Exploring the impact of celebrity endorsement on product placement effectiveness

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This study examines the impact of celebrity endorsements on the effectiveness of product placement. Celebrity endorsements and product placement appear in a multitude of media in consumers’ daily lives, and this phenomenon has increasingly raised the interest among researchers and practitioners. Therefore, this study explores the following two kinds of normative influence in the context of product placement: (a) parasocial interaction with a celebrity and (b) social interaction by means of peer communication among consumers on attitudes toward a placed brand. In addition, it examines the effect of plot connection, which refers to the way the placed brand is exposed in a scene. Finally, it tests how the message variables, plot connection and strength between celebrity and placed brand, moderate the parasocial interaction’s effect on attitude toward brands. This study tests these effects by conducting a hierarchical regression with survey data from a sample of Japanese consumers. It concludes with theoretical contributions and the direction of future research.

Key words: product placement, brand endorsement, celebrity endorsement, parasocial interaction, plot connection, moderation analysis

1 INTRODUCTION

In general, consumers view TV programs and advertisements inserted between programs in a passive manner (Gupta, Balasubramanian, & Klassen, 2000; Krugman, 1965). Moreover, the effect of TV advertising is deteriorating due to viewers’ skepticism toward advertising in realizing the commercial intention—that advertisers pay large fees to publicize their product benefits. Many viewers never watch the advertisements during their favorite programs because digital video recorders allow them to skip commercial breaks. Accordingly, advertisers have developed methods of product placement that merge advertising and publicity (Balasubramanian, 1994), inserting their products and logos into television shows. Since popular TV programs and movies enhance users’ involvement, they present attractive opportunities for brand exposure in the form of product placement (Karrh, 1998). The definition of product placement differs depending on the author. Some authors define product placement as a paid attempt to insert information regarding a product into editorial content in mass media (Balasubramanian, 1994; Gupta & Gould, 1997). However, irrespective of whether paid attempts are made by an advertiser, the audience often does not know whether the product placement has been paid for or not (Karrh, 1998). Moreover, recent studies have focused on subtle placement that is unlikely to be perceived as promotional intention. Not only a paid message but even a free insertion and inclusion of information regarding a product is pertinent as a broader definition for understanding the product-placement phenomenon (Karrh, 1998; Morton & Freedman, 2002).

As far as the effective constituent of product placement is concerned, characters appearing in popular programs and movies play important roles in product placement because of their endorsement (Gupta et al., 2000; Karrh, 1998;
Russell & Stern, 2006). At the beginning, product placement appeared in movies and TV dramas. Subsequently, the practice was extended to other TV genres, such as comedies, competition and game shows, news, and talk shows (e.g., Gould & Gupta, 2006). Accordingly, in these fields, the endorsers of placed brands came to include not only fictional characters in movies and dramas, but also real people, such as celebrities. Celebrities become referent for others not only in terms of their media role but also through their public existence (Hirschman & Thompson, 1997). Furthermore, the rise of the Internet has provided a wide scope for conducting product placement endorsed by celebrities. Previous studies made a distinction between celebrity endorsement and celebrity placement. The term celebrity endorsement is traditionally used to denote a celebrity appearing in an advertisement for a product, whereas celebrity placement usually refers to a company giving a free product to a celebrity for use in a public setting (Pringle & Binet, 2005; Saladino, 2008). However, the distinction is outdated because celebrity endorsement can be observed in many more types of communication other than that of traditional advertising (Bergkvist & Zhou, 2016). When a celebrity endorses a brand on social media, consumers that follow the celebrity tend to enhance their interest in the endorsed brand (Escalas & Bettman, 2017). Celebrity endorsements greatly influence consumption activities. Bergkvist and Zhou’s (2016) updated definition of celebrity endorsement as the use of the celebrity by a brand or other organization for the purpose of promoting itself appears to include the concept of celebrity placement. Therefore, this study focused on product placement effectiveness of celebrity endorsement.

