



UvA-DARE (Digital Academic Repository)

Disclosing Brand Placements in Movies

Effects of Disclosure Type and Movie Involvement on Attitudes

van Reijmersdal, E.A.

DOI

[10.1027/1864-1105/a000158](https://doi.org/10.1027/1864-1105/a000158)

Publication date

2016

Document Version

Final published version

Published in

Journal of Media Psychology

License

Article 25fa Dutch Copyright Act (<https://www.openaccess.nl/en/policies/open-access-in-dutch-copyright-law-taverne-amendment>)

[Link to publication](#)

Citation for published version (APA):

van Reijmersdal, E. A. (2016). Disclosing Brand Placements in Movies: Effects of Disclosure Type and Movie Involvement on Attitudes. *Journal of Media Psychology*, 28(2), 78-87. <https://doi.org/10.1027/1864-1105/a000158>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Disclosing Brand Placements in Movies

Effects of Disclosure Type and Movie Involvement on Attitudes

Eva A. van Reijmersdal

Amsterdam School of Communication Research, University of Amsterdam,
Amsterdam, The Netherlands

Abstract. Recently, the European Union has decided that disclosures of brand placement are obligatory. However, the effects of such disclosures remain largely unstudied. Departing from theoretical notions of the persuasion knowledge model, this study examined how different types of disclosures and viewer involvement with a movie clip affected attitudes toward the placed brand. In addition, the role of attitude toward the placement as mediator was tested. The study employed a one-factorial (no disclosure, disclosure of source, disclosure of source and intent) between-subjects design using an online survey ($N = 191$). The results showed that disclosure of both the commercial source and the persuasive intent of brand placement resulted in more negative placement attitudes and in turn in more negative brand attitudes than in the absence of a disclosure. In addition, involvement with the movie moderated the disclosure effects: The brand attitudes of high-involved viewers became more negative via placement attitudes when disclosures were shown, regardless of the type of disclosure. For low-involved viewers, a disclosure of both the commercial source and the persuasive intent was necessary to affect brand attitude negatively via placement attitude. These results show that brand placement disclosures can mitigate persuasion. However, the effects depend on the disclosure type and movie involvement. These findings have important implications for theory, legislation, and practice.

Keywords: brand placement, disclosure, involvement, advertising, label

Both in the European Union and in the United States, there is an ongoing debate about how to disclose brand placements in television programs and movies (Cain, 2011). Brand placement is defined as “the purposeful incorporation of a brand into an entertainment vehicle” (Russell & Belch, 2005, p. 74). Disclosures should explicitly inform audiences when persuasive content is integrated into editorial content, to guarantee fair communication (Cain, 2011; Teinowitz, 2008). It is expected that the information provided in the disclosure determines its effects (Friestad & Wright, 1994; Wood & Quinn, 2003). However, empirical tests of the effects of different types of brand placement disclosures for television programs and movies are lacking.

To fill this gap, the first aim of this study is to investigate the effects of different types of disclosure content on viewers and provide theoretical explanations for these effects. A second gap in the current literature is that previous studies have not focused on individual susceptibility to disclosure effects due to involvement. Hence, the second aim of this study is to examine whether people’s involvement with the medium vehicle would moderate the effects of disclosure types on brand placement and brand attitudes.

Influential theories such as the elaboration likelihood model (ELM; Petty, Cacioppo, & Schumann, 1983) and the model of processing commercialized media content (PCMC; Buijzen et al., 2010) emphasize that responses to persuasive messages depend on audience involvement. Therefore, it is important to include involvement when investigating the effects of brand placement disclosures on brand responses.

Insights from this study may aid the debate about how to disclose brand placement. Although legislators want to inform the audience, brand placement disclosures are likely to impact persuasion as well (Boerman, van Reijmersdal, & Neijens, 2012), therefore we focused on effects of disclosure types and viewer involvement on viewers’ attitudes toward the placement and the brand.

