	3.48 (1.39)

Note: Scales for mean scores for Arousal and Pleasure are from 1 to 9 with 9 being most positive. All other mean scores are from 1 to 7 with 7 being most positive. $n=221$.

Table 4-6. Multivariate Results

Treatments	Dependent Variables	Wilk's Lambda	F	d.f
Level of Plot Connection	Pleasure, Arousal, Dominance, A _{PPL} , A _B , and PI	.790	9.24***	(6,208)
Level of Involvement		.614	21.81***	
Prior Brand Evaluation		.888	4.38***	
Level of Plot Connection X		.896	4.02***	
Level of Involvement X				
Prior Brand Evaluation				

Note: *** $p < .001$

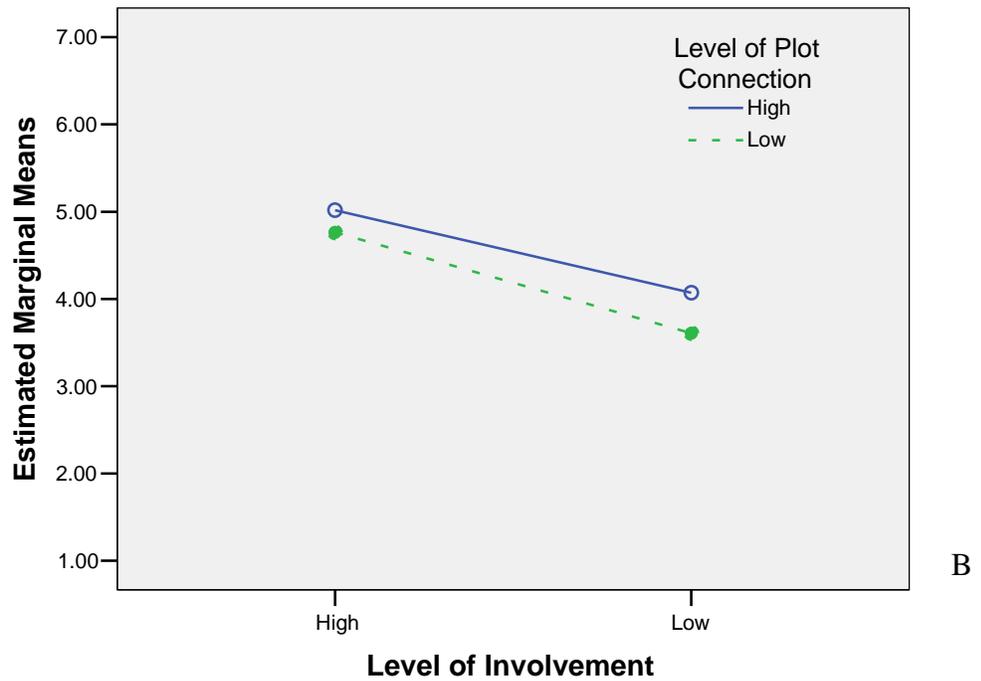
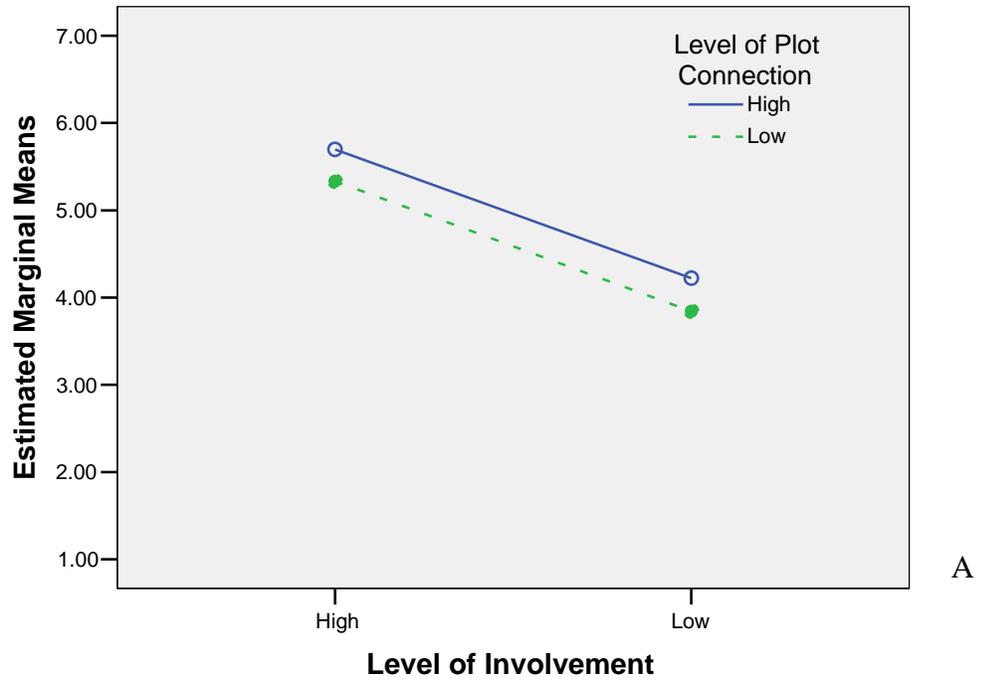


