

# Conscious and Nonconscious Effects of Product Placement: Brand Recall and Active Persuasion Knowledge Affect Brand Attitudes and Brand Self-Identification Differently

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We evaluated how brand recall and persuasion knowledge combined to affect brand attitudes and brand self-identification following product placement. In two experiments ( $N = 296$ ), implicit brand self-identification for a placed brand increased regardless of brand recall and persuasion knowledge activation. In contrast, brand recall led to increased brand attitudes when persuasion knowledge was not primed, but decreased brand attitudes when it was primed. Our results suggest that product placement can affect both implicit and explicit measures, and that one placement experience can have both positive and negative consequences depending on brand recall and whether viewers are primed to think about product placement.

*Keywords:* product placement, attitude formation, implicit self-identification, implicit attitudes

*Liz:* “We’re not compromising the integrity of the show to sell . . .”

*Pete:* “Wow, this is *diet* Snapple?”

*Liz:* “I know, it tastes just like regular Snapple, doesn’t it?”

*Frank:* “You should try Plum-a-Granate, it’s amazing.”

*Cerie:* “I only date guys who drink Snapple.”

*Jack:* “Look, we all love Snapple. Lord knows I do.”

In the past 25 years, product placement has grown from an afterthought to an important component in many marketing portfolios (Russell & Belch, 2005; Wiles & Danielova, 2009). The concept of product placement has entered the public consciousness enough that it is often parodied, as the opening quotation from the TV

show *30 Rock* aptly demonstrates. A variety of factors have contributed to the overall growth of product placement. For example, the increased sales figures for Reese’s Pieces following their appearance in the movie *E.T. The Extraterrestrial* increased awareness of the possible benefits of product placement (Balasubramanian, Karrh, & Patwardhan, 2006). In addition, the emergence of digital video recorders (DVR’s) in the cable and satellite TV markets has made it possible for a large number of viewers to easily skip over traditional commercial advertisements on TV (Wilbur, 2008). Further, as persuasion knowledge increases among savvy consumers, traditional advertisements may become less effective as viewers become more skeptical of them (Friestad & Wright, 1994). Because product placement is not always identified as a persuasion attempt, defending oneself from the persuasive message can be more difficult. The confluence of these factors has made subtler and imbedded strategies, such as product placement, more appealing to advertisers. This trend is apparent from available figures, which document the increase in dollars spent by advertisers for product placement privileges (Wiles & Danielova, 2009).

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This growth in the use of product placement has corresponded to a growth in research aimed at understanding how it affects viewers. A variety of studies have attempted to document whether viewers can accurately recall brands that were placed in movies and TV shows, and to identify the factors that increase or decrease brand recall. For example, increasing the centrality of the placement leads to greater recall of the brand (Babin & Carder, 1996; Brennan, Dubas, & Babin, 1999; Bressoud, Lehu, & Russell, 2010; Gupta & Lord, 1998; Law & Braun, 2004; Schneider & Cornwell, 2005). Centrality can be increased by featuring the brand in a more prominent location, having it more centrally connected to the plot, having it used by a central character (as opposed to appearing in the background), having it mentioned verbally, and having a limited number of placed brands competing for the viewer's attention. From this literature, it is clear that viewers can and do recall brands from movies and TV shows, and that the adoption of certain strategies of placement can facilitate brand recall.

Recall of brands, however, is not the only goal of marketers. Altering brand attitudes in a positive way and increasing purchase intentions are likely to be the ultimate goals of product placement. Other studies have attempted to evaluate the effects of product placement on brand attitudes and purchase intentions (Law & Braun, 2000; Russell, 2002; Russell & Stern, 2006; Schemer, Matthes, Wirth, & Textor, 2008; Yang & Roskos-Ewoldsen, 2007). In this line of research, too, a number of variables have been identified that have been shown to increase the effectiveness of the placement. For example, a verbal reference to a brand that was central to the plot led to positive effects on brand attitudes, whereas a verbal reference to a noncentral brand did not (Russell, 2002). When characters use products within the show, viewers' connection to the characters predicts reactions to the product. Russell and Stern (2006) found that for characters that viewers feel a strong sense of connection toward, viewers adopted the attitude toward the product that was displayed by the character. Similarly, Schemer et al. (2008) showed that a novel brand used by a performer in a rap video took on either a positive or negative valence, depending on the viewer's attitude toward the rapper. Use of the brand by a main character also led to more

positive brand attitudes than having the brand appear in the background of a scene (Yang & Roskos-Ewoldsen, 2007). This study also found that exposure to a soft drink brand in the movie led to an increased likelihood of choosing the brand at the end of the study. In general, this line of research suggests that product placement can affect brand attitude and choice, with the strength and direction of such effects depending on a variety of factors, such as centrality of placement, duration of placement, and degree of viewer connection with characters using the product. One goal of the current research was to extend previous studies by evaluating how brand recall may relate to brand attitude change following exposure to brands via product placement. We use a recent dual process model of attitudes (the APE model, Gawronski & Bodenhausen, 2006) to generate hypotheses regarding how brand recall will interact with other variables to predict brand attitude change. We further suggest that product placement may function similarly to evaluative conditioning (EC) as a conditioned stimulus (CS—the brand) is paired with a valenced unconditioned stimulus (US—the character using the brand). Beyond brand recall and improved brand attitudes, however, there are other potential benefits of product placement. We now turn to one such potential benefit.

Park, MacInnis, Priester, Eisingerich, and Iacobucci (2010) discuss brand attachment and distinguish this construct from brand attitude strength. They found that people with greater brand attachment will sacrifice more to maintain a relationship with the brand, and that brand attachment actually predicts brand purchase behavior better than brand attitude strength. In their model, one component of brand attachment is what they call brand–self connection. A variety of other studies in the consumer literature suggest that connections of brand to self are important (Banwari, 2006; Escalas, 2004; Escalas & Bettman, 2003, 2005; Fournier, 1998; Moore & Homer, 2007). Although no studies have directly examined the effects of product placement on self–brand connection, there are a number of reasons to expect that such effects may exist. Recent research suggests that casual and subtle associations of brands to self-related constructs can increase implicit self–brand connections (Perkins & Forehand, 2012). Seeing a liked character in a movie or TV show using a

brand may function similarly (Cooper, Schembri, & Miller, 2010). If a viewer identifies with a character, that character becomes almost a proxy for the self (Cohen, 2001). Kaufman and Libby (2012) call this process “experience taking,” and they provide evidence that losing oneself in a story leads the individual to adopt the thoughts, emotions, and traits of the characters in the story. Applying this reasoning to the product placement strategy suggests that brands being used by the character will become integrated into the viewer’s self-concept. Kaufman and Libby suggest that because of the relatively automatic nature of this process, implicit measures might most easily identify these effects. Suggestive evidence to support this notion comes from Dal Cin, Gibson, Zanna, Shumate, and Fong (2007) who showed that identification with a lead movie character who smokes led to an increased implicit association between smoking and the self. This study did not, however, examine implicit connection of the self to a particular *brand* of cigarette. One purpose of the current research is to explore whether product placement can lead to greater implicit connections of brand to self. We next explore the psychological mechanisms that may lead to shifts in brand attitudes and implicit brand self-identification.

