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The effect of individual level variables on the effectiveness of brand placements

Abstract

This paper suggests a theoretical framework to understand whether product placement within television programs is an effective promotional strategy for advertisers who intend to improve their customers' attitudes toward their brands, and if so, what the dispositional antecedents and moderators of such an effect might be. Analyses, using structural equation modeling of data obtained from a survey of 249 respondents, show that the viewer's mood at exposure to a product placement and their attachment to the character in the program that is associated with the placement have significant positive relationships with their attitude toward the specific product placement. Their attitude toward the specific placement is in turn positively related to attitude toward the brand placed. However, testing for moderation revealed that this relationship is not consistent across all viewers. The viewer's need for cognition, or the tendency to engage in activities that require cognitive effort, moderates this relationship. Specifically, the magnitude of the positive relationship between attitude toward a specific product placement and attitude toward the brand placed was significantly higher for viewers with low need for cognition indicating that product placement within television programs may be more effective for these individuals. Implications of these findings on how marketers can improve the success of their television product placements for viewers in different dispositional states are discussed.

Keywords: product placement, brand placement, attitudes in product placement, advertising effectiveness.
JEL Classification: M3, M370.

Introduction

In recent times, the lines between entertainment and advertising have become increasingly blurred. A key contributor to this phenomenon is the practice of product placement. While it has existed for several decades, product placements now attract considerable attention from academic researchers as well as the industry and popular media. In the early days of product placement, advertisers were able to heavily influence program content, to the extent that programs were even created by advertisers. By 1957, more than one-third of all television programs were created by advertisers. However, the ability of advertisers and their agencies to influence program content gradually diminished. By the late sixties, less than 3% of network programs were created by advertisers (Turner, 2004).

Despite its popularity, there is no single measure of the "effectiveness" of product placement. A frequently cited "success" is the placement of Reese's Pieces in the movie in E.T. The Extra-Terrestrial in 1982, that reportedly increased sales by 65% (Galician and Bourdeau, 2004). A more recent example features the cognac Courvoisier in the music video (and song) by Busta Rhymes and Puff Daddy titled Pass the Courvoisier Part Two that increased sales by 20% in 2002 (Schemer, Matthes, Wirth and Textor, 2008). However, most placements on television fail to generate such impressive results; hence academic researchers often use other measures of effectiveness, such as recognition (or recall) of the placement, attitude toward the brand, and purchase intention or choice (Balasubramanian, Karrh and Patwardhan, 2006).

Extant literature on product placement include content analyses and conceptual papers, studies that focus on execution factors that influence effectiveness, and research investigating consumer attitudes toward product placement. In this study, we suggest a theoretical framework to understand how individual level variables and consumer attitudes toward a particular product placement may shape attitudes toward the brand placed. Need for cognition is proposed as a construct with a major role in these relationships.

Attitudes toward product placement in general and attitude toward the placed brand have attracted attention in previous studies that also consider executional factors such as modality and prominence and/or audience characteristics such as age and gender. Other studies have examined pre-existing attitudes toward product placement, attitude toward advertising, and involvement (See Van Reijmersdal et al., 2009, for a review of research). A unique characteristic of our study is that it investigates relationships between various audience related factors and audience attitudes toward product placements as well as toward the brand placed. The former factors remain unexplored in the growing product placement literature, and include temporary factors such as mood of the viewer as well as more enduring factors such as the viewer's need for cognition and attachment to the program character associated with the placement.

The persuasive nature of product placement draws on peripheral cues, in addition to depending on audience characteristics. One such characteristic is

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the viewer's need for cognition, i.e. the tendency to engage in activities that require cognitive effort that may in turn drive the motivation to process information in the context of the Elaboration Likelihood Model (Petty and Cacioppo, 1981). On the other hand, factors such as the mood of the viewer are considered peripheral cues in this model.

We next review the literatures on need for cognition and mood in advertising and product placement contexts. We then propose and test related hypotheses and offer directions for managers and for future research.