This study contributes to the product placement literature in several ways. First, it examines the normative influences on the endorsement process by a celebrity, including the effects of parasocial interaction and interpersonal influence. A parasocial interaction is defined as a person’s one-sided interaction with a character in a mediated environment, such as the mass media. In addition, significant others in the real world, such as peers, are likely to influence consumer behavior. Peers transmit the group norm and standard, and as a result guide and adjust other consumers’ behavior (Churchill & Moschis, 1979; Gregorio & Sung, 2010).

Prior studies advanced the understanding of the parasocial interaction construct in character and celebrity endorsements (e.g., Escalas & Bettman, 2017; Hung, Chan, & Tse, 2011; Hung, 2014; Rubin & Perse, 1987). Moreover, some studies related to interpersonal influence found that peer communication plays an important role in consumption activities (Churchill & Moschis, 1979; Gregorio & Sung, 2010). However, little research has examined the role of the parasocial interaction and peer communication constructs on celebrity endorsements in the context of product placement.

Second, this study focused on message characteristics (Bhatnagar, Aksoy, & Malkoc, 2004) conducive to product placement effectiveness. Prior studies researched the effect of plot connection, which represents the degree that a placed brand is integrated into a storyline. Blatant placement can draw attention and break the storyline; viewers do not form favorable attitudes toward brands placed in this manner. However, little research has distinguished plot connection from celebrity endorsement, as exemplified in a study regarding brand endorsement by characters as the prominence of placement (e.g., Russell, 2002). This study examines the effects of plot connection and parasocial interaction independently. Moreover, this study examines the moderating effects of message characteristics on the parasocial effect to advance the understanding of the complex relationship in the endorsement process.

Third, this study focuses on celebrity endorsement through placement in various types of media. Most placement studies have focused on TV drama, comedy, and movies (e.g., Cowley & Barron, 2008; Gregorio & Sung, 2010; Gupta et al., 2000; Gupta & Lord, 1998; Russell & Stern, 2006; Yoon, Choi, & Song, 2012). However, the practices of product placement have penetrated in everyday life. Therefore, this study includes various types of media in which placement takes place.

Regarding the effectiveness of product placement, this study focuses on attitudes toward placed brands. Several studies have investigated the impact of product placement on brand recall (e.g., Gillespie, Joireman, & Muehling, 2012; Kamleitner & Jyote, 2013; Russell, 2002; Russell, Norman, & Heckler, 2004; Russell & Stern, 2006). However, some studies point out a discontinuity between brand recall and brand attitude, because high brand awareness conversely generates a skeptical attitude, which in turn leads to an unfavorable brand attitude (Cowley & Barron, 2008; Friestad & Wright, 1994; Russell, 2002; van Reijmersdal, 2009; Yoon et al., 2012). In order to further understand the endorsement process by celebrities in terms of product placement effectiveness, this study focuses on attitudes toward brands, which are expected to be influenced by the endorsement process.

The objectives of this research are to examine (1) how parasocial interaction and peer communication drive a normative influence of endorsement on placed brands, (2) how plot connection as a message variable affects placed brands in celebrity endorsements, and (3) how plot connection and strength between celebrity and placed brand as message
variables moderate the parasocial interaction’s effect on attitude toward brands.

2 THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1 Celebrity endorsement

The practice of product placement originated in the movie industry. Simultaneously, movie stars’ endorsements of products also developed around the same time. Advertising that involves the consumer in the celebrity endorsement process aims to build cultural meaning through factors such as class, gender, status and lifestyle. Likewise, a celebrity endorsement transfers a cultural meaning (represented by the celebrity) to a product’s meaning. Consumers receiving the message may choose an endorsed product with the desired cultural meaning (McCranken, 1989). Product placement is expected to achieve greater effect through the celebrity endorsement process than through traditional advertising (Karrh, 1998). Several studies have identified the effect of celebrity endorsement as providing source credibility and source attractiveness (Escalas & Bettman, 2017; Hung, 2014; Hung et al., 2011; Ohanian, 1990). However, Hung et al. (2011) assert the importance of the bonding relationship with the celebrity. A bonding relationship is driven by personal attachment and the derivation of entertainment and fun from the celebrity, which facilitates the endorsement.