Figure 4-1. Significant 3-way Interactions on Attitude toward Placement. A) Attitude toward the targeted brand at prior brand evaluation is favorable. B) Attitude toward the targeted brand at prior brand evaluation is unfavorable.

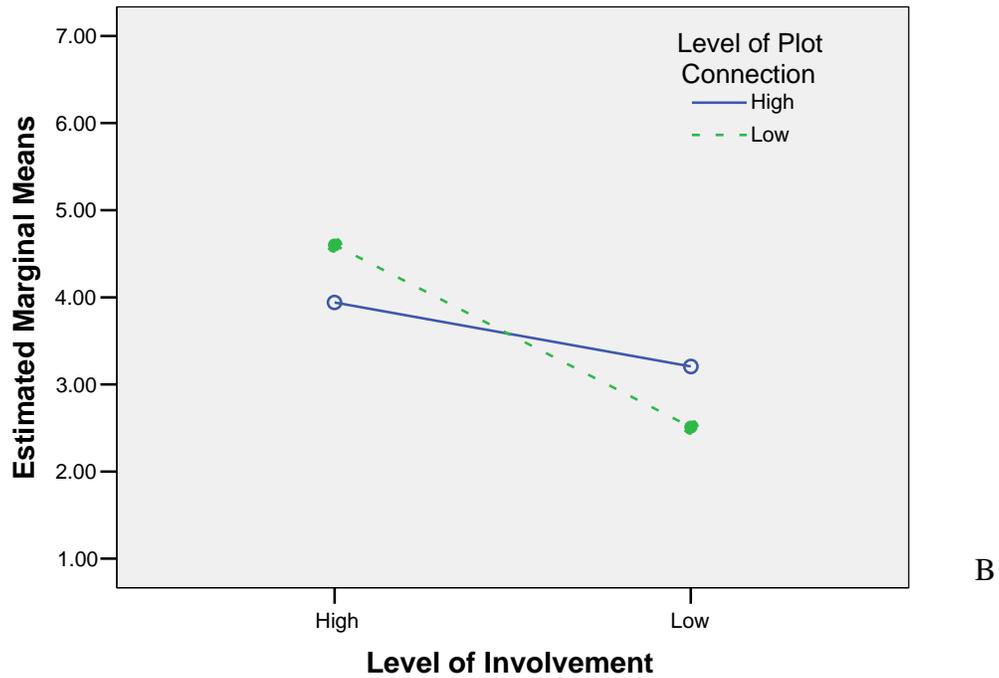
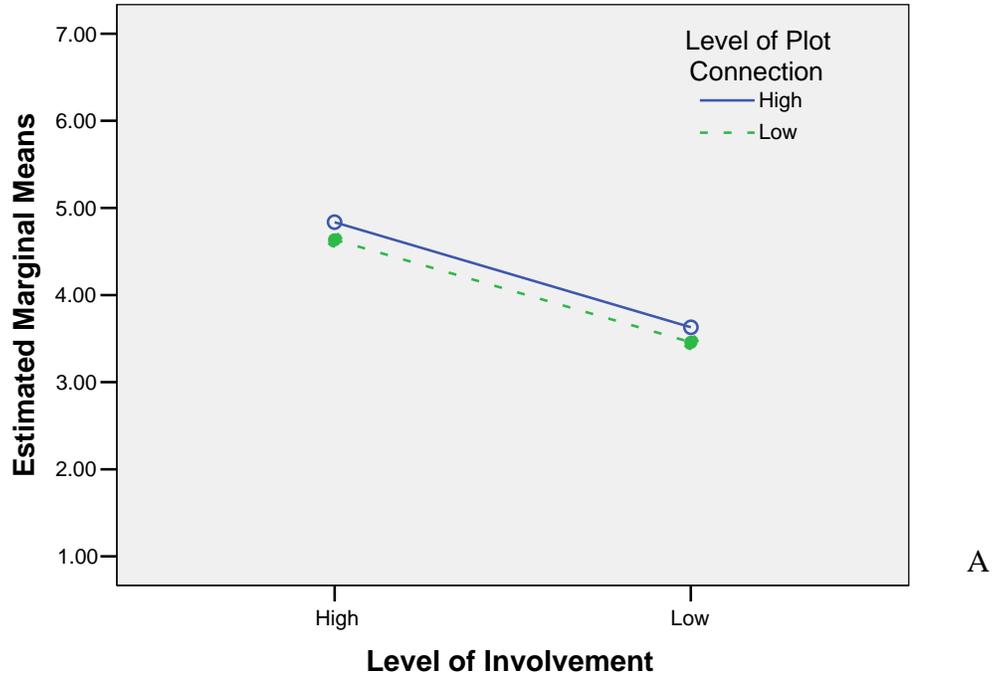