1. Literature review

1.1. Product placement. Two widely accepted definitions of product placement are as follows. It has been 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). Another definition states that "brand placement is the compensated inclusion of brands or brand identifiers, through audio and/or visual means, with mass media programing" (Karrh, 1998). There is no comprehensive theory on how product placement works; however, it is clear that placements embed elements of advertising. Within the television medium placements (usually visual placements or audio mentions) may avoid the skepticism that is typically associated with advertising (Balasubramanian, 1994).

1.2. Model development and theoretical underpinnings. Researchers have relied extensively on the advertising literature for developing theory and models about product placements (Balasubramanian and Patwardhan, 2006; Balasubramanian, Patwardhan, Pillai and Coker, in press; Russell and Stern, 2006). Mirroring this development, the theoretical underpinnings of our model draw heavily from the advertising literature, in addition to prior studies on product placements.

Placements in movie or television program contexts embed products through visual, audio or audio-visual means. While some placements are incongruent and/or intrusive, television placements are usually subtle. Research indicates that 80.6% of them appear on screen for less than five seconds, and 90% of placements with verbal product/brand references last under five seconds (La Ferle and Edwards, 2006). Unlike most ads., a typical placement does not provide significant product information. In comparing ads and placements (Balasubramanian et al., 2006) note that while there are some similarities, key differences include the lack of distinctiveness between the message and the editorial content in the case of placements, and persuasive content that resembles drama rather than arguments. This means that product placement shares some features of advertising in situations that elicit minimal audience attention. The advertising literature on incidental exposure shows that even in low attention conditions, ad exposure may increase the likelihood that an advertised product is included in the recipient's consideration set (Shapiro, Macinnis and Heckler, 1997). A similar effect was observed in the case of incidental exposure to brand names and product packages where there was no intentional processing of brand information.

Our proposed model is shown in Figure 1. The model proposes that attitude toward a specific product placement is influenced by three individual difference constructs (attitude toward product placement in general; mood; and parasocial attachment to the character). In line with recent evidence (e.g., Balasubramanian, Patwardhan, Pillai and Coker, in press), the attitude toward a specific product placement, in turn, influences attitude toward the brand. Finally, our model suggests that need for cognition (NFC) moderates all the proposed model relationships. A unique contribution of our model is its focus on the moderating role of NFC, a construct that has not been explored earlier in the context of product placements. The theoretical rationale for this focus on NFC will be elaborated later.

The final outcome of research interest is attitude toward the brand, a construct that has been widely studied because it is an antecedent of purchase intention, brand choice (Lutz, MacKenzie and Belch, 1983), and other product-related behaviors (Rucker, Petty and Priester, 2007). We next discuss specific components of our model.

1.3. Attitude toward a specific product placement. In the advertising literature, attitude toward the ad has been found to influence brand attitude (Gardner, 1985). The dual mediation model in advertising (MacKenzie, Lutz and Belch, 1986) supports the view that attitudes toward the ad may directly influence brand attitudes. It also suggests that attitude toward the ad may shape brand cognitions in addition to attitude toward the brand. A meta-analysis of 43 studies on the antecedents and consequences of attitude toward advertiing (A_{ad}) supported the dual mediation model of advertising as the best explanation of the antecedents of brand attitude (Brown and Stayman, 1992; Homer, 1990).

Most studies in advertising, because of their design as well as by virtue of the inclusion of brand information in the stimuli used, may naturally induce cognitive processing (Homer, 2006), thereby increasing the likelihood of elaboration and counter-argumentation. For product placements, we expect

the relative paucity of brand-specific information (and the greater reliance on peripheral cues to persuade) will produce a stronger effect than in the case of advertising, i.e. the relationship between attitude toward the stimulus and attitude toward the brand will be stronger for placements. Stated differently, the positive relationship between attitude toward the ad and attitude toward the brand in the case of advertising is actually an attenuated version of the analogous relationship in product placement. A key rationale for this expectation is that advertising is more likely to elicit counter-argumentation than product placements (Balasubramanian, 1994). In the product placement domain, researchers have focused on attitudes toward the placement of specific product categories in the context of media consumption, cultures, and ethicality of the products. Studies have underscored the importance of the latter variables in placement contexts (Gupta and Gould, 1997; Mckechnie and Zhou, 2003). In a similar vein, research has documented that executional characteristics of the placement influence attitudes toward the brand (Russell, 2002; Yang and Roskos-Ewoldsen, 2007). Placements were found to have a positive effect on attitude toward the brand placed in the context of video games even when the exposure period was short (Bambauer, 2006). More recently, a significant positive relationship was observed between attitude toward the placement and attitude toward the brand with the former being accorded a central position between execution related antecedents and attitude toward the brand (Balasubramanian, Patwardhan, Pillai and Coker, in press). Based on the above, we hypothesize that:

H1: Attitude toward a specific product placement has a significant positive relationship with attitude toward a brand.

MacKenzie and Lutz (1989) hypothesized that a consumer's general attitude toward advertising could positively influence attitude toward a specific ad through a process of generalization. More recently, Mehta (2000) found that attitudes regarding advertising in general influenced audience responses, including persuasion. Although the dependent variable in Mehta's study was not attitude toward the brand, but rather responses to statements such as "On average, brands that are advertised are better in quality than brands that are not advertised", we find it logical to extend this finding to encompass attitudes toward the brand as well (Mehta, 2000). The analogous construct capturing general attitude toward product placement (i.e., attitude toward product placement in general) has not attracted much research attention. Therefore, we extend research findings from the advertising domain into the product placement context, leading to the following hypothesis.

H2: Attitude toward product placement in general has a significant positive relationship with attitude toward the specific product placement.

1.4. The effect of individual level variables. Attitude toward a specific product placement may be influenced by several individual level variables, as described next.

1.4.1. Mood. Mood may influence attitude toward advertising even if the persuasive message is not recognized as an ad by the consumer. Given the covert nature of most product placements, we expect this effect to occur. Batra and Stayman (1990) found that individuals with a positive mood tended to perceive strong and weak message arguments similarly, and to produce fewer counter-arguments than those with a neutral mood. We expect mood to influence attitude toward a specific product placement through a peripheral effect (Batra and Stayman, 1990). For product placements, this may be related to execution, program content, or the exposure situation, as in the case of advertising (Lutz, 1985). Thus, the mood of the subject at the time of product placement exposure is an important individual difference variable, and along with other factors related to the reception context, is likely to influence attitudes to the specific placement (MacKenzie and Lutz, 1989). This leads to the following hypothesis.

H3: There is a significant positive relationship between the mood of the subject at the time of exposure to a product placement and the attitude toward that specific product placement.

1.4.2. Parasocial attachment to a character. Product placement typically contains little or no information content, making it conducive to peripheral processing, whereby the source of the message rather than information/content is more relevant. For movie placements, Delorme and Reid (1999) found that liking for a movie actor was related to increased likelihood of buying the placed product. According to McCracken's meaning transfer model, cultural meaning can be transferred directly from a celebrity to a brand (McCracken, 1989). While actors on television may or may not be celebrities, they are often considered "disposable". Television viewers are more likely to be preoccupied with the character rather than the actor, especially since they usually lack exposure to the actor in other character roles (Butler, 1991).

For television programs, especially long-running sitcoms, parasocial relationships are considered more important than attitudes toward the character

or the actor. Parasocial attachments are similar to real relationships but different from attitude toward a specific actor or character. Such attitudes may develop after a single exposure to the program; and over the course of multiple episodes a viewer may become vested in the characters and their lives, thereby developing strong attachments (Russell and Stern, 2006). Long running sitcoms that feature the same set of characters (e.g. Seinfeld) provide ideal settings to develop parasocial attachments. Russell and Stern (2006) found that consumer attitudes to a character affects attitude toward product only when the character-product association is strong and negative. However, they also found that consumers' parasocial attachment to character has a strong positive association with attitude toward the product. Such attachments facilitate greater audience identification with all facets of the featured characters, including the brands placed in their stories. However, in their study, "consumers' attitude toward the product" was measured using attitude items about the consumption event that depicted the product placed, which also aligns with the "Attitude toward the specific product placement" construct in our study. This leads us to the following hypotheses:

H4: Consumers' parasocial attachment to a character will have a significant positive relationship with attitude toward the specific product placement.