From a psychological perspective, the endorsement process by a character generates a parasocial interaction (Rubin & Perse, 1987). As a result of the increasingly developing mass mediated environments and media techniques that reproduce face to face interaction, audiences start to consider characters and media personalities on TV programs as friends. Viewers can begin to feel that people on TV talk to them, and begin to know media characters the way they know their friends (Rubin & Perse, 1987). In this case, a pseudo social interaction occurs between media characters and audience members (Escalas & Bettman, 2017; Rubin & Perse, 1987; Russell & Stern, 2006).

In other words, a parasocial interaction is a sense of affection toward a character or personality on a TV program, with the viewer experiencing high involvement and bonding with the character (Rubin & Perse, 1987). In terms of the extent of preference toward a character, attitude and attachment via parasocial interaction are distinct constructs. Attitude reflects an audience’s positive feeling toward characters, whereas attachment indicates the strength of interpersonal relationship by which audience considers the characters as referent others (Russell & Stern, 2006). Via parasocial interaction, a character may obtain the longing and proximity of a viewer, which exerts a normative influence on his or her consumption behavior. Several studies examined the parasocial effect on the outcome of product placement (Russell et al., 2004; Russell & Stern, 2006). In particular, Russell and Stern (2006) found that parasocial interaction with a fictional character improved attitudes toward a product in situation comedy.

Recently, since the practice of product placement has extended to other genres than drama and movies such as blogs and social media, celebrities can exert an influence on product placement through parasocial interaction (Colliander & Dahlén, 2011). Because social media allows a consumer to know the daily life of a celebrity, a consumer is likely to feel closer to that celebrity (Escalas & Bettman, 2017). Thus, product placements endorsed by celebrities now appear in all types of media. Therefore, regardless of the media and genre in which the placements appeared, the parasocial interaction by celebrities may enhance viewers’ attitudes toward placed brands. This leads to the first hypothesis.

H1: Parasocial interaction has a positive impact on attitudes toward a brand.

Social interaction among reference groups, such as word of mouth or peer communication, is another normative influence. Prior studies found that peer communication is an information influence and a normative influence (Bandura, 1969; Churchill & Moschis, 1979; Gregorio & Sung, 2010). As indicated by the two-step flow (Katz & Lazarsfeld, 1955), peer communication is likely to be generated by media exposure. Media exposure generates conversation and discussion among consumers (Churchill & Moschis, 1979). Similarly, product placement exposed on media is likely to generate peer communication (Churchill & Moschis, 1979; Gregorio & Sung, 2010). The consumer socialization perspective proposes that peer communication has influence as a social agent through a modeling mechanism, social interaction, and reinforcement. Especially in consumption-related conversations, peer communication influences the consumption behavior of others through normative and informative influences (Gregorio & Sung, 2010). Acting as mutual referent others, people comply with group norms and standards through peer communication in product selection (Bearden & Etzel, 1982; Bearden, Netemeyer, & Teel, 1989). Communication with peers about brands and consumption allows consumers to engage in brand-related experiences (Kwon, Kim, Sung, & Yoo, 2014). Gregorio and Sung (2010) revealed that peer communication generates positive attitudes toward product placement in general. Especially in celebrity endorsement,
peer communication seems to produce favorable brand attitudes, due to high interest and involvement on the part of consumers. These findings inform the next hypothesis.

H2: Peer communication has a positive impact on attitudes toward a brand.

In relation to the influence of message characteristics, prior studies revealed that the strength of placement exposure, also known as the ‘prominent–subtle dimension’ influences the effectiveness of product placement (Gupta & Lord, 1998; van Reijmersdal, 2009; van Reijmersdal, Neijens, & Smit, 2009). This dimension is defined as the degree to which the placed product is centered in the scene (Gillespie et al., 2012; Gupta & Lord, 1998). However, some argue that prominent placement actually causes negative attitudes, since prominence allows consumers to perceive the commercial intention, thus generating skepticism. Drama, movie or blog will enhance the attitude toward the commercial intention that can distract the consumer from being entertained and immersed in the medium. Instead, plot connection enhances the consumer experience if the product is connected to the story line, i.e., if it has a plot connection (Russell, 2002; Yoon et al., 2012).