Figure 4-2. Significant 3-way Interactions on Purchase Intention. A) Purchase intention at prior brand evaluation is favorable. B) Purchase intention at prior brand evaluation is unfavorable.

CHAPTER 5 CONCLUSION AND DISCUSSION

Summary of Results

This study was designed to identify the impact that various conditions and variables have on the effectiveness of product placements. The results identify the effect that product placement variables have on consumer emotional response, attitude toward placements, attitude toward the target brand, and purchase intentions.

First, the effects of plot connection were only significant for two dependent variables-- arousal and attitude toward the target brand. These results indicated that the brand's level of integration into the plot do not affect viewer attitudes toward the placement and purchase intentions. It seems that high level of plot connection might affect some parts of viewers' emotions and brand evaluations, but it has limited power in influencing attitude toward the placement or altering their purchase intentions.

Second, statistical differences between the high and low involvement groups were noted for the all dependent variables: pleasure, arousal, attitudes toward the placement, attitude toward the target brand, and purchase intentions. These results show that a consumer's level of involvement does influence the effectiveness of product placement and has more power than other variables in determining the effectiveness of product placements.

Third, statistically significant differences were found in attitude toward the target brand and purchase intentions between the favorable and unfavorable groups. These results indicate that regardless of participant attitudes toward brands prior to exposure to

the placement, viewers were likely to exhibit the same emotional responses and attitudes toward the product placement. The product placement seems to play a role as reinforcing evaluations and purchase intentions of consumers who already have positive attitude toward the target brand not generate new emotions or change attitudes of consumers who had unfavorable attitude toward the brand.

Forth, the test identified significant three-way interaction effects on attitude toward the placement and purchase intentions. For subjects who had a favorable attitude toward the target brand prior to the exposure and high product involvement, the high plot connection generated more positive effects in terms of both attitudes toward the placement and purchase intentions. For those who had unfavorable prior brand evaluation and high product involvement, however, the degree of plot connection either did not result in any differences or a low plot connection generated more positive effects.

Also, for those who have low product involvement, whether they demonstrate favorable or unfavorable prior brand evaluations, the degree of plot connection did not show many differences or low plot connection generated more positive attitudes toward the placement.

These results are consistent with previous research dealing with product involvement (Zaichkowsky, 1985; Laurent & Kapferer, 1985) that indicate that personal involvement or relevance of the object in the communication is necessary before there is active attention to the communication (Zaichkowsky, 1985). In order for viewers to positively respond to the placement and also for the high plot connection to be more effective, viewers' high involvement should be previously established.

Managerial Implications

The results of this study will offer marketers and advertising agencies useful insights into using product placement strategies as a marketing communication tool. The results of this study suggest that many factors should be accounted for when evaluating the effectiveness of a placement. The most common measure of product placement effectiveness has been consumer memory (Babin & Carder, 1996; d'Astous & Séguin, 1999; Gupta & Lord 1998; Karrh, 1995; Nelson, 2002; Vollmers & Mizerski, 1994). This study investigated the effectiveness of product placements on attitude toward the target brand and purchase intentions, and the results provided some significant findings.

This study showed that the level of product involvement plays an important role in determining the effectiveness of product placement under all circumstances (high/low plot connection and favorable/unfavorable prior brand evaluations) studied in this research. In other words, a high plot connection does not influence the effectiveness of product placement if consumers possess low product involvement.

Results from previous research concerning the influence of plot connection on viewers' arousal level and attitudes toward the target brand indicate that product placements that are highly integrated into movie scenes yield positive consumer evaluations (d'Astous & Chartier, 2000). However, this study did not find any distinctive correlation between plot connection and viewers' attitudes toward the placement and purchase intentions. This result conflicts with d'Astous and Séguin's (1999) stance that consumers more positively evaluate product placements within television programs when the product is highly related to the contents of the program. These conflicting results can be attributed to the confounding variables such as viewers' prior exposure to the movie scenes or attitude toward the movie itself or actors/actresses.