H5: Consumers' parasocial attachment to a character will have a significant positive relationship with attitude toward the placed brand.

1.4.3. Moderating effect of need for cognition (NFC). An individual's need for cognition (NFC) determines whether they enjoy cognitively demanding activities (Cacioppo, Petty and Kao, 1984). The Elaboration Likelihood Model (ELM) considers NFC a motivation-related factor that may activate the central rather than peripheral route to persuasion. Peripheral cues are likely used as heuristics by low rather than high NFC individuals. On the other hand, high NFC individuals may respond to informative content more readily than to peripheral cues. High NFC consumers are also more likely to elaborate upon a message. The NFC construct has been studied extensively, and documents its importance in attitude formation and change.

Since product placements are embedded in an entertainment medium, associated with a character, and provide exposure with very little information, they are more likely to rely on the peripheral rather than central route to persuasion in the Elaboration Likelihood Model. It is assumed that lower levels of conscious processing have significantly stronger relationships with brand attitudes (Balasubramanian et al., 2006). From a research perspective, it is useful to investigate whether persuasion attempts work similarly for low and high NFC individuals in placement contexts.

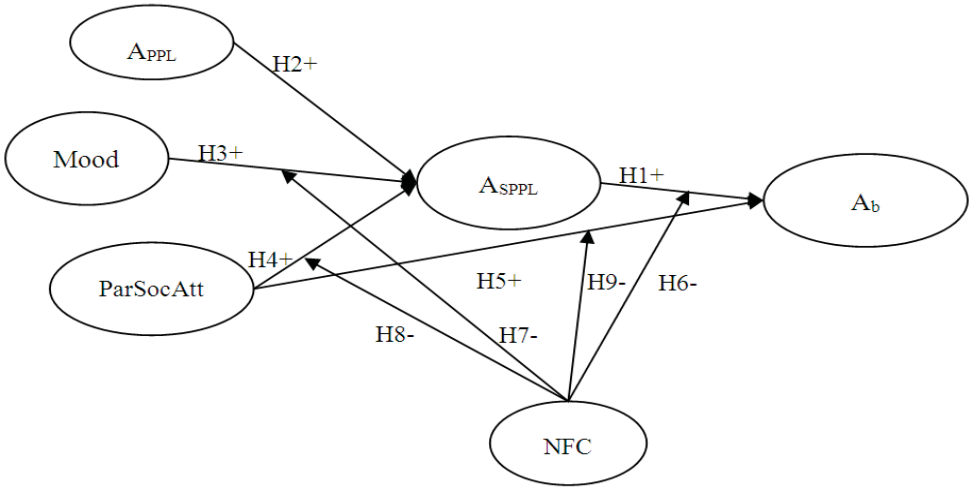
We expect that NFC moderates relationships between individual difference factors such as mood and parasocial attachment to character – which function as peripheral cues – and audience attitudes toward the specific placement. For instance, mood may create a peripheral effect that is characterized more by heuristic than systematic processing. Thus attitudes of low NFC consumers toward brands are influenced to a greater extent by mood when compared to high NFC consumers (Batra and Stayman, 1990). Similarly, attitudes of high NFC individuals have been found to be more influenced by the quality of arguments rather than by peripheral cues (Haugtvedt, Petty and Cacioppo, 1992). Taken together, this means that product placements have more persuasive impact for low NFC consumers than those with high NFC leading to the following hypotheses:

H6: Need for cognition moderates the relationship between attitude toward a specific product placement and attitude toward brand.

H7: Need for cognition moderates the relationship between mood and attitude toward the specific product placement.

H8: Need for cognition moderates the relationship between consumers' parasocial attachment to character and attitude toward the specific product placement.

H9: Need for cognition moderates the relationship between consumers' parasocial attachment to character and attitude toward the brand.



Note: APPL: attitude toward product placement in general, ASPPL: attitude toward a specific product placement, Ab: attitude toward brand; ParSocAtt: parasocial attachment).