Plot connection is the degree to which the product is integrated into the storyline (Russell, 2002). Not mere prominence, but actual connection to the storyline, has previously been found to boost the effect of product placement (Bhatnagar et al., 2004; Gupta & Lord, 1998; Karrh, McKee, & Pardon, 2003). Good fit and congruence between a placed brand and the context in which it appears facilitates the transfer of the viewer’s attitude toward the context to the placed brand. A positive attitude toward the drama, movie or blog will enhance the attitude toward the placed brand (Bhatnagar et al., 2004). Simultaneously, plot connection prevents a consumer from perceiving the commercial intention that can distract the consumer from being entertained and immersed in the medium. Instead, plot connection enhances the consumer experience of a drama or movie, thereby improving brand attitude. This is part of the third hypothesis.

H3: Plot connection has a positive impact on attitudes toward a brand.

2.2 Moderating effects on attitude toward a brand

This study also examines moderating factors on the parasocial interaction effect. The research focuses on two dimensions of message factors as moderators of the parasocial effect on brands: the association between the product and the celebrity (Kamleitner & Jyote, 2013; Russell et al., 2004) and the plot connection with the placement (Russell, 2002).

Closeness between the celebrity and the product is expected to reinforce the effect of the parasocial relationship on attitudes toward the brand. Kamleitner and Jyote (2013) reveal that physical interaction of the character with the product greatly enhances attitudes toward the brand. Actions by the character, such as touching or mentioning the brand, evoke awareness of the brand in the viewer and improve his/her attitude toward the brand. Russell and Stern (2006), drawing on balance theory, proposed that the process of attitude alignment for placed product between character and consumer is facilitated by the consumer–character relationship and affected by the character–product relationship. Perceiving a close relationship between celebrity and endorsed brand facilitates transferring consumer’s attachment toward the celebrity to the endorsed brand. Therefore, the association between a product and a celebrity is expected to moderate the effect of parasocial interaction on attitudes toward the placed brand, leading to the fourth hypothesis.

H4: The effect of parasocial interaction on attitudes toward a brand is more pronounced for a strong association as compared to a weak association between the celebrity and the placed brand.

In order to transfer a positive attitude toward the celebrity to an attitude toward the placed brand, congruence is required between the placed brand and the context in which it appears (Bhatnagar et al., 2004; Karrh et al., 2003). A famous example of this is the BMW Z3 roadster brand placement in the James Bond movie, GoldenEye. Fitting this particular car with superior technology into the context of a spy movie facilitates transferring the attitude toward James Bond, a technologically savvy character, to the vehicle. The integration of the car into the storyline strengthened the complementarities of the relevant attributes between the endorser and the brand (Bhatnagar et al., 2004). In other words, the plot connection legitimizes the pairing between the celebrity and the brand. Even when a celebrity endorses a product in a placement, plot connection is required for the consumer to perceive endorsement that is not contrived, thereby enhancing brand experience. This example leads to the final hypothesis, as follows (Fig. 1).

H5: The effect of parasocial interaction on attitudes toward a brand is more pronounced for high connection as compared to low connection of the placed brand to the story plot.
3 METHODS

The measurement of parasocial interaction was assessed using four items on a five-point Likert scale, adjusted from Rubin and Perse (1987). Peer communication was measured using three items assessed on a four-point frequency scale, following past studies (Churchill & Moschis, 1979; Gregorio & Sung, 2010; Gruen, Osmonbekov, & Czaplewski, 2006). The association between the celebrity and the brand was measured by the strength of interaction and association, and assessed on a seven-point strength scale, adjusted from Russell and Stern (2006). Regarding the measurements of the plot connection, most studies conducted experiments to condition the degree of plot connection. Thus, this study drew on past studies to create new measurements. Attitude toward the brand was measured using four items on a seven-point semantic differential scale from Lutz, Mackenzie, and Belch (1983) and Choi and Miracle (2004).