The Associative–Propositional Evaluation model (APE model, Gawronski & Bodenhausen, 2006) suggests that attitudes can change based on simple associative processes or through more extensive propositional reasoning. These two avenues to attitude change can potentially have differing effects on implicit and explicit attitudes. When new associations are formed or a subset of existing associations is activated in memory, this will lead to a shift in implicit attitudes. Explicit attitudes may follow along if the individual is aware of the newly activated association, and if this association is viewed as a valid piece of information on which to base the explicit judgment. Propositional reasoning, in contrast, involves the conscious consideration of relevant propositions and the evaluation of the veracity of these propositions. For example, an individual may consciously consider the proposition that “Brand X is known for high quality,” and then recruit information that either confirms or disconfirms the proposition. Attitude change via this route directly affects explicit attitudes. Implicit attitudes may or may

not follow along, depending on the strength of existing associations in memory, and the likelihood that the propositional reasoning altered or differentially activated these associations. We propose that both associative and propositional processes can occur as a result of product placement, and these processes have the potential to affect both implicit and explicit brand attitudes and brand self-identification. Further, we propose that these effects will differ in a variety of predictable ways depending on the viewer’s conscious recognition of the brand within the show, whether they are vigilant to identify placements, and their overall enjoyment of the show they are viewing. We next consider more carefully how propositional reasoning could play a role in product placement effects.

### Propositional Processes in Product Placement

*Vesper Lynd*: “I like this poker thing. And that makes perfect sense! Since MI6 looks for maladjusted young men, who give little thought to sacrificing others in order to protect queen and country. You know, former SAS types with easy smiles and expensive watches.” She looks at Bond’s watch: “Rolex?”

*James Bond*: “Omega.”

*Vesper Lynd*: “Beautiful.”

Attitude change via propositional reasoning occurs as a result of the evaluation of various positive and negative propositions regarding the attitude object. This avenue to attitude change occurs when individuals shift their evaluation of an attitude object due to new information that highlights positive or negative qualities of the attitude object. For familiar attitude objects, these newly identified propositions shift the explicit attitude directly. In order for propositional processes to play a role in attitude change during product placement, the placement would need to elicit some form of propositional thought, however rudimentary, about the placed brand. This would require conscious recognition of the brand in the scene. Thus, our first research question was: Do individuals who notice placed brands exhibit explicit attitude changes in response to noticing those placements? We sought to address this question with Hypotheses 1a and 1b. In the excerpt from the movie *Casino Royale* that opened this section, the overt reference to Omega watches highlights

the beauty and expensiveness of the brand. This strategy is likely to maximize conscious recognition that a liked central character (the US) is using the brand (the CS), and is thus likely to increase consideration of positive propositions related to the brand. As such propositions are considered, explicit brand attitudes should become more positive. In general, noticing the contingency between the CS and US leads to stronger EC effects (Hofmann, De Houwer, Peurini, Baeyens, & Crombez, 2010).

*H1a:* Brands used by liked characters and noticed by viewers will show evidence of a positive shift in explicit attitudes.

This beneficial effect of recognizing a brand on subsequent explicit brand attitudes should be contingent on positive propositions generated following such recognition. Should negative propositions be generated by such recognition, however, we would expect that explicit brand attitudes should suffer. Thus if viewers of *Casino Royale* found Bond's Omega watch to be ostentatious, their explicit attitude toward Omega would drop. Such negative propositions may be more likely to the extent that viewers recognize the placement as a persuasive tactic. Persuasion via narratives has been shown to be successful in part because narratives result in less resistance to the persuasive message (Moyer-Guse, 2008; Moyer-Guse & Nabi, 2010). If, however, a viewer recognizes a brand in a movie or TV show as a placement, they may react against this placement as a manipulative strategy. Friestad and Wright (1994) might suggest that the identification of a brand within the movie or TV show as an attempt at product placement leads to a "change of meaning." A placement that might have originally generated positive propositions is now viewed as a manipulative attempt to alter viewer's brand attitude. One factor that could increase such reactance would be if a viewer's persuasion knowledge about product placement was activated before watching the movie or TV show (see Cowley & Barron, 2008). In this situation, if the viewer consciously identifies the brand, he/she should experience reactance and generate negative propositions related to the brand, which should cause more negative subsequent explicit brand attitudes.

*H1b:* Brands used by characters and noticed by viewers will show evidence of a negative shift in explicit attitudes if persuasion knowledge regarding product placement is primed before viewing.

## Associative Processes in Product Placement

**Associations of brand with valence.** By pairing a brand (the CS) with a liked character (the US), the marketer hopes that the positive evaluation of the US will transfer to the CS. De Houwer (2007) suggests that EC is best thought of as an effect (that is, the shift in attitude that follows the pairing of the CS and US) rather than a process. This distinction is important to make because there are multiple processes that could lead to the changed attitude. One process by which this attitude change could occur is propositional in nature (Mitchell, De Houwer, & Lovibond, 2009). Thus, in the product placement scenario, the viewer may consciously note a brand within the movie or TV show, and make a reasoned judgment that the liked character using the product has made an informed choice, and therefore the brand has high quality. Thus, the viewer has evaluated an implied proposition regarding the brand based on the association they observed. In addition to altering explicit attitudes via propositional reasoning, product placement could potentially alter implicit attitudes via more automatic associative processes. This view of EC suggests that all that is necessary for attitude change to occur would be for the affect associated with the US to become tagged to the CS (Bliss-Moreau & Feldman-Barrett, 2009). For example, noticing a liked character in a liked movie or TV show using a well-known brand should activate existing positive associations with that brand in memory, even without significant propositional reasoning. Further, if the brand is noticed, increased elaborative thought regarding the brand is likely to strengthen the brand-evaluation association (Petty & Brinol, 2006). Thus, our next research question was as follows: Do implicit attitudes shift when viewers notice the brand being used by the character? We sought to address this question with Hypothesis 2.

*H2:* Brands used by liked characters in liked movies or TV shows, and noticed by viewers will show evidence of a positive shift in implicit attitudes.

One model of how affect is transferred in EC is the Implicit Misattribution Model (IMM, Jones, Fazio, & Olson, 2009; Jones, Olson, & Fazio, 2010). This model suggests that EC occurs when the affect elicited by the US is misattributed to the CS. In this model, such misattribution is more likely when there is source confusability. In other words, when the source of the affect is not entirely clear and the focus of attention is primarily on the CS. Jones et al. (2010) showed that factors increasing attention to the CS increased the strength of the EC effect. In product placement, the affective experience elicited by the TV show or movie may be attributed to the brand placed in the show, leading the brand to be evaluated in a similar fashion. Thus, our next research question was as follows: Will individuals who like the show they are watching evaluate placed brands favorably, and will individuals who dislike the show evaluate those brands unfavorably? Furthermore, given the role of attention to the CS in the IMM model, we wondered, will implicit misattribution be most apparent among those who recalled seeing the brand within the episode? We sought to address these questions with Hypothesis 3.

*H3:* For brands appearing within the show, enjoyment of the show itself will be positively correlated to implicit and explicit brand attitudes, and this correlation will be stronger among those who recall seeing the brand in the show.