Fig. 1. Structural model

2. Methodology

2.1. Participants and procedure. 249 undergraduate students (134 males, 115 females, mean age 22 years) enrolled in a university in the U.S. Midwest participated in our online survey study in exchange for course credit. The first part of the survey consisted of mood measures. This was followed by exposure to an episode of the popular television series "Seinfeld" that was approximately 23 minutes long. This series (including the specific episode – "Puerto Rican Day") is currently not on prime-time, reducing the likelihood of prior exposure of subjects to placements featured therein. Of the various products placed within the episode, Diet Coke was the best representation of a typical product placement (i.e. between 0 and 6 seconds, character interaction with the main character of the program – Jerry Seinfeld). In order to ensure that participants viewed the entire clip, several measures were built in, such as the disabling the option to fast-forward or to skip to the next screen. After viewing the program, subjects responded to the question "Did you watch the entire program?" In addition, they were asked four questions seeking details about the program, storyline and characters. If a participant indicated that they had not watched the program, or did not answer at least two of the four questions correctly, their data was not considered in our analyses (for this reason, 33 participants were removed from our data).

Finally, participants completed the remaining measures for attitude toward the brand placed, attitude toward the specific product placement, attitude toward product placement in general, parasocial attachment to the character associated with the placement, and need for cognition, in addition to providing demographic information.

The measures for the various constructs are as follows. *Attitude toward product placement in general* was measured using a four item 5-point Likert type scale (Gupta and Gould, 1997), *attitude toward a specific product placement* and *attitude toward the brand* with four seven-point semantic differential scales (Mitchell and Olson, 1981), and *mood* with a four-item, seven-point scale (Lee and Sternthal, 1999). Consumers' *parasocial attachment* was measured using a nine-item scale (Rubin, Perse, and Powell, 1985; Russell and Stern, 2006) and *need for cognition* with a three item abbreviated instrument used in Ailawadi, Neslin and Gedenk (2001) adapted from the NFC scale version proposed by Cacioppo, Petty and Kao (1984).

2.2. Analysis. Our data analysis employs the structural equation modeling method. Our survey data lacked multivariate normality since the normalized estimate of Mardia's coefficient was 23.2, which is higher than the recommended cut-off of 1.96 (Mardia, 1970). Hence, robust statistics that are adjusted for non-normality are reported throughout this paper (Bentler and Chou, 1987). Additionally, the maximum likelihood estimation procedure was used in our analyses.

Average Variance Extracted (AVE) was used as an estimate of convergent and discriminant validity (Fornell and Larcker, 1981). As shown in Table 1, the estimates for AVE for most constructs in the base structural equation model had values greater than or close to .5[1].

Discriminant validity was determined by checking if each construct had more internal variance than variance shared with each of the other constructs.

[1] Attitude toward product placement in general had an AVE of .47. This is addressed in the discussion section.

The squared covariance for each pair of constructs was found to be less than the AVE of both constructs under consideration, thereby lending support for discriminant validity.

Table 1. Average variance extracted

	Att. toward PPL in general	Mood	Parasocial attachment	Att. toward specific PPL	Att. toward brand
Att. toward PPL in general	**.47**				
Mood	.00	**.77**			
Parasocial attachment	.04	.06	**.63**		
Att. toward specific PPL	.01	.04	.18	**.68**	
Att. toward brand	.02	.03	.26	1.79	**.82**

Note: Diagonal elements are AVE estimates; off-diagonal elements are squared covariances.

The two-step approach was used, whereby the measurement model is estimated first, followed by estimation of the structural model (Anderson and Gerbing, 1988). The results from the confirmatory factor analysis (to assess the fit of the measurement model) are summarized in Table 2 and the final measurement model is shown in Figure 2. While there is a lot of debate about cut-off values for various fit indices, with no general consensus, a widely used basis for cut-off is < .06 for RMSEA and close to .95 for CFI (Hu and Bentler, 1999). At the same time, Hu and Bentler (1999) caution that these cutoffs are not universally applicable and that the RMSEA tends to be too conservative for smaller sample sizes. Even with these conservative cut-off values, the fit indices were acceptable, with a comparative fit index of .94 and root mean square error of approximation of .063. All factor loadings were statistically significant at the .05 level.