Brand Placement Disclosures

Although a substantial body of research exists on disclosures, warnings, and disclaimers in related fields

(e.g., Jöckel, Blake, & Schlutz, 2013; Slater, Karan, Rouner, & Walters, 2002), these insights cannot be applied directly to sponsorship disclosure effects. Those disclaimers and warnings refer to characteristics of advertised products and their consequences, whereas sponsorship disclosures inform the audience about the (persuasive) nature of the message itself.

More specifically, the integration of brands into television programs and movies conceals the source and the persuasive nature of the advertising message (Nebenzahl & Jaffe, 1998). Research has shown that when people are unaware of a persuasion attempt, they are less critical toward the message and more open to persuasion (Campbell & Kirmani, 2000; Hass & Grady, 1975; Wood & Quinn, 2003). When brand placement is not disclosed, people are likely to assume that the film or program maker placed the brand instead of the advertiser (Nebenzahl & Jaffe, 1998). In this case, the message will not be evaluated as advertising but rather as part of the story. Therefore, brand placement is often deemed deceptive (Cain, 2011; Van Reijmersdal, Tutaj, & Boerman, 2013).

Disclosures can help audiences understand the persuasive nature of brand placement by explicitly informing audiences when persuasive content is integrated into editorial content (Cain, 2011; Teinowitz, 2008). When a disclosure is provided, people may realize that the brand is placed by an advertiser who wants to persuade them (Wright, Friestad, & Boush, 2005). In other words, disclosures may activate people's persuasion knowledge – that is, consumers' theories about persuasion and their beliefs about marketers' motives, strategies, and tactics (Campbell & Kirmani, 2000; Friestad & Wright, 1994, p. 10). As a consequence, a more systematic and critical level of processing of the brand placement may be evoked (Buijzen et al., 2010; Wood & Quinn, 2003). This processing level requires effortful and extensive cognitive elaboration (Petty et al., 1983; Zuckerman & Chaiken, 1998). People pay close attention to the message and are often aware of its persuasive nature (Buijzen et al., 2010). When this level of processing is triggered by a disclosure, people are expected to respond in a more critical manner. As a consequence, they may apply resistance strategies such as source derogation, message scrutiny, or counterarguing (Boerman et al., 2012; Friestad & Wright, 1994; Zuwerink & Cameron, 2003), possibly resulting in more negative attitudes.

Thus the theoretical implications for disclosures would be that disclosures activate people's existing persuasion knowledge which makes them realize that the brand placement is not just entertainment but has a persuasive intent. This realization is expected to cause people to process the brand placement more thoroughly. This increases the chance of resistance to the persuasion attempt. As a result, disclosures are predicted to lead to less favorable attitudes toward the placement and the brand.

The literature indeed points in this direction. Wei, Fischer, and Main (2008) demonstrated that an announcement of payment by advertisers before a radio show that included brand placement resulted in more negative brand attitudes. Similarly, several studies have shown that

displaying a sponsorship disclosure in a television program led to the activation of persuasion knowledge (Campbell, Mohr, & Verlegh, 2013; Nelson, Wood & Paek, 2009; Tessitore & Geuens, 2013, Wood et al., 2008), which ultimately resulted in more negative attitudes toward the placed brand and less purchase intention (Boerman et al., 2012; Boerman, van Reijmersdal, & Neijens, 2014). Although these effects on attitudes and intentions depended on the duration and timing of the disclosure, in general, disclosures of brand placement elicited more elaborate and more critical processing of the message (Buijzen et al., 2010).

Effects of Disclosure Types

However, the impact of a disclosure may depend on the information provided. Current disclosures that mention the source by simply stating that a message is “sponsored by sponsor X” are criticized for not being effective (Benjamin, 2005; Cain, 2011). Some argue that disclosures have to reveal both the source and intent of the message, to be informative and generate critical processing (Cain, 2011; Dekker & van Reijmersdal, 2013; Kuhn, Hume, & Love, 2010). Campbell and Kirmani (2000) showed that the accessibility of an ulterior motive determined the use of knowledge about persuasion and the evaluation of a salesperson. This means that suspicion of an ulterior motive – that is, the advertiser's motive or intent to persuade – may lead to a more negative evaluation of the brand or the brand placement. Similarly, Wentzel, Tomczak, and Herrmann (2010) showed that people held more negative brand attitudes when they were aware of the persuasive intent of a narrative ad, than when they were unaware. Dekker and van Reijmersdal (2013) showed that the effects of disclosure type were moderated by perceptions of the endorser in the brand placement. They showed that disclosure of the source had no effects, and disclosure of the source, intent, and deception had an effect on belief in product claims, but only for viewers who thought the endorser was not credible. Together, these findings seem to imply that disclosing the persuasive intent of a message may make the ulterior motive more evident, which may have a stronger impact on attitudes than solely disclosing the source of the message. This leads to the following hypotheses:

Hypothesis 1a (H1a): Disclosure type affects placement attitude, such that disclosure of the source and intent will lead to more negative placement attitudes than disclosure of the source, whereas a disclosure of the source will lead to more negative placement attitudes than no disclosure.

Hypothesis 1b (H1b): Disclosure type affects brand attitude, such that disclosure of the source and intent will lead to more negative brand attitudes than disclosure of the source, whereas a disclosure of the source will lead to more negative brand attitudes than no disclosure.

Based on research on advertising (see, e.g., Brown & Stayman, 1992; MacKenzie, Lutz, & Belch, 1986; Phelps & Hoy, 1996), brand placement attitudes are expected to mediate the effects on brand attitudes. Previous research has demonstrated a strong relation between the attitude toward a specific ad and the attitude toward the advertised brand (Brown & Stayman, 1992; MacKenzie et al., 1986; Phelps & Hoy, 1996). Mechanisms of affect transfer and association activation explain this effect (MacKenzie et al., 1986). Affect transfer theory states that an evaluation or feeling induced by an object can be transferred to another object (J. Kim, Lim, & Bhargava, 1998; Mitchell & Olsen, 1981). Thus the brand benefits or suffers from the positive or negative feelings associated with the ad itself (MacKenzie et al., 1986; Van Reijmersdal, Smit, & Neijens, 2010). In the case of brand placement disclosure, a negative evaluation of the brand placement caused by a disclosure may be transferred to the brand that is placed. To test this assumption, the following hypothesis was formulated.

Hypothesis 1c (H1c): Brand placement attitude mediates the effect of disclosure type on brand attitude, such that disclosure of the source and intent will lead to more negative placement attitudes which in turn will lead to more negative brand attitudes than disclosure of the source or no disclosure.

The Moderating Role of Movie Involvement

Involvement with the medium vehicle is likely to moderate the effects of brand placement disclosures. Persuasion and information-processing theories suggest that involvement is one of the most important predictors of message outcomes (Buijzen et al., 2010; Petty et al. 1983; Sood, 2002). Research on traditional advertising has shown that (a moderate level) of involvement with the medium vehicle can have positive effects on persuasion, in particular on brand attitudes (e.g., Moorman, Neijens, & Smit, 2007; Tavassoli, Schultz, & Fitzsimons, 1995).

In addition, theory on narrative persuasion and engagement predicts that engagement and transportation are incompatible with counterarguing and message scrutiny (Moyer-Gusé, 2008; Slater & Rouner, 2002). Transportation is considered to be a high level of involvement (Sood, 2002). In this state, people are more likely to be persuaded, because they are distracted from discounting the message (Slater & Rouner, 2002).

A disclosure may counteract the positive effects of involvement because it evokes opposite reactions: Disclosures direct people's attention away from the narrative to the persuasive components that are integrated in it – that is, to the brand placement and its persuasive nature. When disclosures are presented, viewers may realize that the content is advertising instead of a noncommercial movie. In general, advertising is perceived as more biased than editorial content (Nebenzahl & Jaffe, 1998). Therefore,

audiences have been shown to be less willing to pay attention to advertising than to editorial content (B. Kim, Pasadeos, & Barban, 2001; Lord & Putrevu, 1993).