A bilingual native English speaker translated the measurements from past studies into Japanese. Afterwards, the author discussed the translated measurements with Japanese undergraduate students in terms of proper usage of the context of product placement. Any problems with the translation were resolved through discussion between the translator and the author.

From the refined measures, a questionnaire was designed to test the hypotheses. The instrument was an online questionnaire survey. Respondents were recruited from the database of a research company. At first, potential respondents were given a modified definition of the product placement concept used by Gupta and Gould (1997) as follows: product placement is the practice of a seller inserting a brand, product or logo in recognizable form into a scene on TV, on the Internet, in a movie etc., in a way that is different from advertising. The respondents were asked whether they had been recently exposed to any product placements. A total of 1027 respondents who had recently been exposed to product placement via any media were recruited from among 10,000 people in the database of the research company. Respondents were screened further by asking if they had seen a celebrity in the product placement they had been exposed to. In open-ended comments, respondents were asked to describe the details of the product placements they had experienced, such as the product categories of the product placement, the media genres and content in which product placement had appeared and the characteristics of the celebrities they had seen. After deletion of invalid answers, such as the confusion of product placement with advertisements, the final sample consisted of 512 individuals. Respondents were asked about parasocial interaction with the celebrity they had seen, association between the placed brand and the celebrity, plot connection of the placement scene, and peer communication and attitude toward the placed brand. In addition, this study collected demographic information.

In terms of gender and age distribution, males comprised 47.9% of those surveyed, and the breakdown by age group was as follows: 20–29 (16.2%); 30–39 (19.3%); 40–49 (21.5%); 50–59 (21.3%); and 60–69 (21.7%). The breakdown of media on which the placements appeared was as follows: TV (68.4%); Internet (20.2%); others, such as movies, magazines or games (11.4%).

The product categories of placed brands the respondents had seen comprised automobiles (21.1%), food and beverages (15%), electronics (13.3%), mobile phones (12.1%) retail and service (9.8%), and others (28.7%), including media, apparel, finance and transportation. Regarding the kinds of celebrity they had seen, domestic actors and actresses comprised 54.7% of the sample, followed by foreign actors and actresses (17.4%), athletes (6.4%), comedians (6.3%), and others (15.2%) (such as experts, fashion models, singers, authors, etc.)
4 RESULTS

A confirmatory factor analysis was conducted using the maximum likelihood method to evaluate the fit of the measurement model. Goodness of fit was assessed with a chi-square test, a comparative fit index (CFI), incremental fit index (IFI), the Tucker-Lewis index (TLI), and a root mean square error of approximation (RMSEA) (Table 1). Although the chi-square test is significant due to the large sample size, CFI, IFI, and TLI values are greater than 0.9 and the RMSEA value is less than 0.07, which indicated a satisfactory fit (chi-square = 222.944; d.f. = 80; p < 0.01; CFI = 0.97; IFI = 0.97; TLI = 0.96; and RMSEA = 0.05). Convergent validity was assessed by examining the standardized factor loadings on the constructs in the estimated model. All of the loaded items were found to be significant and greater than 0.50. This study assessed the convergent validity using composite scale reliabilities (CR) and average variance extracted (AVE) (Fornell & Larcker, 1981). The composite scale reliabilities ranged from 0.64 to 0.96; values above 0.6 are acceptable, although the recommended threshold is 0.7 (Bagozzi & Yi, 1988). The plot connection value is 0.64. The lower score of CR might be due to the fact that this study only measured two items per construct (Mathwick, Wiertz, & Ruyter 2008). The AVE of each construct should be above recommended cutoff of 0.50. All constructs except for the plot connection construct ranged from 0.63 to 0.87. The AVE for the plot connection construct is slightly below 0.5. To examine discriminant validity, we compared the square root of the AVE with the correlation between the two latent constructs (Fornell & Larcker, 1981). The square root of the AVE should exceed this correlation. This criterion was satisfied. Table 2 shows the correlation, the composite reliabilities, the AVE, and the square root of the AVE. Since this study conducted multiple regressions, the possibility of multicollinearity should be tested when correlations between constructs are significant. The variance inflation factor (VIF) revealed the VIFs of all constructs are less than 3.