In addition, viewers' prior brand evaluation did not seem to affect arousal and pleasure levels and attitude toward placements. The fact that subjects previously had favorable attitude towards the target brand generated more positive attitude toward the brand and purchase intentions imply that the product placement strategies were more effective to enhance brand evaluations and purchase intentions for those who with positive attitude toward the target brand. It is plausible since product placement is an unobtrusive and non-persuasive manner of communication tool, placement seems to reinforce evaluation and purchase intentions of consumers who already have favorable brand evaluation rather create or change attitudes of viewers who have negative attitude toward the target brand.

Therefore, when developing product placement strategies and evaluating the results, marketing practitioners must identify and understand the target audience, including their psychographic and behavioral characteristics such as brand loyalty, product involvement, and attitude toward the brand (Russell & Belch, 2005).

Furthermore, practitioners should examine the synergetic relationship between product placements and other types of marketing communication tools and integrate product placements into overall communication strategies and media plans (DeLorme & Reid, 1999; Russell & Belch, 2005). Like other media, the effectiveness of product placements should be assessed against the objectives set, whether it is brand awareness, or building brand image. Therefore, it seems that standards to measure the effectiveness of product placement other than mere exposure must be established.

The overall implications of this study for advertisers and marketing communication researchers and practitioners are that, when attempting to evaluating effectiveness of

product placements and planning product placement strategies, they would need to consider viewers' differences including consumer involvement and prior brand evaluations. In addition, when planning product placement strategies, it would be useful to consider the key role of degree of plot connection.

Limitations and Future Research

The limitations of this study suggest a number of issues for future research. The first limitation involves the study participants, who were restricted to college students. Although this sample was appropriate for a study on product placement, the results may differ for other subjects. One criticism of using students as respondents is that they are often unfamiliar with the task required (Gaugler & Thornton, 1989). In addition, students from the Southern region of the U.S. may be different from students in other geographic locations. Thus, future research should investigate a wider demographic base to generalize the results across segments.

Furthermore, viewers' prior exposure to the movie was not measured, and people who were previously exposed to the movie were not excluded. The participants who were previously exposed to the movie and know the whole storyline might have different reactions to the clip than those who watch the clip for the first time. Also there was not an item that asks participants if they presently own a Nokia cell phone. Nokia users might have different purchase intentions. Even though they positively reacted to the placement and demonstrated a positive attitude toward the brand, they might show lower purchase intentions.

The second limitation of the study is associated with the artificial environment of the experiment. The classroom atmosphere coupled with viewers' short exposure to the

scenes could have led respondents to pay closer attention to the placements than they would have in a natural home or theater setting.

The third study limitation is related to selection of stimuli. In the pretest, only the degree of plot connection was measured. Other confounding variables such as viewers' attitude toward the movie itself, attitude toward the main actor/actress, or pleasure and arousal level to the movie were not controlled.

Yet another limitation of this study relates to the product category. Cell phones are a relatively high involvement product category and results could vary with the use of a low involvement product category.

Finally, the method of measuring dependent variables in the study could be improved. Because all the dependent variables in this study were measured right after the placements were shown to the respondents, important long-term effects went unanalyzed. DeLorme and Reid (1999) mentioned the long-term effects of product placement on memory. Therefore, future research should consider evaluating the long-term effects of product placement. Also, assessing viewers' attitude changes after exposure to the product placement might generate interesting results.

APPENDIX
QUESTIONNAIRE

Dear Participant,

I am a Master student at the University of Florida. Under the supervision of Dr. Weigold, I am exploring product placement in the movie for my thesis. The information from you will not be released to anybody. Your identity will be kept confidential to the extent provided by law. You have the right to withdraw consent for participation at any time without consequence. There are no known risks or immediate benefits to the participants of this study. If you have any questions about this research protocol, please contact SeoYoon Choi at 846-1060

Description: You are invited to evaluate the product placement in the movie.

Procedures: First, you will be watched the video clip. Next, you will be asked to evaluate the placed product in the video presentation.

Whom to contact about your rights as a research participant in the study:
Seoyoon Choi, master student, G035 Weimer Hall, College of Journalism and Mass Communications, Phone number: 352-846-1060, E-mail: arashys@ufl.edu

UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250, 392-0433

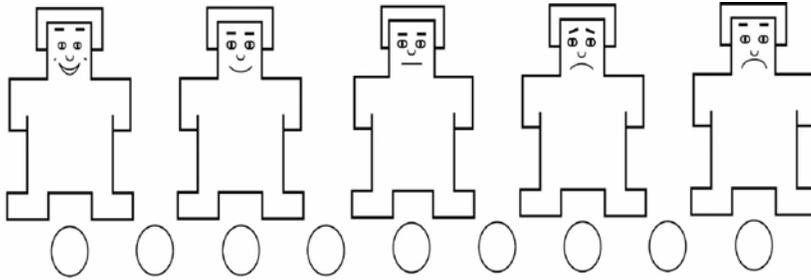
I have read and understand the above information. I agree to participate in the research. I have received a copy of this description.