The realization that the program is sponsored may be particularly off-putting for high-involved viewers because they have dedicated their cognitive resources to content that in hindsight did not deserve their attention (Cowley & Barron, 2008; Edwards, Li, & Lee, 2002; Friestad & Wright, 1994). Disclosures can then lead to feelings of betrayal resulting in resistance among high-involved viewers. This process is referred to as the “change-of-meaning” principle (Friestad & Wright, 1994): When viewers realize that someone is trying to persuade them, the meaning of the communication is redefined, and their responses change. Both disclosure of the source and disclosure of the source and intent may cause a change of meaning making high-involved viewers think about the placement and correct their opinion about the placement and the brand (Dekker & van Reijmersdal, 2013). It is assumed that high-involved viewers process on a more elaborate level and pay close attention to the program including everything that appears on screen (Cowley & Barron, 2008; Edwards et al., 2002). They are highly focused, and therefore they are expected to respond to a simple cue, such as disclosure of the source. They do not necessarily need disclosure of the intent to trigger critical processing, because they are already thoroughly processing the message.

Unlike high-involved viewers, low-involved viewers have not dedicated their resources to content that may be biased, so their reactance is expected to be lower (Edwards et al., 2002). Thus, a disclosure is expected to have little or no impact on attitudes of low-involved viewers. If a disclosure does impact these viewers, it may be the stronger disclosure of both source and intent. Because low-involved viewers care less about the content (Cowley & Barron, 2008), information regarding the persuasive intent may be needed to trigger their resistance and evoke negative attitudes.

Hypothesis 2 (H2): Movie involvement moderates the effect of disclosure type on brand placement attitude and brand attitude, (a) such that both a disclosure of the source and a disclosure of the source and intent will have negative effects on the brand placement attitudes and brand attitudes of high-involved viewers, whereas (b) for low-involved viewers only the disclosure of the source and intent will have a negative effect on brand placement attitudes and brand attitudes.

A Moderated Mediation Effect of Disclosure Type on Brand Attitude

Combining the previous hypotheses would imply a moderated mediation effect which means that the effect of disclosure type on brand attitude is mediated by placement

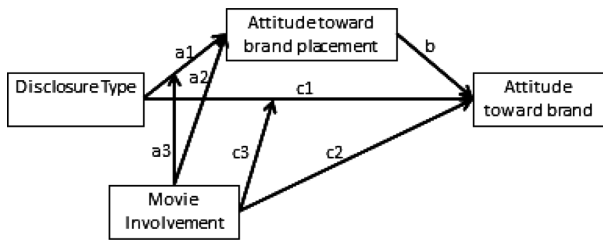


Figure 1. Conceptual moderated mediation model of disclosure type on attitude toward the brand.

attitude but that this effect is conditional – that is, dependent on on the viewer’s level of movie involvement (see Figure 1). It was predicted that the mediated effect of both disclosure types would have a negative effect on brand attitude via placement attitude for high-involved viewers. For low-involved viewers, only disclosure of the source and intent were expected to have a negative effect on brand attitude via placement attitude. The following hypothesis was tested:

Hypothesis 3 (H3): Movie involvement moderates the effect of disclosure type on brand attitude via placement attitude, such that (a) both types of disclosures will have a negative effect on brand attitude via placement attitude for high-involved viewers, and (b) only the disclosure of the source and intent will have a negative effect on brand attitude via placement attitude for low-involved viewers.

Method

Participants and Procedure

In this study, participants were exposed to a movie clip that included brand placement. The experiment employed a one-factor between-subjects design (disclosure: no disclosure, disclosure of source, or disclosure of source and intent). The second independent variable, movie involvement, was measured. We used a convenience sample of Dutch students who were recruited online. The participants were randomly assigned to one of the three conditions. A total of 191 students 19–28 years old ($M = 23.46$, $SD = 1.90$) participated in the research (55% male). This age group was chosen because these people visit the cinema more often than the average population (Stichting Filmonderzoek, 2014). After a short introduction, the participants watched the film clip that was embedded in the online survey. Then they answered questions about their movie-viewing behavior in general and about the movie, followed by questions about attitudes and demographics. Finally, the participants were debriefed and thanked for their participation.