To test the hypotheses, hierarchical multiple regression was conducted. In hierarchical multiple regression, four mean-centered variables (parasocial interaction, plot connection, association between the celebrity and the brand, and peer communication) were entered in the first block. At the same time, dummy codes for the type of media (TV, and web), age, and gender (0 = male, 1 = female) were also entered. In the second block, two interaction variables (parasocial interaction*association, and parasocial interac-

| Construct                  | Item | Standardized Factor Loading | Goodness-of-Fit Statistics |
|----------------------------|------|----------------------------|----------------------------|
| Parasocial interaction     | PI 1 | 0.878                       | χ² = 222.944               |
|                            | PI 2 | 0.805                       | d.f. = 80                  |
|                            | PI 3 | 0.723                       | CFI = 0.97                 |
|                            | PI 4 | 0.911                       | IFI = 0.97                 |
| Peer communication         | PC1  | 0.691                       | TLI = 0.96                 |
|                            | PC2  | 0.783                       |                             |
|                            | PC3  | 0.910                       |                             |
| Plot connection            | PLC1 | 0.580                       |                             |
|                            | PLC2 | 0.789                       |                             |
| Association                | ASS1 | 0.927                       |                             |
|                            | ASS2 | 0.832                       |                             |
| Attitude toward brand      | ATTB1| 0.949                       |                             |
|                            | ATTB2| 0.921                       |                             |
|                            | ATTB3| 0.945                       |                             |
|                            | ATTB4| 0.929                       |                             |

Notes: **p < 0.01, *p < 0.05
On-diagonal elements are the square root of the average variance extracted (AVE) for each construct.
Association denotes the association between celebrity and brand.
The results are shown in Table 3. There was a significant improvement between Step 1 and Step 2 ($p < 0.01$), which indicates a significant interaction effect. The dummy variables regarding age and gender were significantly positive, whereas the web dummy variable was significantly negative. The main effects of parasocial interaction, peer communication and plot connection have an impact on attitudes toward the brand (parasocial interaction $\beta = 0.36$, $p < 0.01$; peer communication $\beta = 0.20$, $p < 0.01$; plot connection $\beta = 0.11$, $p < 0.05$). Thus, H1, H2, H3 are supported. The moderating effect of the association between the celebrity and the brand on the impact of parasocial interaction on attitudes toward the brand was only marginally significant ($\beta = 0.07$, $p < 0.1$). Regarding the interaction effect between parasocial interaction and plot connection ($\beta = -0.13$, $p < 0.01$), it was found to be significant, but negative, against the expectation in H5.

Regarding the two moderators that indicate the interaction effect, a simple slope procedure of regression analysis was conducted (Cohen, Cohen, West, & Aiken, 2003). Regressions were conducted at high (one standard deviation above) and low (one standard deviation below) levels of the moderator variable. At both levels, the parasocial variable, moderator variable, interaction variable, and dummy variables were entered. As for the moderating effect of the association on the parasocial interaction effect for attitudes toward the brand at both levels, the results showed that when there was a high level of association, parasocial interaction had a significantly positive impact on attitudes toward the brand ($\beta = 0.42$, $p < 0.01$). When there was a low level of association, parasocial interaction still had a significantly positive impact on attitudes toward the brand ($\beta = 0.39$, $p < 0.01$); however, the effect of parasocial interaction was slightly greater for a high level than for a low level of association. Thus, H4 is supported. Regarding the moderating effect of plot connection on the parasocial interaction effect, parasocial interaction had a significantly positive impact on attitudes toward the brand at both levels (high plot connection: $\beta = 0.41$, $p < 0.01$; low plot connection: $\beta = 0.52$, $p < 0.01$). However, contrary to the hypothesis, the effect of parasocial interaction when there was a low level of plot connection was greater than when there was a high level. Thus, H5 is rejected (Table 4).

### 5 DISCUSSION

This study’s main finding is that normative influence, in the form of parasocial interaction and peer communication, exists in the celebrity endorsement process. Moreover, a brand’s integration into the storyline enhances the viewer’s...
attitudes toward the brand but higher plot connection does not enforce the parasocial effect of attitude toward the brand. Instead, the higher association between the placed brand and the celebrity enforces the parasocial effect. Because this study reveals the complex structure of the product placement effect, the results contribute to the study of product placement in several ways.