Table 2. Estimation of measurement and structural models

Model type	Satorra Bentler scaled λ^2	NNFI	CFI	RMSEA	RMSEA 90% CI	Modification for next step
Measurement model	476.68/ 242 df	.94	.94	.063	(.054, .071)	None
Structural models						
Hypothesized model	487.29 / 247 df	.94	.94	.063	(.054, .071)	Dropped parasocial attachment → Att. toward brand
Revised model	488.58/ 248 df	.94	.94	.063	(.054, .071)	Dropped att. toward Pdt. placement in general → Att. toward a specific product placement
Final model	388.38/186 df	.94	.95	.066	(.057, .075)	

Note: NNFI: non-normed fit index, CFI: comparative fit index, RMSEA: root mean square error of approximation.

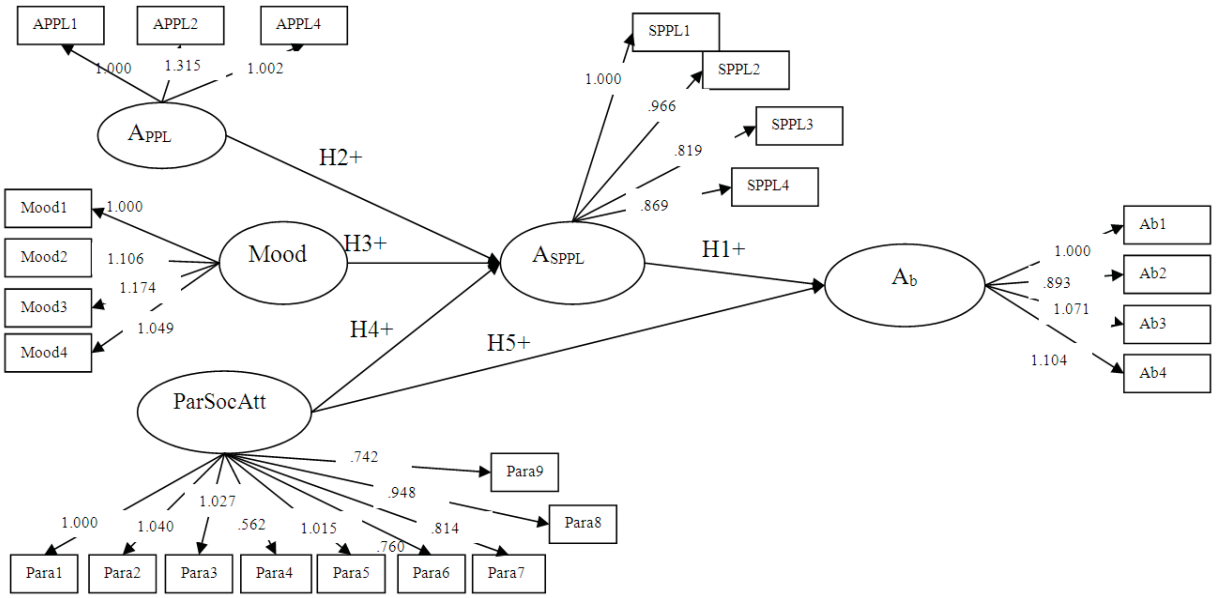
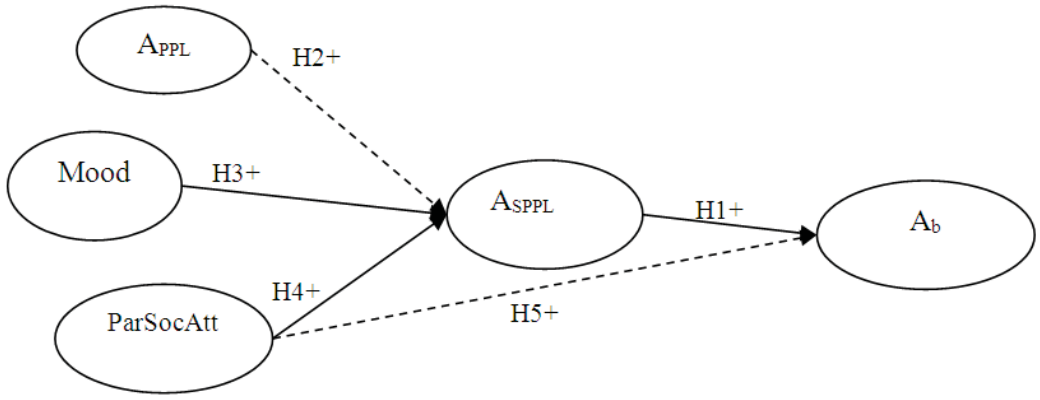