Stimulus Materials

A segment of the movie *Spider-Man* was used as stimulus material. This movie was chosen because it contains brand placement. Moreover, the movie is equally appreciated among men and women in the age group of the participants (18–29) (IMDB, 2013). The segment lasted 1 min and 11 s. It showed the main character, Peter Parker alias Spider-Man, practicing his “spider” skills on a can of the soft drink Dr. Pepper. In the clip, Parker first designs his Spider-Man suit, and thereafter he practices his web-making skills by putting a web around a Dr. Pepper can. The can is prominently visible for 6 s.

Disclosures were added to the segment to create three different versions: one with a disclosure of the source of the placement (“this is advertising for Dr. Pepper”), one with a disclosure of the source and intent of the placement (“this advertising for Dr. Pepper is created to influence your buying behavior”), and one control segment without disclosure. The disclosures appeared in the upper right corner of the screen for 8 s during the brand placement. The execution of the disclosure was based on previous research that showed that a disclosure for brand placement placed in the upper right corner for 6 s was more effective than a disclosure of 3 s (Boerman et al., 2012). Therefore, the disclosure was placed for at least 6 s: The final choice of 8 s was based on natural placement of the disclosure within the clip.

Measures

Involvement

To measure movie involvement, Zaichkowsky’s personal involvement inventory was used (1994). Eight 7-point semantic differentials that were applicable to the movie segment were selected. The question was “To me, the segment of *Spiderman* is ...” followed by unimportant/important, boring/interesting, irrelevant/relevant, unexciting/exciting, means nothing to me/means a lot to me, unappealing/appealing, mundane/fascinating, and worthless/valuable. Number 1 was always the negative anchor and number 7 the positive anchor. Scores were averaged to create a single measure of movie involvement (Eigen Value, $EV = 4.89$, $R^2 = 0.61$, all factor loadings > 0.69 ; Cronbach’s $\alpha = .91$, $M = 4.42$, $SD = 1.05$).

Brand Placement and Brand Attitudes

Attitude toward brand placement was measured with seven items on a 7-point semantic differential, with the question: “To me, showing brands in the movie *Spiderman* is ...” followed by bad/good, dislikeable/likable, unattractive/attractive, useless/useful, not enjoyable/enjoyable, not funny/funny, and negative/positive (Batra & Stayman, 1990; Singh & Cole, 1993; Stuart, Shimp, & Engle, 1987).

Scores were averaged to create one measure of placement attitude ($EV = 5.03$, $R^2 = 0.72$, all factor loadings > 0.66 ; Cronbach's $\alpha = .92$, $M = 3.91$, $SD = 1.11$).

Attitude toward the brand was measured with six items on a 7-point semantic differential. The question was "To me Dr. Pepper is ..." followed by bad/good, dislikeable/likeable, unpleasant/pleasant, poor quality/high quality, unfavorable/favorable, and not enjoyable/enjoyable (Aggarwal, 2004; Anand & Sternthal, 1990; Stuart et al., 1987). Scores were averaged to create one measure of brand attitude ($EV = 4.38$, $R^2 = 0.73$, all factor loadings > 0.79 ; Cronbach's $\alpha = .93$, $M = 4.20$, $SD = 1.15$).

Covariates and demographics

Participants were asked whether they had seen the movie *Spider-Man* before (1 = yes, 0 = no; 68% yes) and whether they consumed Dr. Pepper, on a scale ranging from 1 (*never*) to 6 (*daily*; $M = 1.13$; $SD = 0.82$). In addition, they were asked for their age and gender.

Results

Randomization

A test of equivalence was conducted to verify whether the three experimental groups were similar in age and sex composition: The groups did not differ with respect to sex, $\chi^2(2) = 5.02$, $p = .08$, and prior exposure to the movie, $\chi^2(2) = 1.68$, $p = .43$. In addition, ANOVA showed that the groups did not differ with respect to brand use either, $F(2, 188) = 0.12$, $p = .89$, $\eta^2 = .001$. There was a significant difference between the groups with respect to age, $F(2, 188) = 14.55$, $p < .001$, $\eta^2 = .13$. To make sure that the results were the effect of the experimental manipulations and not of differences in age between these groups, age was included as a covariate in all analyses.