### Associations of Brand With Self

As noted earlier, increased self–brand connections could be a potential benefit of product placement. When liked characters are seen using a brand, the brand should become integrated into the self-concept. This process could be propositional in nature or associative in nature. Thus, a viewer may consciously evaluate the degree to which a brand is “me.” Such conscious evaluation would lead to a direct change in explicit measures of self–brand connections. Kaufman and Libby (2012), however, suggest that experience taking is a spontaneous and natural process that does not require conscious evaluation of similarities between the viewer and the character. Thus, our final research question was as follows: Will implicit self–brand connections emerge without conscious recognition of the brand? We sought to address this question with Hypothesis 4.

*H4:* Brands used by liked characters will show evidence of an increase in implicit self-identification with the brand regardless of brand recall.

Experiment 1 was carried out to test Hypotheses 1a, 2, 3, and 4. Participants who liked the TV show *Friends*, and held neutral attitudes about the Nike and Reebok brands were recruited to participate. They then viewed an episode of *Friends* in which either the Nike brand was used and mentioned by a main character, was used but not mentioned by a main character, or in which Nike did not appear.

## Experiment 1

### Method

**Participants.** Participants were 75 undergraduate psychology students (55 females and 20 males) who participated to get extra course credit.

#### Instruments.

**Pretest.** Potential participants completed a pretest containing a variety of items, among which were three questions measuring their attitudes toward Nike and three questions measuring their attitudes toward Reebok. In addition, three items measured their attitudes toward the TV show *Friends*.

**Brand recall measure.** A variety of memory questions relevant to *Friends* were asked. The majority of the items were distracters, designed to ensure that participants did not guess that brand exposure was a primary concern of the study. Some questions focused on the characters in the episode (e.g., “Did any of the main male characters wear a tie?”; “In the episode you just watched, did the character Gunther appear?”; etc.). Other questions required that they complete lists focusing on a variety of background information in the episode (e.g., “List the types of fruit you remember seeing in the bowl in the kitchen.”; “List the types of appliances on the counter in the apartment in this episode.”; etc.). Among these questions was the main measure of interest, asking participants to “List any product brands used by the characters, presented in the background of a scene, mentioned by the characters, or displayed in any way during this episode.”

**Explicit brand measures.** Participants evaluated four brands (Sony, Panasonic, Nike, and

Reebok) on the same semantic differential and purchase intention scales used by Shimp, Stuart, and Engle (1991). These included 7 seven-point semantic differential items (good–bad; high quality–poor quality; like very much–dislike very much; superior–inferior; attractive–unattractive; pleasant–unpleasant; interesting–boring), a seven-point global evaluation item (favorable–unfavorable), and an 11-point purchase intention item (“All things considered, if you were to purchase [brand category] on one of your next several trips to the store, what are the chances in 10 that you would purchase [brand] if it were available?”).

**Implicit brand measures.** Participants completed a Nike–Reebok attitude Implicit Association Test (IAT), and a Nike–Reebok self-identification IAT. The attitude IAT involved having participants respond to images and words related to Nike with one key (“e”) and images and words associated with Reebok with another key (“i”). They then completed a second block of trials responding to positive words (e.g., love, paradise) with one key (“e”) and negative words (e.g., grief, pain) with the other key (“i”). The two concept categories were then combined, responding to Nike or positive words with the “e” key, and Reebok and negative words with the “i” key. The following block of trials reversed the keys used for valenced words, and then a final block of trials combined Nike with negative words and Reebok with positive words. The Nike–Reebok self-identification IAT was similar, but instead of positively and negatively valenced words, Nike and Reebok were paired with self-related words (e.g., me, mine, self) or other-related words (e.g., them, they, theirs). The logic of the IAT is that if constructs are closely related in memory, then the keyboard response when those concepts share a response key should be faster. Thus, if Nike is more strongly associated with positive constructs (or the self) then the keyboard response when Nike shares a response key with positive words (or self-related words) should be faster. Initial presentation of Nike or Reebok on the right or left of the screen, and initial pairing of Nike or Reebok with positive or negative, or self or other attributes was counterbalanced across participants.

**Procedure.** Potential participants completed the online pretest. People expressing equivalent attitudes toward Nike and Reebok

(i.e., within 2 scale points in summed items for Nike and Reebok) and who reported liking *Friends* (i.e., were in the top 1/3 of people responding to the scale) were then phoned and offered the opportunity to participate in two further studies for extra credit. Participants went through the procedure either individually or in pairs. On arrival to the lab, the experimenter communicated the cover story that they would be participating in two studies today, one focusing on individual differences in responses to TV shows, and the other a pilot study on brands and reaction time (RT) to provide information for a future study. This cover story was designed to reduce hypothesis guessing on the part of the participants, and to reduce any demand effects on participants’ explicit brand attitudes. After signing a consent form, participants watched one of three episodes from season 2 of *Friends*. In one of these episodes (“The One With the Breast Milk”), Phoebe gives Ross’s son a pair of Nike sneakers, and says “just do it” (visual and verbal product placement); in another episode (“The One Where Heckles Dies”), Joey wears a sweatshirt displaying the word Nike and the Nike “swoosh” throughout the episode (visual only product placement); and in the third episode (“The One With Phoebe’s Husband”), Nike is neither seen nor mentioned (control). Participants were randomly assigned to an episode. After watching the episode, participants then went to separate computers in the same room and completed the brand recall measure. Participants were given a false debriefing suggesting that the study was concerned with how personality variables affected attention to and recall of information in TV shows. The remaining portion of the study was presented as a pilot study, designed to help the researchers select products to use in future studies. Participants then completed the explicit brand measures. Measuring brand attitudes following our measure of brand recall opens up the possibility that the brand recall measure could have led to demand effects on the brand attitude measures. Note, however, that had the order of measurement been reversed, we would have created another problem. Specifically, by asking about attitudes toward Nike, participants may have been more likely to recall that Nike appeared in the episode they had watched. Given our hypothesis that natural recall of the brand within the episode will play a crucial role in altering

brand attitudes, we felt that this potential contamination of the brand recall measure was more problematic. Further, by disguising our measure of brand recall among other memory questions regarding the episode, we limited the likelihood that participants would connect the brand recall and brand attitude measures. Following the explicit brand evaluations, participants completed the Nike–Reebok attitude IAT and the Nike–Reebok self-identification IAT. After completing the IATs, participants were given a funnel interview to probe for suspicion, were debriefed, and excused.

## Results

**Preliminary analyses.** Only six of 75 participants (8%) expressed accurate suspicion that the “two studies” were in fact connected. These six guessed that the purpose of the study was to evaluate how brand exposure in the episode of *Friends* affected brand attitudes. Removal of these participants from the analyses presented below does not alter any of the results, and therefore these participants are retained in all analyses. Neither sex nor the counterbalanced IAT variables led to any significant effects, and are not discussed further. In addition, to evaluate whether any of the episodes were liked more than any of the others, a one-way ANOVA was carried out on participants’ ratings of the episode. This analysis found no effects,  $F(2, 72) < 1$ , suggesting that the episodes were not differentially preferred by participants.

**Brand recall.** To test whether noticing product placements resulted in attitude change,

participants were asked to recall any brands they had seen during the episode they viewed. A chi-square test was used to evaluate whether those in the visual + verbal placement condition were more likely to recall seeing Nike than those in the visual only condition. This analysis was significant,  $\chi^2(1) = 3.39, p < .04$ , one-tailed. More participants in the visual + verbal placement condition recalled seeing Nike (7/25, 28%) than those in the visual only placement condition (2/25, 8%).