_____	_____	_____
Print Name of Participant	UF ID	Date
Gender: _____ Female	_____ Male	

You will watch the video clip.
Movie Scene: Cellular

Q1: It is your first impressions, the immediate feelings about the items that we want. On the other hand, please do not be careless, because we want your true impressions. How do you feel about the Movie Scene?

Q: Pleasure

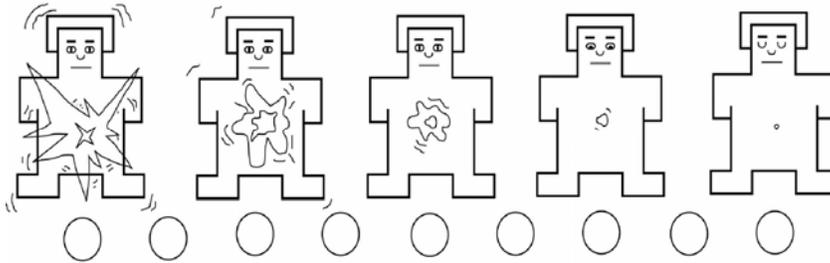


p-1). Happy : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unhappy
 +3 +2 +1 0 -1 -2 -3

p-2). Pleased : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Annoyed
 +3 +2 +1 0 -1 -2 -3

p-3). Satisfied : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unsatisfied
 +3 +2 +1 0 -1 -2 -3

Q: Arousal



a-1). Stimulated : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Relaxed
 +3 +2 +1 0 -1 -2 -3

a-2). Excited : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Calm
 +3 +2 +1 0 -1 -2 -3

a-3). Aroused : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unaroused
 +3 +2 +1 0 -1 -2 -3

LIST OF REFERENCES

- Ahluwalia, R., R. E. Burnkrant, and H. R. Unnava (2000). "Consumer Response to Negative Publicity: The Moderating Role of Commitment." *Journal of Marketing Research* 37(2): 203-214.
- American Brandstand, Agenda Inc.(2005).
- Ananad, P., and B. Sternthal (1992). "The Effects of Program Involvement and Ease of Message Counterarguing on Advertising Persuasiveness." *Journal of Consumer Psychology* 1(3): 225-238.
- Andrews, J.C., S.H. Akhter, S. Durvasula, and D. Darrel (1992). "The Effects of Advertising Distinctiveness and Message Content Involvement on Cognitive and Affective Response to Advertising." *Journal of Current Issues & Research in Advertising* 14(1): 45-58.
- Avery, R. J., and R. Ferraro (2000). "Verisimilitude or Advertising? Brand Appearance on Prime-Time Television." *The Journal of Consumer Affairs* 34(2): 217-244.
- Babin, L. A., and S. T. Carder (1996a). "Viewers' Recognition of Brands Placed Within a Film." *International Journal of Advertising* 15: 140-151.
- Babin, L. A., and S. T. Carder (1996b). "Advertising Via the Box Office: Is Product Placement Effective?" *Journal of Promotion Management* 3(1/2): 31-51.
- Baker, W. E. (1999). "When Can Affective Conditioning and Mere Exposure Directly Influence Brand Choice?" *Journal of Advertising* 28(4): 31-46.
- Balasubramanian, S. K. (1994). "Beyond Advertising and Publicity: Hybrid Messages and Public Policy Issues." *Journal of Advertising* 23(4): 29-46.
- Bloch, P. H. (1982). "Involvement beyond the Purchase Process: Conceptual Issues and Empirical Investigation." *Advances in Consumer Research* 9(1): 413-417.
- Bloch, P. H. (1986). "The Product Enthusiast: Implications for Marketing Strategy." *Journal of Consumer Marketing* 3(3): 51-62.
- Bloch, P. H., and M. L. Richins (1983). "A Theoretical Model for the Study of Product Importance Perceptions." *Journal of Marketing* 47(2): 69-81.