First, this study identified the two kinds of normative influences on attitudes toward a placed brand: parasocial interaction and peer communication. As expected, parasocial interaction was found to enhance attitudes toward a brand. Personal attachment toward a celebrity can be a strong driver to transfer the positive meaning of a celebrity to a placed brand. More importantly, peer communication after viewing the placement influences the viewer’s attitude toward a brand. As indicated by the consumer socialization perspective, peer communication as a social agent facilitates modeling, reinforcement and social interaction to exert normative influence in a celebrity endorsement. In particular, product placement is more susceptible to peer influence because placement is part of consumption activity.

Although parasocial interaction and peer communication in terms of characters’ endorsement and consumer socialization have been examined respectively, little research has examined the independent respective influences of parasocial interaction and peer communication on product placement effectiveness. This study’s findings contribute to the development of a framework of celebrity endorsement in the context of product placement.

Second, this study found a significant interaction effect in the association between the celebrity and the brand in terms of the parasocial effect on attitudes toward the brand; however, the effect was slight. High association slightly enforces the parasocial effect of attitude toward the brand.

A close relationship with the brand, such as frequent use and contact by the celebrity, is likely to transfer the cultural meaning represented by the celebrity to the brand. Given that the main effect of association is not significant, the effect of association is required merely for the parasocial interaction effect in the endorsement process.

Third, the effect of plot connection found to be significant in other product placement studies is also seen with celebrity endorsement. Moreover, the result of its moderating effect shows that the parasocial effect of low plot connection is greater than that of high plot connection, though the moderating effects are positive at both levels. Taken together, a celebrity seems to play a more important role in the celebrity endorsement process than does the plot connection. In addition, as most studies have suggested, it is unlikely that a consumer remembers the scene of product placement because of being immersed in the program and content, or the scene appearing briefly. Thus, the effect of celebrity endorsement seems to inhibit the effect of plot connection on the placed brand.

Overall, the effect of product placement in celebrity endorsement is generated by the celebrity, through parasocial interaction and peer communication and their strength, which is inconsistent with the findings of product placement studies. Most studies have suggested an effect of plot connection on product placement, which suppresses viewers’ skeptical attitudes when they realize that the product placement has a commercial intention. However, regarding celebrity endorsement, plot connection does not enhance the parasocial effect of the celebrity. Cowley and Barron (2008) found excessive prominent placement has a negative effect on a placed brand among viewers who like a program, whereas it has a positive effect on the placed brand among viewers who dislike a program. Drawing on their findings, the influence of parasocial interaction or plot connection on the outcome of the placement depends on whether the viewer likes the content (such as the program or the celebrity). Thus, the results show that there is a dual, but conflicting, process in product placement through celebrity endorsement. This finding sheds light on the unique characteristics of celebrity placement, which is unlike typical product placement.

Furthermore, the findings regarding the endorsement process suggest important insights for advertisers. When advertisers expect the effect of celebrity endorsement on the placed brand, they should adopt popular celebrities who cause not only parasocial interaction but also word of mouth. Given that two kinds of influence exist, it appears reasonable to assume that social media are a congruent place to endorse a brand. When an endorser appears on an SNS, the followers who feel intimacy and personal attachment to the endorser are motivated to generate peer communication. Peer communication on social media is likely to cause purchase intention (Wang, Yu, & Wei, 2012). A brand account on social media should corroborate celebrities who have greater influence on their followers. However, and contrary to expectations, this study’s findings show that the coefficient of the web dummy variable is significantly negative. On the Internet, the number of celebrity endorsements might be excessive for consumers as compared to those in traditional media. Whether negative attitudes toward Internet media also apply to attitudes toward social media should be confirmed in future research.

Regarding the best scene placement for a brand, products should be integrated moderately into a storyline; excessive exposure of placed brands weakens the effect of the endorsement by celebrities. Advertisers can adjust the ways of presenting product placement, using a celebrity, integra-
tion into the storyline, or both.