**Explicit brand attitudes.** The explicit attitude toward Nike was computed by summing the responses on the seven semantic differential items, the overall evaluation item, and the purchase intention item. Scores comprising this measure proved reliable, Cronbach’s  $\alpha = .93$ . The ANOVA for the explicit attitude measure was not significant,  $F(2, 72) < 1$  (see Table 1). Hypothesis 1a, however, focused on differential effects based on recall of the brand from the episode. Therefore, separate  $t$  tests were carried out comparing the explicit attitudes of participants who recalled seeing Nike in the visual + verbal placement condition ( $n = 7$ ) and those who did not recall seeing Nike in that condition ( $n = 18$ ). This analysis was significant,  $t(23) = 2.18, p < .05$ . As hypothesized, those who recalled seeing Nike had more positive explicit attitudes toward Nike ( $M = 54.3$ ) than those who did not recall seeing Nike ( $M = 41.4$ ). This effect held when controlling for pretest attitude toward Nike,  $t(22) = 2.20, p < .05$ . Although only two participants in the visual only condition recalled seeing Nike, our hypothesis would

Table 1  
*Experiment 1: The Effects of Product Placement Condition on Explicit Brand Attitude, Implicit Brand Attitude, and Implicit Brand Self-Identification*

Dependent Measure	Product Placement Condition			
	Visual Only	Visual + Verbal	Control	Total
Explicit attitude	42.1	45.0	44.8	44.0
	$SD = 8.62$ $n = 25$	$SD = 14.21$ $n = 25$	$SD = 8.66$ $n = 25$	$SD = 10.76$ $n = 75$
Implicit attitude	0.116	0.201	0.162	0.160
	$SD = 0.516$ $n = 25$	$SD = 0.544$ $n = 25$	$SD = 0.517$ $n = 25$	$SD = 0.520$ $n = 75$
Implicit self-identification	0.288 <sub>a</sub>	0.368 <sub>a</sub>	0.053 <sub>b</sub>	0.236
	$SD = 0.423$ $n = 25$	$SD = 0.314$ $n = 25$	$SD = 0.286$ $n = 25$	$SD = 0.367$ $n = 75$

*Note.* For the implicit measures, a positive score indicates an implicit preference for Nike or an implicit self-identification with Nike. Different subscripts represent means different at the .05 level by Tukey’s test.

suggest that these participants too would show an increase in explicit attitudes toward Nike. We therefore carried out an additional  $t$  test in which we combined the visual only and the visual + verbal conditions, and compared explicit attitudes toward Nike for those who recalled ( $n = 9$ ) and those who did not recall ( $n = 41$ ) seeing the brand. There was a significant effect,  $t(48) = 3.17, p < .005$ , such that those who recalled seeing Nike had more positive explicit attitudes toward Nike ( $M = 53.9$ ) than those who did not recall seeing Nike ( $M = 41.3$ ). This supports Hypothesis 1a, and suggests that noticing placed brands makes explicit attitudes toward those brands more positive.

**Implicit measures.** The Nike–Reebok attitude IAT score and the brand self-identification IAT score were computed using the  $D$  method outlined by Greenwald, Nosek, and Banaji (2003). This measure is similar to an effect size estimate in which the relative speed of response when one brand is paired with one construct is compared with the relative speed of response when the pairing is reversed, adjusting for standard deviation of the speed of response. An IAT score of zero would indicate identical response times for pairings of, for example, Nike-positive/Reebok-negative and Nike-negative/Reebok-positive. Separate one-way ANOVAs were carried out on the implicit brand attitude and the implicit brand self-identification measures.

**Implicit brand attitudes.** The ANOVA on the implicit attitude measure was not significant,  $F(2, 72) < 1$  (see Table 1). Similarly to Hypothesis 1a, however, Hypothesis 2 focused on a comparison between those who recalled and those who did not recall the brand from the episode. Therefore, we carried out follow up  $t$  tests comparing the implicit brand attitudes of those who recalled and those who did not recall the brand from the episode in the visual + verbal condition. There was a significant difference between these groups on the implicit attitude measure,  $t(23) = 2.27, p < .05$ . As with the explicit measure, implicit attitudes toward Nike were more positive for those who recalled seeing Nike ( $M = .57$ ) than for those who did not recall seeing Nike ( $M = .06$ ). This effect also held when controlling for pretest attitude toward Nike,  $t(22) = 2.24, p < .05$ . A similar effect emerged when we combined both of the placement conditions and compared those who

recalled the brand with those who did not,  $t(48) = 3.17, p < .005$ . Those who recalled seeing Nike had more positive implicit brand attitudes ( $M = .61$ ) than those who did not recall seeing Nike ( $M = .06$ ). This supports Hypothesis 2, and suggests that viewing a liked character using a brand activates and strengthens positive brand-evaluation associations and shifts implicit attitudes.

**Implicit self-identification with Nike.** To test Hypothesis 4's proposition that viewers would implicitly identify more with brands used by liked characters regardless of brand recall, a one-way ANOVA comparing the three episodes of *Friends* was carried out on the implicit self-identification measure. This analysis was significant,  $F(2, 72) = 5.61, p < .005$ . Tukey's test revealed that participants in both the visual + verbal and visual only placement conditions had significantly stronger implicit self-identification with Nike than participants in the control condition (see Table 1). This supports Hypothesis 4. A  $t$  test was carried out comparing the implicit self-identification of participants who recalled seeing Nike in the visual + verbal placement condition ( $n = 7$ ) and those who did not recall seeing Nike in that condition ( $n = 18$ ). This analysis was not significant,  $t(23) < 1$ . Combining the visual only with the visual + verbal conditions led to a similar result,  $t(48) < 1$ . Thus, unlike the attitude measures, implicit brand self-identification was unaffected by brand recall.

**Correlation between liking of Friends, liking of the episode, and the dependent variables.** Hypothesis 3 proposed that product placement may operate in part via the transfer of viewers' valenced experience during the TV show to the brand that appears in the show. To test this idea, we correlated participants' attitudes toward *Friends* (measured at pretest) and their evaluation of the episode they watched with implicit brand attitude, explicit brand attitude, and implicit brand self-identification. We expected that these variables would be unrelated in the no placement condition, but related in the placement conditions. In the no placement condition, neither measure of liking of *Friends* was significantly related to our outcome measures (all  $r_s < .30$ , all  $p_s > .15$ ). Unexpectedly, in the placement conditions overall, these relationships were also nonsignificant as were the relationships for only those who recalled seeing



Nike in the episode (all  $r_s < .22$ , all  $p_s > .10$ ). This lack of a relationship between liking of the show and brand outcomes could be due to a restricted range caused by using a pretest to select only people who liked *Friends*. This possibility will be explored in Experiment 2.

## Discussion

**Overview of results.** Results of Experiment 1 provide some initial support for Hypotheses 1a, 2, and 4. Attitudes were not affected directly by exposure to Nike product placement. Attitudes were more positive, however, for participants who recalled seeing Nike during the episode. Thus, implicit and explicit attitudes changed in unison in response to brand exposure and recall.