Fig. 2. Measurement model with standardized path estimates

The structural model is shown in Figure 3 (the dotted lines represent the non-significant paths that were ultimately dropped). Once again, Maximum likelihood estimation was used, and the robust fit indices are reported. The structural model was found to have good fit indices, with a CFI = .942 and RMSEA = .063. However, the paths from "parasocial attachment" to "attitude toward brand" and from "attitude toward product placement in general" to "attitude toward the specific product placement" (corresponding to H5 and H2) were not significant. Based on the result of the Wald test, the path from "parasocial attachment" to "attitude toward brand" was dropped, and the model was re-estimated. Neither CFI nor RMSEA changed as a result of the dropped path; however the path from "attitude toward product placement in general" to "attitude toward the specific product placement" (H2) continued to be non-significant. This path was dropped and the model was re-estimated. The results from the re-estimation show that fit indices were acceptable (CFI = .949 and RMSEA = .066), and all structural paths were statistically significant and in the hypothesized direction, thereby supporting hypotheses H1, H3, and H4.



Note: APPL: attitude toward product placement in general; ASPPL: attitude toward a specific product placement; Ab: attitude toward brand; ParSocAtt: Parasocial attachment. Dotted lines represent dropped paths.

Fig. 3. Final structural model

Tables 2 and 3 summarize the results of the structural model estimation.

Table 3. Unstandardized parameter estimates of structural paths: base model

Hypothesis	Structural path		Unstd. estimate
H1	Att. toward specific PPL	Att. toward brand	.889*
H2	Att. toward PPL in general	Att. toward specific PPL	n.s
H3	Mood	Att. toward specific PPL	.155*
H4	Parasocial attachment	Att. toward specific PPL	.141*
H5	Parasocial attachment	Att. toward brand	n.s

Hypotheses H6, H7, H8, and H9 focus on Need for cognition and its interaction with the relationships between the various constructs in the model. There are two basic methods of testing for interaction effects in structural equation modeling. The most widely used is the multi-group approach, which necessitates a median-split of the moderating variable. However this method is not adopted in this study since such an approach would not only result in loss of information, but also in reduction in power due to the reduced sample size (Fitzsimons, 2008; Irwin and McClelland, 2003).

Other methods focus on non-linear latent interactions; however there is no consensus on the best approach (Ping Jr., 1995; Rigdon, Schumacker, and Wothke, 1998). We use a recent method in this area – the unconstrained latent interaction approach (Marsh, Wen and Hau, 2004) that appears less biased than other methods for non-normal data (as was the case with our data).

The indicators for mood, attitude toward specific product placement, and parasocial attachment and those for need for cognition were centered in order to reduce multi-collinearity, as well as to aid interpretation of results (Aiken, West and Reno, 1991). The indicators of the moderator construct associated with each of the above constructs were then created by multiplying matched indicators from the respective construct and the NFC construct. This made it possible to use all available information, at the same time avoiding re-using information (Marsh et al., 2004). For example, the first indicator of the moderator construct corresponding to the path between attitude toward a specific placement and attitude toward brand was created by multiplying the first indicator of the former with the first indicator of the NFC construct and so on,

until all available indicators were used. In order to test for interaction effects, each moderating construct was introduced into the model one at a time, and three different models were estimated. The significance or lack thereof indicated the presence or absence, respectively, of an interaction effect.

All models had acceptable fit indices as follows. For the model for H6: CFI = .941 and RMSEA = .052, H7: CFI = .943 and RMSEA = .053, for H8: CFI = .941 and RMSEA = .054, and for H9: CFI = .943 and RMSEA = .053. The unstandardized estimates of the interaction effects are shown in Table 4.