- Bloch, P. H., D. L. Shrerell, and N. M. Ridgway (1986). "Consumer Search: An Extended Framework." *Journal of Consumer Research* 13(1): 119-126.
- Brennan, I., K. M. Dubas, and L.A. Babin (1999). "The Influence of Product Placement Type and Exposure Time on Product Placement Recognition." *International Journal of Advertising* 18(1): 323-337.
- Brennan, S., P. J. Rosenberger, and V. Hementera (2004). "Product Placements in Movies: An Australian Consumer Perspective on Their Ethicality and Acceptability." *Marketing Bulletin* 15: 1-16
- Caraccioli-Davis, L. (2005). *Smashing the Myths of Branded Entertainment*. *Television Week*. 24: 11.
- Celsi, R. L., and J. C. Olson (1988). "The Role of Involvement in Attention and Comprehension Processes." *Journal of Consumer Research* 15(2): 210-224.
- Chattopadhyay, A., and K. Basu (1990a). "Humor in Advertising: The Moderating Role of Prior Brand Evaluation." *Journal of Marketing Research* 27(4): 466-476.
- Chattopadhyay, A., and K. Basu (1990b). "Does Brand Attitude Moderate the Persuasiveness of Humor in Advertising." *Advances in Consumer Research* 17(1): 442.
- Chaudhuri, A. (1998). "Product Class Effects on Perceived Risk: The Role of Emotion." *International Journal of Research in Marketing* 15(2): 157-168.
- d'Astous, A., and F. Chartier (2000). "A study of Factors Affecting Consumer Evaluations and Memory of Product Placements in Movies." *Journal of Current Issues and Research in Advertising* 22(2): 31-40.
- d'Astous, A., and N. Seguin (1999). "Consumer Reactions to Product Placement Strategies in Television Sponsorship." *European Journal of Marketing* 33(9/10): 896-910.
- DeLorme, D. E. (1998). *Brand Placement: A Historical Overview*. American Academy of Advertising, Pullman, WA, American Academy of Advertising.
- DeLorme, D. E., and L. N. Reid (1999). "Moviegoers' Experiences and Interpretations of Brands in Films Revisited." *Journal of Advertising* 28(2): 71-103.
- Diamond, R. (2002). *Bond Traders*. *New Statesman*. 25.
- Federal Communications Commission Reports(1970). Washington, DC, U.S. Government Printing Office. 40.

- Feltham, T. S., and S. J. Arnold (1994). "Program Involvement and Ad/Program Consistency as Moderators of Program Context Effects." *Journal of Consumer Psychology* 3(1): 51-78.
- Flynn, L. R., and R. E. Goldsmith (1993). "Application of the Personal Involvement Inventory in Marketing." *Psychology and Marketing* 10(4): 357-366.
- Ford UK Mounts Novel Multi-Media Product Placement Campaign (2004).
- Fournier, S., and R. J. Dolan (1997). *Launching the BMWZ3 Roadster*. Boston, Harvard Business School.
- Friestad, M., and P. Wright (1994). "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts." *Journal of Consumer Research* 21(1): 62-74.
- Gaugler, B. B., and G. C. Thornton (1989). "Number of Assessment Center Dimensions as a Determinant of Assessor Accuracy." *Journal of Applied Psychology* 74(4): 611-618.
- Gould, S. J., P. B. Gupta, and S. Grabner-Kräuter (2000). "Product Placement in Movies: A Cross-Cultural Analysis of Austrian, French, and American Consumers' Attitudes toward This Emerging International Promotional Medium." *Journal of Advertising* 29(4): 41-58.
- Grigorovici, D. M., and C. D. Constantin (2004). "Experiencing Interactive Advertising Beyond Rich Media: Impacts of Ad Type and Presence on Brand Effectiveness in 3D Gaming Immersive Virtual Environments." *Journal of Interactive Advertising* 4(3).
- Gupta, P. B., and S. K. Balasubramanian (2000). "Viewers' Evaluations of Product Placements in Movies: Public Policy Issues and Managerial Implications." *Journal of Current Issues and Research in Advertising* 22(2): 41-52.
- Gupta, P. B., and S. J. Gould (1997). "Consumers' Perceptions of the Ethics and Acceptability of Product Placements in Movies: Product Category and Individual Differences." *Journal of Current Issues and Research in Advertising* 19(1): 37-50.
- Gupta, P. B., and K. R. Lord (1998). "Product Placement in Movies: The Effect of Prominence and Mode on Audience Recall." *Journal of Current Issues and Research in Advertising* 20(1): 47-59.
- Haley, R. I., and P. B. Case (1979). "Testing Thirteen Attitude Scales for Agreement and Brand Discrimination." *Journal of Marketing* 43(3): 20-32.
- Holbrook, M. B., and M. W. Grayson (1986). "The Seminology of Cinematic Consumption: Symbolic Consumer Behavior in 'Out of Africa'." *Journal of Consumer Research* 13(4): 374-381.