**Alternative explanations.** It is important to consider a potential alternative explanation for these results. We propose that noticing a brand being used by a liked character will lead the viewer to generate positive propositions about the brand, and shift their brand attitude accordingly. It is possible, however, that it was not noticing the brand that led participants to shift their attitude toward Nike, but rather those liking Nike the most before viewing were the participants who noticed the brand. If this was the case, then the differences in implicit and explicit attitudes between the recall and no recall groups were preexisting and not due to attitude change. There are a few reasons that this alternative explanation is less than compelling. First, all participants in this study were selected because they reported at pretest that they liked Nike and Reebok at a similar level. In fact, comparing participants who recalled and did not recall seeing Nike on their pretest attitudes toward Nike shows that these groups did not differ,  $t(48) < 1$ . Another way to evaluate this possibility would be to compare the participants in the two placement conditions who did not recall seeing Nike with participants in the control condition. Because these individuals were sampled from the same participant pool, we would expect that if those with the most positive preexisting attitudes toward Nike were those who recalled seeing the brand in the episode, then the remaining participants would have a more negative attitude toward Nike compared with the control group. This was not the case,  $t(64) < 1$ . Thus, a reverse causation ex-

planation in which those with more positive existing attitudes toward Nike were more likely to recall the brand does not have any support in our data.

Our data also showed that implicit self-identification with Nike was higher for participants who had just seen characters using Nike products, regardless of brand recall. This would suggest that a conscious consideration of the brand is unnecessary to lead to implicit brand self-identification. A potential problem with this interpretation is the relatively low proportion of participants who recalled seeing Nike in the episode. It may be that the lack of effect of recall on implicit self-identification is owing to a lack of power rather than no effect of recall. If this were the case, however, we might expect to see means trending toward higher implicit self-identification among those who recalled seeing the brand. This was not the case, with those who recalled seeing Nike showing no absolute rise in implicit self-identification ( $M = .34$ ) compared with those who did not recall seeing Nike ( $M = .32$ ). Furthermore, if recall was necessary for placement to affect implicit self-identification, then we would expect that the small number of participants who recalled seeing Nike would preclude finding an overall effect identified by the ANOVA on this variable. Given that this effect was present, our data provide initial evidence that conscious and nonconscious processes in product placement may work independently (see Van Reijmersdal, 2009).

**Implications for Experiment 2.** Thus, for familiar brands such as Nike, attitude change will occur via propositional reasoning, while implicit brand self-identification change will occur associatively when a liked character uses the brand. If this is the case, then it may be possible to create a situation in which brand attitude and brand self-identification move in opposite directions. Other research has shown that implicit and explicit attitudes can change in opposite directions when the consciously accessible information about a target was in opposition to subliminally presented information about the target (Rydell, McConnell, Mackie, & Strain, 2006). This led to explicit attitudes that aligned with the consciously accessible information and implicit attitudes that aligned with the subliminal information. Applied to the product placement situation, this suggests that if a viewer identifies a placement after persuasion

knowledge has been primed, the placement should generate negative propositions and brand attitudes should suffer. If, however, implicit brand self-identification occurs automatically, then a positive effect on brand self-identification should still be evident for these participants. Experiment 2 replicated Experiment 1 with a few exceptions. First, we added a variable in which we either primed or did not prime the construct of product placement. We expected that primed participants who noticed the brand would react against the perceived manipulation of the placement, and show more negative attitudes toward Nike. Given our hypothesis that implicit self-identification occurs automatically, we expected that these individuals would still show an increase in implicit self-identification with Nike. Another difference is that in Experiment 2, we did not pretest our sample. Thus, we used a sample that would likely have more variability in their evaluation of the episode they viewed, allowing us a better opportunity to identify the hypothesized correlation between evaluation of the show and evaluation of the brand. A potential drawback to this method, however, is that we were also likely to get more people with strong preexisting attitudes toward Nike who would be less likely to change their attitudes as a result of placement. For this reason, we increased our sample size in Experiment 2.

## Experiment 2

### Method

**Participants.** Participants were 221 undergraduate psychology students (130 females and 91 males) who participated to get extra course credit.

**Instruments.** The instruments used for Experiment 2 were identical to Experiment 1.

**Procedure.** The procedure for Experiment 2 was identical to Experiment 1 with the following exceptions: First, participants were recruited without the use of a pretest. Second, in addition to being randomly assigned to see one of the three episodes of *Friends* described in Experiment 1, half the participants had product placement persuasion knowledge primed. This prime occurred through a question asked of participants before viewing the episode of *Friends*. In line with the cover story regarding

TV preferences, all participants answered a series of three questions focusing on the current season of *American Idol*. Participants rated on a nine-point Likert-type scale, how regularly they watched the show, how regularly they had watched the show in past seasons, and whether they liked or disliked the new lineup of judges on the show. Half of the participants received a 4th question asking how they felt regarding the prominent placement of Coca-Cola in *American Idol*. Participants then watched one of the three episodes of *Friends*, completed the dependent variables as in Experiment 1, and were then debriefed and excused.

### Results

**Preliminary analyses.** Overall, 27 of 221 participants (12%) expressed suspicion that the purpose of the study was to evaluate how brand exposure in the episode of *Friends* affected brand attitudes. There was a nonsignificant trend for participants in the persuasion knowledge prime condition to be more likely to draw this conclusion, as 16 of 104 participants (15%) in this condition mentioned product placement as the purpose of the study, whereas in the nonprime condition only 11 of 117 participants (9%) mentioned this,  $\chi^2(1) = 1.84, p > .10$ . Removal of these participants from the analyses presented below does not alter any of the results, and therefore these participants are retained in all analyses. Neither sex nor the counterbalanced IAT variables led to any significant effects, and are not discussed further. As in Experiment 1, we carried out an ANOVA on participants' ratings of the episode. Unlike Experiment 1, however, we found a main effect for episode, such that the control episode was liked more ( $M = 26.5$ ) than either of the episodes in which Nike appeared ( $M$ 's = 24.1 and 23.2, respectively),  $F(2, 215) = 5.51, p < .01$ . This main effect was not found in Experiment 1, but that may be due to the smaller sample size in that study. The mean liking of the episodes was very similar in Experiment 1 ( $M = 26.0$  for the control episode, and  $M$ s = 24.2 and 23.6 for the episodes in which Nike appeared). There was also a main effect for the persuasion knowledge prime,  $F(1, 215) = 4.16, p < .05$ , such that primed participants liked the show less ( $M = 23.7$ ) than nonprimed participants ( $M = 25.5$ ).

**Brand recall.** As in Experiment 1, brand recall measures were analyzed before the hypotheses were tested. A chi-square test was used to evaluate whether those in the visual + verbal placement condition were more likely to recall seeing Nike than those in the visual only condition. As in Experiment 1, this analysis was significant,  $\chi^2(1) = 2.85, p < .05$ , one-tailed, with more participants in the visual + verbal placement condition recalling seeing Nike (21/75, 28%) than those in the visual only placement condition (12/73, 16%). We also expected that the persuasion knowledge prime would lead more participants to recall seeing Nike. A chi-square analysis found that this difference approached significance,  $\chi^2(1) = 1.80, p < .10$ . As expected, those who were primed were somewhat more likely to recall seeing Nike in the episode (19/70, 27%) than those not primed (14/78, 18%). When asked to list brands appearing in the episode, many participants listed other brands as well. To evaluate whether the persuasion knowledge prime led to an increased likelihood of listing any brand after viewing the episode, we coded participants' responses for this variable. A chi-square analysis found that primed participants were more likely to report seeing a brand in the episode they watched (52/70, 74%) than were nonprimed participants (39/78, 50%),  $\chi^2(1) = 9.19, p < .001$ , one-tailed.