Table 4. Interaction effects of NFC; unstandardized estimates

Hypothesis	Structural path		Unstd. estimate of interaction effect
H6	Att. toward specific PPL	Att. toward brand	- .101*
H7	Mood	Att. toward specific PPL	+ .087
H8	Parasocial attachment	Att. toward specific PPL	+.020
H9	Parasocial attachment	Att. toward brand	- .024

Note: * p < .05, PPL = Product placement, NFC is reverse-coded, higher values indicate higher need for cognition.

The results show that while all models had good fit indices, a significant positive interaction effect was observed only in the case of the path between attitude toward a specific product placement and attitude toward brand. This supports H6, but does not support H7, H8, and H9. The significant interaction effect shows that the positive effect of attitude toward a specific placement on attitude toward brand is weaker for individuals with higher need for cognition.

Discussion

This paper examines whether product placement is an effective promotional strategy for advertisers in terms of improving audience attitudes toward their brand, and if so, what the significant dispositional antecedents of the latter may be. In addition, the relationships between the constructs are tested for the moderating effect of need for cognition.

First, we find that an individual's attitude toward a specific product placement is an important variable that determines their attitude toward the brand placed within a television program, with more positive attitudes toward the specific placement resulting in more positive attitudes towards the brand.

Second, in order to capture the role of dispositional antecedents, we consider and examine the effects of pre-existing attitudes toward product placement, the viewer's mood at the time of viewing a product placement, and viewer's attachment to a character. In testing whether pre-existing attitudes toward product placement have an effect on the viewer's attitude toward a specific product placement on television, we find that this effect is non-significant. A possible explanation is that the nature of the product (durable v. non-durable, the price of the product), the brand (familiar v. unfamiliar brand) or the nature of the actual placement (subtle, integrated placements v. non-subtle placements) may very well override any pre-existing attitudes toward product placements in general.

Consistent with past research in the advertising domain (MacKenzie and Lutz, 1989), we find that the viewer's mood at the time of the placement has a significant relationship with the attitude toward the specific placement. This has significant implications for marketers and warrants further study – does this mean that a program-induced positive mood can have a significant positive effect on the attitude toward the specific product placement? In addition, the affective bond that a viewer has with the character of a television program also has a significant positive effect on the attitude toward the specific product placement. This finding extends the literature on the positive association between consumers' parasocial attachment to character and attitude toward the product (Russell and Stern, 2006). This is also a relevant implication from the perspective of marketing practice as marketers may find television programs with characters that generate such attachments to be better venues to place their brands.

Lastly, we test for the moderating role of need for cognition which is another dispositional variable, defined as the tendency to engage in activities that require cognitive effort. We examine whether effects of attitude toward a specific product placement, mood, and attachment to a character vary based on the viewer's need for cognition. While we find no interaction between need for cognition and mood or attachment to a character, need for cognition significantly interacts with attitude toward a specific product placement. The magnitude of the positive relationship between attitude toward a specific product placement and attitude toward the brand is significantly higher for viewers with low need for cognition tendencies, since the peripheral cues offered by product placement seem to work in a more effective manner for these viewers. From the perspective of marketing practice and for future research, an exploration into whether these viewers vary in their preference for specific genres of television programs could yield results of practical significance.

Limitations and future research

A limitation of this study is that the results are not generalizable to movie placements due to other

individual level factors that may be influential in the movie viewing context. This is also an opportunity for further research. Another limitation is the fact that the reliability of the "Attitude toward product placement in general" construct was low. While this construct is not part of the final model, the possibility exists that with the increasing use of product placement in non-traditional media, the scale that was originally developed in the late 90s (Gupta and Gould, 1997) may need revision, and this is an avenue for future research. Using a student sample to test the effectiveness of television product placements may raise concerns about external validity. Future studies may focus on testing the validity of the current model for a general population across other media.

Ultimately, the results point to the fact that the effect of product placement, while being influenced by a host of individual-specific factors vary with respect to whether the viewer enjoys cognitive processing or not. Future research opportunities are extensive, as noted above. Hopefully, this paper will stimulate additional work in this area.

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