This study has some limitations. The study collected self-reported data of respondents to understand common characteristics of the endorsement process. However, as in most of the extant research on the subject, the experimental method would have allowed us to enhance internal validity by the manipulation of independent variables such as parasocial interaction and plot connection.

This study did not control the program genre in which the placement appeared. Studies have found that the placement effect varies according to the program genre, since this influences the interpretation of placement for consumers (Gould & Gupta, 2006). The result of the moderating effect for parasocial effect might depend on genre, such as a drama or a talk show. Moreover, in this study, product categories into which placed brands fall were not controlled. Classification of a product as high or low involvement or as a publicly or privately consumed type of product might influence the findings of this study. In spite of these limitations, the findings of the general characteristics covering various types of product placement using celebrity endorsement advance the knowledge of product placement practices.

Future research should focus on differences in type of media (Internet versus TV) in terms of placement effectiveness. The advances of the Internet allow celebrities and experts to address product information easily. Instagram, for example, provides a great deal of content that can include a celebrity endorsement and that content is easily shared among users. Moderation analysis of multiple groups that include samples of both TV and Internet should be conducted.

Second, the interaction effect between parasocial interaction toward celebrity and peer communication should be examined. Escalas and Bettman (2017) found that parasocial relationship mediated the relationship between the need to belong and self-brand connection. They postulated that parasocial relationship stemmed from social identity needs because celebrity endorsement provided useful meaning and connection to share. However, a logical and casual relationship between parasocial interaction and consumer-to-consumer interaction should be examined prudently. In particular, on the Internet, there seem to be different relationships between the two types of interactions as compared to those in the mass media.

Third, future studies should examine the relationship between brand awareness and placed brand attitude in celebrity endorsement. Several studies showed a converse relationship between awareness and attitude because high prominent placement is likely to generate skeptical attitudes. However, this study showed that plot connection, which should have suppressed skeptical attitudes among viewers, did not enforce parasocial interaction. Thus, unlike typical product placement, celebrity endorsement might bring about a different relationship between awareness and attitude.

Fourth, future studies should be conducted in countries other than Japan or should be cross-cultural in nature. These studies might reveal unique cultural characteristics of Japan consumers. Because most Japanese consumers tend to have a more interdependent self than consumers in western countries, peer communication might be more influential on product placement in Japan. Cultural comparison might clarify the effect of cultural characteristics and peer communication on placement. Moreover, cultural variables such as self-construal (Markus & Kitayama, 1991), which refers to a person’s relationship with others, might be useful to examine product placement processes in complex relationships, comprising vertical relationships such as parasocial interaction, and horizontal relationships such as peer communication. Thus, there is also a need to conduct cross-cultural comparative studies.

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**Appendix**

**Concept and measurement**

Parasocial interaction (four items), adjusted from Rubin and Perse (1987), using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree)

“I look forward to watching the celebrity.”

“I would watch the celebrity if he/she appeared in other content.”

“I would like to meet the celebrity.”

“I find the celebrity attractive.”

Peer communication (three items), adjusted from Churchill & Moschis (1979), Gregorio & Sung (2010) and Gruen et al. (2006) using a four-point frequency scale (Frequently, Sometimes, Rarely, and Never)

“My friends and I talk about the placed brand I see.”

“I share information regarding the placed brand with my friends via e-mail and websites.”

“I recommend the placed brand to my friends.”

Association (two items) adjusted from Russell and Stern (2006), using a seven-point strength scale (from weak to strong)

“The placed brand is strongly associated with the celebrity.”

“The celebrity interacts with placed brand.”

Plot connection (two items), using a seven-point semantic differential scale

| Not Centered in the scene | Centered in the scene |
|---------------------------|-----------------------|
| Irrelevant to the storyline | Relevant to the storyline |

Attitude toward brand (four items), adjusted from Lutz et al. (1983) and Choi and Miracle (2004), using a seven-point semantic differential scale

| Bad | Good |
|---------------------|-------|
| Unfavorable | Favorable |
| Negative | Positive |
| Dislike | Like |