**Explicit brand attitudes.** The explicit attitude toward Nike was computed as in Experiment 1, and again scores comprising this measure were reliable, Cronbach's  $\alpha = .94$ . To test for Hypotheses 1a and 1b's propositions regarding the effects of brand placement and priming of persuasion knowledge on explicit brand attitudes, a 3 (episode viewed)  $\times$  2 (priming) ANOVA was carried out on the explicit attitude measure. In this analysis, none of the main or interactive effects were significant, all  $F$ s  $< 2.2$ , all  $p$ s  $> .12$ . We did, however, hypothesize that our IV's effects on our attitude measures would depend on participant's conscious awareness of Nike within the episode. Therefore, we added whether participants recalled seeing Nike as a grouping variable, and removed the no placement control group in a 2 (episode viewed)  $\times$  2 (priming)  $\times$  2 (Nike recall) ANOVA for the explicit brand attitude measure. This analysis found a significant main effect for the persuasion knowledge prime variable,  $F(1, 140) =$

17.11,  $p < .001$ . Primed participants reported significantly lower explicit brand attitudes than those not primed (see Table 2). In addition, there was a main effect of brand recall,  $F(1, 140) = 3.95, p < .05$ , such that participants who recalled seeing Nike had lower explicit brand attitudes than participants who did not recall seeing Nike (see Table 2). These main effects, however, were qualified by a prime by brand recall interaction,  $F(1, 140) = 26.94, p < .001$ . Tests for simple effects showed that for participants primed with persuasion knowledge, those who recalled seeing Nike had lower explicit brand attitudes ( $M = 40.8$ ) than those who did not recall seeing Nike ( $M = 53.8$ , see Table 2),  $t(68) = 5.68, p < .001$ . For participants not primed with persuasion knowledge, however, those who recalled seeing Nike had more positive brand attitudes ( $M = 57.5$ ) than those who did not recall seeing Nike ( $M = 52.1$ , see Table 2),  $t(76) = 2.24, p < .03$ . These results support Hypotheses 1a and 1b, and suggest that not only does noticing a brand placed in a show affect attitudes toward that brand, but the direction of attitude change depends on the context in which the placement is viewed. Finally, these effects were qualified by a 3 way interaction,  $F(1, 140) = 5.19, p < .03$ . To follow up this interaction, 2 (episode viewed)  $\times$  2 (brand recall) ANOVAs were carried out separately for those in the prime and no prime conditions. For those in the no prime condition, the episode viewed  $\times$  brand recall interaction was not significant,  $F < 1$ . For those in the persuasion knowledge prime condition, however, this interaction was significant,  $F(1, 66) = 9.76, p < .004$ . This effect was due to those who recalled seeing Nike in the visual + verbal condition having a stronger negative brand attitude than those who did not recall seeing Nike (see Table 2),  $t(35) = 6.98, p < .001$ . In contrast, those in the visual only condition did not differ based on brand recall,  $t(31) = 1.54, ns$ .

**Implicit measures.** The attitude IAT and self-identification IAT were again computed using the D method outlined in Greenwald et al. (2003).

**Implicit brand attitudes.** A 2 (episode viewed)  $\times$  2 (priming)  $\times$  2 (Nike recall) ANOVA was carried out on the implicit attitude measure. This analysis failed to identify any significant effects, though the two-way Nike recall by priming interaction approached signif-

Table 2  
*Experiment 2: The Effects of Product Placement Condition, Priming and Brand Recall on Explicit Brand Attitude*

Priming Condition	Product Placement Condition		
	Visual Only	Visual + Verbal	Total
Brand recall			
Recall			
No prime	57.2 <i>SD</i> = 5.17 <i>n</i> = 5	57.7 <sub>a</sub> <i>SD</i> = 6.60 <i>n</i> = 9	57.5 <i>SD</i> = 5.92 <i>n</i> = 14
Prime	45.9 <i>SD</i> = 10.04 <i>n</i> = 7	37.8 <sub>b</sub> <i>SD</i> = 8.83 <i>n</i> = 12	40.8 <i>SD</i> = 9.85 <i>n</i> = 19
No recall			
No prime	52.6 <i>SD</i> = 9.08 <i>n</i> = 35	51.6 <i>SD</i> = 7.89 <i>n</i> = 29	52.1 <i>SD</i> = 8.51 <i>n</i> = 64
Prime	51.0 <i>SD</i> = 7.14 <i>n</i> = 26	56.7 <i>SD</i> = 7.86 <i>n</i> = 25	53.8 <i>SD</i> = 7.97 <i>n</i> = 51
Total	51.7 <i>SD</i> = 8.51 <i>n</i> = 73	51.8 <i>SD</i> = 10.19 <i>n</i> = 75	51.8 <i>SD</i> = 9.37 <i>n</i> = 148

*Note.* Different subscripts represent means different at the .05 level by tests for simple effects.

icance,  $F(1, 135) = 2.53, p < .12$ , as did the three way interaction,  $F(1, 135) = 2.35, p < .13$ . Thus, Hypothesis 2 was not supported. Examination of the means reveals a pattern similar to that found for the explicit measure (see Table 3).

**Implicit self-identification with Nike.** A 3 (episode viewed)  $\times$  2 (prime) ANOVA was carried out on the implicit self-identification measure. The main effect for episode viewed was significant,  $F(2, 208) = 3.22, p < .05$ . Tukey's test revealed that participants in the visual + verbal placement condition showed greater implicit self-identification with Nike than those in the control condition,  $p < .05$ . The visual only condition, however, did not differ from either the control group or the visual + verbal condition (see Table 4). Neither the priming main effect, nor the episode by priming interaction reached significance, both  $F_s < 1$ . To evaluate whether brand recall had an effect on implicit brand self-identification, brand recall was added as a grouping variable, and the no placement control was removed from the analysis. No main or interactive effects of this analysis were significant, all  $F_s < 1.1$ . These results support Hypothesis 4, and further sug-

gest that it is not necessary to notice a placed brand for implicit connections between the self and that brand to emerge.