- Holbrook, M. B., and J. O'Shaughnessy (1984). "The Role of Emotion in Advertising." *Psychology and Marketing* 1(2): 45-64.
- Houston, M. J., and M. L. Rothschild (1978). *Conceptual and Methodological Perspectives on Involvement*. Research Frontiers in Marketing: Dialogues and Directions. S. C. Jain. Chicago, American Marketing Association: 184-187.
- Howard, J. A., and J. A. Sheth New York (1969). *The Theory of Buyer Behavior*. NY, Wiley.
- Jesdanun, A. (2005, January 23). Bloggers Influence Raises Ethical Questions. Retrieved September 24, 2005 from http://www.ladlass.com/ice/archives/cat_blogging_feeds.html
- Karrh, J. A. (1998). "Brand Placement: A Review." *Journal of Current Issues and Research in Advertising* 20(2): 31-49.
- Karrh, J. A., K. T. Frith, and C. Callison (2001). "Audience Attitudes towards Brand (Product) Placement: Singapore and the United States." *International Journal of Advertising* 20(1): 3-24.
- Karrh, J. A., K. B. McKee, and C.J. Pardun (2003). "Practitioners' Evolving Views on Product Placement Effectiveness." *Journal of Advertising Research* 43(2): 138-149.
- Kirsner, S. (2006). *Screen Test: Product Placement Can Turn a Brand into a Star- If It Has That Certain Something*.
- Krugman, H. E. (1965). "The Impact of Television Advertising: Learning Without Involvement." *Public Opinion Quarterly* 29(3): 349-356.
- Laurent, G., and J.-N. Kapferer (1985). "Measuring Consumer Involvement Profiles." *Journal of Marketing Research* 22(1): 41-53.
- Law, S., and K. A. Braun (2000). "I'll Have What She's Having: Gauging the Impact of Product Placements on Viewers." *Psychology and Marketing* 17(12): 1059-1075.
- Marsilio, E. (2004). *Waffle House Serves up Math Textbook Cover*. The Shorthorn. Arlington.
- Maslin, J. (1982). *Plugging Products in Movies as an Applied Art*. New York Times: C11.
- McCarty, J. A. (1994). *Studios Place, Show and Win: Product Placement Grows up*. Brandweek. 35: 30-32.
- McCarty, J.A. (2003). *Product Placement: Practice and Inquiry. The Psychology of Entertainment Media: Blurring the Lines between Entertainment and Persuasion*. L. J. Shrum. Mahwah, NJ.

- Mckechnie, S. A., and J. Zhou (2003). "Product Placement in Movies: A Comparison of Chinese and American Consumers' Attitudes." *International Journal of Advertising* 22(3): 349-374.
- McQuarrie, E. F., and J. M. Munson (1986). "The Zaichowsky Personal Involvement Inventory: Modification and Extension." *Advances in Consumer Research* 14: 36-40.
- Mehrabian, A., and J. Russell (1974). *An Approach to Environmental Psychology*. Cambridge, MA, MIT Press.
- Morris, J. D. (1995). "Observations SAM: The Self-Assessment Manikin-an Efficient Cross-Cultural Measurement of Emotional Response." *Journal of Advertising Research* 6: 63-68.
- Morton, C. R., and M. Friedman (2002). "'I saw it in the Movies': Exploring the Link between Product Placement Beliefs and Reported Usage Behavior." *Journal of Current Issues and Research in Advertising* 24(2): 33-40.
- Moser, H. R., L. Bryant, and K. Sylvester (2004). "Product Placement as a Marketing Tool in Film and Television." *National Social Science Journal* 22(1): 76-86.
- Muehling, D. D., and R.N. Laczniak. (1991). "The Moderating Effects of Ad Message Involvement: A Reassessment." *Journal of Advertising* 20(2): 29-38.
- Nebenzahl, I. D., and E. D. Jaffe (1998). "Ethical Dimensions of Advertising Executions." *Journal of Business Ethics* 17(7): 805-815.
- Nebenzahl, I. D., and E. Secunda (1993). "Consumers' Attitudes toward Product Placement." *International Journal of Advertising* 12(1): 1-12.
- Neer, K. (2003). *How Product Placement Works*. October 14, 2005 Retrieved from <http://money.howstuffworks.com/product-placement4.htm>
- Nelson, M. R. (2002). "Recall of Brand Placements in Computer/ Video Games." *Journal of Advertising Research* 42(2): 80-92.
- Nelson, M. R., H. Keum, R. A. Yaros (2004). "Advertainment or Adcreep? Game Players' Attitudes toward Advertising and Product Placement in Computer Games." *Journal of Interactive Advertising* 4(3).
- Ong, B. S., and D. Meri (1994). "Should Product Placement in Movies be Banned?" *Journal of Promotion Management* 2(3/4): 159-175.
- Park, C. W., and G. W. McClung (1986). "The Effect of TV Program Involvement on Involvement with Commercials." *Advances in Consumer Research* 13(1): 544-548.