**Correlation between liking of the episode and the dependent variables.** To test Hypothesis 3's proposition that participant's evaluation of the episode they watched was related to their explicit brand attitude, implicit brand attitude, or implicit brand self-identification, we carried out correlations between these variables separately for participants in the no placement condition and participants who were exposed to Nike in the episode. As expected, for participants in the control condition, none of these correlations reached significance, all  $r_s < .19$ , all  $p_s > .10$ . For participants exposed to Nike, both the implicit brand attitude,  $r(142) = .02$ , and implicit brand self-identification measures,  $r(142) = .11$ , were unrelated to evaluation of the episode. For the explicit brand attitude measure, however, there was a significant relationship between participant's evaluation of the episode they watched and their explicit brand attitude,  $r(147) = .33, p < .001$ . Thus, in support of hypothesis 3, those who liked the episode more reported more positive explicit attitudes toward Nike. To explore this relationship

Table 3  
*Experiment 2: The Effects of Product Placement Condition, Priming and Brand Recall on Implicit Brand Attitude*

Priming Condition	Product Placement Condition		
	Visual Only	Visual + Verbal	Total
Brand recall			
Recall			
No prime	0.46 <i>SD</i> = 0.20 <i>n</i> = 5	0.53 <i>SD</i> = 0.27 <i>n</i> = 9	0.50 <i>SD</i> = 0.24 <i>n</i> = 14
Prime	0.31 <i>SD</i> = 0.32 <i>n</i> = 7	0.27 <i>SD</i> = 0.35 <i>n</i> = 12	0.28 <i>SD</i> = 0.33 <i>n</i> = 19
No recall			
No prime	0.53 <i>SD</i> = 0.39 <i>n</i> = 33	0.33 <i>SD</i> = 0.50 <i>n</i> = 28	0.44 <i>SD</i> = 0.45 <i>n</i> = 61
Prime	0.38 <i>SD</i> = 0.39 <i>n</i> = 25	0.58 <i>SD</i> = 0.37 <i>n</i> = 24	0.48 <i>SD</i> = 0.39 <i>n</i> = 49
Total	0.45 <i>SD</i> = 0.38 <i>n</i> = 70	0.43 <i>SD</i> = 0.43 <i>n</i> = 73	0.44 <i>SD</i> = 0.40 <i>n</i> = 143

*Note.* A positive score indicates an implicit preference for Nike.

further, we carried out separate correlations for participants who recalled seeing Nike and those who did not. Among those who did not recall seeing Nike, the correlation between episode evaluation and explicit brand attitude was significant,  $r(114) = .20, p < .04$ . As hypothesized, however, for participants who did recall seeing Nike this relationship was even stronger,  $r(32) = .51, p < .003$ . These correlations differed significantly from each other,  $z = 1.77, p$

$< .05$ . These results suggest that liking for the episode was related to evaluation of brands placed in the episode, especially among those who remembered seeing the brand.

### Discussion

**Overview of results.** The results of Experiment 2 replicated some important outcomes of Experiment 1. Participants who viewed an epi-

Table 4  
*Experiment 2: The Effects of Product Placement Condition and Priming on Implicit Brand Self-Identification*

Priming Condition	Product Placement Condition			Total
	Visual Only	Visual + Verbal	Control	
Prime	0.50 <i>SD</i> = 0.31 <i>n</i> = 32	0.54 <i>SD</i> = 0.29 <i>n</i> = 36	0.34 <i>SD</i> = 0.33 <i>n</i> = 34	0.46 <i>SD</i> = 0.32 <i>n</i> = 102
No Prime	0.42 <i>SD</i> = 0.35 <i>n</i> = 38	0.46 <i>SD</i> = 0.37 <i>n</i> = 37	0.38 <i>SD</i> = 0.36 <i>n</i> = 37	0.42 <i>SD</i> = 0.36 <i>n</i> = 112
Totals	0.46 <sub>a,b</sub> <i>SD</i> = 0.33 <i>n</i> = 70	0.50 <sub>a</sub> <i>SD</i> = 0.33 <i>n</i> = 73	0.36 <sub>b</sub> <i>SD</i> = 0.34 <i>n</i> = 71	0.44 <i>SD</i> = 0.34 <i>n</i> = 214

*Note.* A positive score indicates an implicit self-identification with Nike. Different subscripts represent means different at the .05 level by Tukey's test.

sode of *Friends* in which Nike appeared displayed greater implicit self-brand connection with Nike, regardless of brand recall. In addition, for those participants not primed with the product placement construct, those who recalled seeing Nike in the episode reported more positive explicit attitudes toward Nike. As expected, without using a pretest in Experiment 2, we required a larger sample to identify the effects we predicted. Of note are the mean values of the implicit measures found in Experiment 2 compared with Experiment 1. For example, the overall average Nike implicit attitude score in Experiment 2 was .41, and in Experiment 1 it was .16. Similarly, implicit brand self-identification with Nike was stronger in Experiment 2 than in Experiment 1 (.44 and .24, respectively). These values suggest that across our sample, Nike was implicitly preferred to Reebok, and our participants implicitly identified with Nike more than with Reebok. Given that recent figures put Nike's market share in the U.S. athletic shoe market at >40% and Reebok's at <10%, this should not be surprising. This could help explain the lack of a significant effect on implicit brand attitudes in Experiment 2. Gibson (2008) showed that an EC procedure does not alter implicit attitudes for people that already strongly like or dislike the brand in question. Thus, given that many people in our sample likely entered the study with an existing preference for Nike, the exposure within the *Friends* episode had little effect on their implicit attitudes. Despite this preexisting preference for Nike, however, exposure to the Nike brand led to more positive explicit attitudes among those who recalled seeing Nike and who were not primed with persuasion knowledge. Further, participants had a stronger implicit brand self-identification when Nike appeared, regardless of brand recall or priming.

In addition, Experiment 2 adds to our understanding of the effects of product placement by demonstrating that participants who had product placement persuasion knowledge primed, and who recalled seeing Nike within the episode, actually reported a more negative attitude toward Nike than those who did not recall seeing the brand within the episode. This suggests a potential negative consequence among individuals who are vigilant about product placement. These individuals may hope to avoid being manipulated by placements, and over-

compensate by reducing their ratings of the brands they recall seeing (see Forehand & Perkins, 2005, for similar reasoning regarding effects of commercial voiceovers). The unanticipated three-way interaction could be understood in this context. This interaction found that primed participants who recalled seeing Nike lowered their explicit brand attitude, but this occurred primarily among those in the verbal + visual condition. This may be because the more overt nature of this placement ("just do it!") elicited more reactance than the subtler placement in the visual only condition. Despite this drop in explicit attitudes among the primed participants, these individuals still showed evidence of higher implicit self-identification with the brand. This finding provides the first evidence for potentially disparate implicit and explicit outcomes of product placement on viewers.

**Unanticipated findings.** One unanticipated finding in our results was the reduction in the enjoyment of the episode being watched among those primed with product placement persuasion knowledge. In hindsight, however, this finding could be understood within theory on transportation into a narrative world (Green & Brock, 2000). Green, Brock, and Kaufman (2004) suggest that enjoyment of a story increases to the extent that one becomes immersed, or transported into the narrative world. By priming the product placement construct, we are likely to have inhibited this process. Rather than becoming involved in the narrative presented in the TV episode, primed participants may have found themselves looking for brands appearing in the episode. Our data provide some support for this interpretation in that primed participants were significantly more likely to recall seeing a brand when asked to do so after the episode. By devoting more attention to brands, the viewer would be less likely to become immersed within the narrative world, and hence the viewing experience becomes less satisfying. As can be attested to by the authors of this research, thinking about product placement and recognizing when it occurs can reduce enjoyment of the movie or TV experience.