- Petty, R. E., and J. T. Cacioppo (1979). "Issue Involvement Can Increase or Decrease Persuasion by Enhancing Message-Relevant Cognitive Responses." *Journal of Personality and Social Psychology* 37(Oct): 1915-1926.
- Petty, R. E., J. T. Cacioppo, and R. Goldman (1981). "Personal Involvement as a Determinant of Argument-Based Persuasion." *Journal of Personality and Social Psychology* 41(Nov): 847-855.
- Petty, R. E., J. T. Cacioppo, D. Schumann (1983). "Central and Peripheral Route to Advertising Effectiveness: The Moderating Role of Involvement." *Journal of Consumer Research* 10(2): 135-146.
- Product Placement Beyond TV (2005). *Maclean's*. 118: 33.
- Product Placement Spending in Media 2005: History, Analysis & Forecast, 1974-2009 (2004). PQ Media.
- Puto, C. P., and W. D. Wells (1984). "Informational and Transformational Advertising: The Differential Effects of Time." *Advances in Consumer Research* 11(1): 638-643.
- Reed, J. D. (1989). *Plugging away in Hollywood*. Time: 103.
- Russell, C. A. (1998). "Toward a Framework of Product Placement: Theoretical Propositions." *Advances in Consumer Research* 25(1): 357-362.
- Russell, C. A. (2002). "Investigating the Effectiveness of Product Placements in Television Shows: The Role of Modality and Plot Connection Congruence on Brand Memory and Attitude." *Journal of Consumer Research* 29(3): 306-318.
- Russell, C. A., and M. Belch (2005). "A Managerial Investigation into the Product placement Industry." *Journal of Advertising Research* 45(1): 73-92.
- Segrave, K. (2004). *Product Placement in Hollywood Films: A History*. Jefferson, North Carolina: McFarland & Company, Inc.
- Simmons Market Research Bureau (1991). *Study of Media and Markets*. New York.
- Soldow, G. F., and V. Principe (1981). "Response to Commercials as a Function of Program Context." *Journal of Advertising Research* 21(2): 59-65.
- Sutherland, M., and J. Galloway (1981). "Role of Advertising: Persuasion or Agenda Setting?" *Journal of Advertising Research* 21(5): 25-29.
- Tavassoli, N.T., C. J. Shultz II, and G. J. Fitzsimons (1995). "Program Involvement: Are Moderate Levels Best for Ad Memory and Attitude Toward the Ad?" *Journal of Advertising Research* 35(5): 61-72.

- Turcotte, S. (1995). 'Gimme a Bud! The Feature Film Product Placement Agency'. Thesis, University of Texas at Austin.
- Vollmers, S., and R. W. Mizerski (1994). A Review of Investigation into the Effectiveness of Product Placements in Films. American Academy of Advertising, Athens, GA: American Academy of Advertising.
- Wasko, J., and M. Philips (1993). "Hollywood Meets Madison Avenue: The Commercialization of US Films." *Media, Culture & Society* 15(2): 271-293.
- Wasserman, T. (2005). Playing the Hip-hop Name Drop. *Brandweek*. 46: 24-27.
- Weinberger, M. G., and C. S. Gulas (1992). "The Impact of Humor in Advertising: A Review." *Journal of Advertising* 21(4): 35-59.
- Writers Guild of America, West and Writers Guild of America, East (2005). "Are You Selling to Me?" *Stealth Advertising in the Entertainment Industry*. Los Angeles, California.
- Yi, M. (2005). Advertisers Pay for Video Games Product Placement Tradition No Longer Free Ride for Business. *San Francisco Chronicle*: E-1.
- You, I.-M. (2005). Product Placement Belief and Product Usage Behavior in South Korea and United States. Thesis, University of Florida.
- Zaichkowsky, J. L. (1985). "Measuring the Involvement Construct." *Journal of Advertising Research* 12(3): 341-52.
- Zeitlin, D. M. and R. A. Westwood (1986). "Measuring Emotional Response." *Journal of Advertising Research* 15(4): 34-42.

BIOGRAPHICAL SKETCH

Seoyoon Choi was born in South Korea in 1981. She double majored at Chung-Ang University in Seoul, Korea, earning both a Bachelor of Advertising and a B.A. in psychology. She came to the University of Florida in August 2004 to pursue a Master of Advertising. She plans to start her doctoral studies at the University of South Carolina starting in the Fall of 2006.