**Alternative explanations.** Finally, our data support the notion that viewer's evaluation of the show they are watching can transfer to the attitudes of the brands they see in the episode in a manner described by the IMM (Jones et al., 2010). The fact that this relationship occurred

only for explicit brand attitudes and the relationship was significantly stronger among those who recalled seeing Nike, however, suggests that attention to the CS (in this case, the brand) is necessary in order for the misattribution process to take place. Two potential alternative explanations to the correlational results exist, however. It may be that a response bias led those who liked the show more to report greater liking of Nike. Thus, these individuals simply tended to respond in similar ways to the questions regarding both Nike and Friends, leading to a significant correlation. Alternatively, responses to the Nike items could have been affected by the mood viewers were in following the episode. Those who liked the episode more were in a better mood, thereby increasing their positive evaluations of any other stimulus, not just the Nike brand. Arguing against these explanations, however, are data from ratings of Reebok and other filler brands (Sony and Panasonic) that were also collected. If either the response bias or mood congruency explanations are accurate, then there should also be a significant correlation between the episode rating and the other brand attitude measures. This was not true in either the control group (all  $r_s < .16$ , all  $p_s > .10$ ) or, more importantly, the experimental groups (all  $r_s < .11$ , all  $p_s > .10$ ).

## General Discussion

### Product Placement's Effects on Explicit Processes

Our research highlights the importance of considering both brand recall and brand attitudes together rather than separately. First, our data suggest that placements in which a central liked character uses a brand can impact explicit brand attitudes for viewers who recalled seeing the brand. Recalling the brand led to positive explicit brand attitudes unless persuasion knowledge was primed prior to viewing the episode. Participants who *were* primed with persuasion knowledge and recalled seeing Nike in the episode they watched, showed evidence of more negative explicit brand attitudes. We suggest that this effect is likely due to propositional reasoning that is elicited by recognition of the character using the brand. When not primed with persuasion knowledge, seeing the character use the brand may prompt thoughts about the

positive qualities of the brand, and activate positive brand associations from memory. When primed with persuasion knowledge, however, more negative propositions are likely to be considered. The viewer may view the manufacturers of the brand as attempting to manipulate them to purchase the brand (Koslow, 2000). In Friestad and Wright's (1994) terms, the viewer will have undergone a "change of meaning." What would have been considered an innocuous use of a product by a character within a story in the absence of the prime now becomes a manipulative attempt to alter the viewer's purchase behavior.

Our results also provide evidence that one mechanism for product placement to achieve effects on viewers' brand attitudes is that the enjoyment of the viewing experience seems to be transferred to the brand itself. In Experiment 2, participants who viewed an episode in which Nike appeared demonstrated a significant correlation between their liking of the episode and their explicit brand attitude. Further, this effect was significantly stronger for those who recalled seeing Nike within the episode. Thus, the more a viewer is enjoying the viewing experience, the more positive their evaluation of brands within the show will be. It is interesting that we found this effect only for the explicit attitude. The implicit measures were not significantly associated with viewers' enjoyment of the episode. Further, the relationship was stronger among those who recalled seeing Nike within the episode. This suggests that the association between liking the episode and brand attitude may also be driven by propositional reasoning. As suggested by the IMM, attention to the CS is necessary in order for the affect misattribution to occur.

### Product Placement's Effects on Implicit Processes

In addition to the effects that seem to be driven by conscious recall of the brand in the TV show, our data provide evidence for non-conscious automatic effects of product placement. Specifically, having a central liked character use a brand increased implicit self-identification with the brand, whether the viewer recalled seeing Nike or not. This finding presents the interesting possibility that within one placement experience, the viewer may walk

away with both positive and negative brand-related outcomes. Our participants who were primed with persuasion knowledge and recalled seeing Nike within the episode showed lowered explicit brand attitudes but inflated implicit brand self-identification. The consequences of this incongruity are uncertain. One result could be a decrease in purchase likelihood when the individual has time and motivation to consciously consider the purchase, but an increase in purchase likelihood when the purchase decision is made without much thought. In other words, when the potential buyer has the time and inclination to consider his or her explicit brand attitude, they will be less likely to make the purchase, but when they rely primarily on feelings toward the brand they may fall back on an implicit connection to the brand that was built during the placement event.

### Implications and Avenues for Future Research

The current research is the first to identify product placement effects on implicit brand self-identification. Such self-brand connection may be facilitated by the narrative format provided within TV shows and movies (see Escalas, 2004). It is still unclear, however, how this increased implicit brand self-identification might impact purchasing behavior. It seems likely, however, that incorporating the brand into the self-concept will lead to a desire to display the self-brand connection, thereby increasing the likelihood of brand purchase.

**Effects of background placements.** Different types of placements, however, may not lead to increased implicit brand self-identification. For example, background placements should be less likely to be perceived as self-relevant (Redker, Gibson, & Zimmerman, in press). We suggest that experience taking (Kaufman & Libby, 2012) is crucial to the creation of implicit brand self-identification in product placement. Since background placements show no character using the brand then there is no opportunity to adopt an attitude toward the brand implied by such character usage. It would therefore seem unlikely that a background placement would lead to increased implicit brand self-identification. Background placements would also seem less likely to prompt even rudimentary propositional thought.

If a viewer sees a lead character using a brand, this may prompt a quick consideration of the positive characteristics of the brand. For background placements, however, even if a viewer notices them it would seem less likely that such a conscious evaluation would take place. This suggests that background placements would be likely to initially result in shifts in implicit attitudes rather than explicit attitudes. If the brand is unfamiliar to the viewer, their explicit attitude toward the brand may also shift as they use the newly created implicit attitude as a guide for creating an explicit attitude (see Olson & Fazio, 2001, and Redker & Gibson, 2009 for similar results with evaluative conditioning). This suggests the possibility that the potential benefit of product placement is higher for new or novel products. Further, if this is the case then some viewers may show a shift in explicit attitudes, whereas others may not. Zimmerman, Redker, and Gibson (2011) showed that evaluative conditioning led to a change in implicit brand attitudes, but that only those high in Faith in Intuition (a trait measure) showed evidence of a correspondent shift in explicit brand attitudes.

**Products used by despised characters.** Another interesting possibility is that the use of a particular brand by a despised movie villain could reduce or eliminate implicit self-identification with the brand. Viewers may be less likely to see the world through the eyes of the villain, leading to less experience taking. Further, Escalas and Bettman (2005) showed that use of a brand by an outgroup member can lead to less self-identification with the brand. If the villain is seen by the viewer as an outgroup member, then disidentification with the brands used by the villain would be a likely result. Companies invest marketing capital to create a brand image that communicates meanings that fit with the demographics of their targeted consumers (Aaker, 1997; McCracken, 1986). If movies or TV shows use the brand in a way that contradicts that desired brand image, these associations could short-circuit the efforts to create that image. In some instances, companies have resisted placement of their brand in certain movies based on this type of reasoning. Mercedes-Benz, for example, insisted that the logos on their cars be digitally removed from the movie *Slumdog Millionaire* as the cars were appearing in the decidedly unglamorous slums of Mumbai (Malvern & Hoyle, 2008). Clearly,



companies are concerned that the associations to their brands portrayed in movies should fit the overall goals for their brand image. Whether such associations actually produce a negative effect on brand image, however, has not been tested. The APE model would suggest that such image transference could occur in such placements. Future research should address these questions.

### Conclusion

In summary, our findings suggest that product placement can have both positive and negative effects on viewers. Further, we show that sometimes these effects coexist within the same viewer. By carefully considering key variables of the placement strategy, brand recall, and whether persuasion knowledge has been activated, these patterns of results can be understood within the framework of the APE model and experience taking theory. Given the large variety of ways in which brands are now appearing within numerous media formats, the continued application of these models to these different methods of product placement seems likely to lead to increased understanding of how product placement works, and what can lead to successful placements.

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