With respect to involvement, correlation analyses showed that there was no significant relation with age ($r = .04$, $p = .62$). There were significant relations between involvement and sex ($r = -.19$, $p = .008$), brand use, ($r = -.24$, $p = .001$), and prior movie exposure ($r = -.38$, $p < .001$). Therefore, sex, brand use, and prior movie exposure were included as covariates in the analyses with involvement.

Effects of Disclosure Type

To test H1a and H1b, a multiple analysis of variance (MANCOVA) was conducted with disclosure type as the predictor, placement attitude and brand attitude as the dependent variables, and age as covariate. MANCOVA was used because brand placement and brand attitude were expected to be related. The analysis showed a significant multivariate effect of disclosure type, Wilks's $\lambda = .94$,

Table 1. Effects of disclosure type on attitudes

	Disclosure		
	No	Source	Source and Intent
Attitude placement	4.23 (1.17) ^a	3.90 (0.95) ^{ab}	3.57 (1.12) ^b
Attitude brand	4.27 (1.17) ^a	4.30 (0.88) ^a	4.03 (1.37) ^a

Notes. Mean scores are portrayed with standard deviations in parentheses. ^{ab}Means with different superscripts in the same row differ significantly at $p < .05$.

$F(4, 374) = 2.97$, $p = .02$, $\eta^2 = .03$. The analysis yielded a significant univariate effect of disclosure type on placement attitude, $F(2, 187) = 4.77$, $p = .01$, $\eta^2 = .05$. Post hoc tests revealed that viewers who saw a disclosure of source and intent had significantly more negative attitudes toward the placement than viewers who saw no disclosure (Table 1). The condition with disclosure of the source did not differ significantly from the other two conditions. This means that H1a was partially supported. There was no significant effect of the covariate age ($p = .79$).

With respect to H1b, there was no significant univariate effect of disclosure type on brand attitude, $F(2, 187) = 0.99$, $p = .37$, $\eta^2 = .01$ (Table 1). Thus H1b was not supported. There was also no significant effect of the covariate age ($p = .92$).

Effects of Disclosure Type via Brand Placement Attitude

Because there was no effect of disclosure type on brand attitude, this relationship could not have been mediated by brand placement attitude (H1c). However, there may have been an *indirect* effect on brand attitude via placement attitude (Preacher & Hayes, 2008). The PROCESS macro developed by Hayes (2013; Model 4) was used to test the indirect effect by means of bootstrapping. This method respects the non-normality of the sampling distribution of the indirect effect and is able to adjust all paths in the mediation model for the potential influence of covariates (Hayes, 2013).

Because the independent variable was categorical, two dummy variables were created: one for each disclosure type, leaving the control group as the reference group. Two analyses were conducted, one for each dummy variable. The first analysis was conducted with the dummy for disclosure of the source as the independent variable, brand attitude as the dependent variable, and placement attitude as the mediator. Disclosure of the source and intent and age were added as covariates. The total indirect effect of disclosing the source compared with no disclosure was not significant, because zero was included in the bias-corrected accelerated confidence interval, $b = -.21$, $SE = .14$, bias-corrected and accelerated 95% confidence interval (BCa 95% CI) $[-.48, .08]$. This means that the disclosure of the source (vs. no disclosure) did not result in

Table 2. Effects of disclosure type on placement attitude and brand attitude for different levels of movie involvement (moderation)

	Involvement					
	Low ^a		Moderate ^b		High ^c	
	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>B</i> (<i>SE</i>)	<i>t</i>
Placement attitude						
Source ^d	.01 (.24)	0.06	-.33 (.18)	-1.83	-.68 (.24)**	-2.85
Source and intent ^d	-.85 (.24)**	-3.48	-.69 (.19)**	-3.75	-.54 (.24)*	-2.22
Brand attitude						
Source ^d	.04 (.23)	0.18	-.10 (.18)	-0.59	-.17 (.23)	-0.73
Source and intent ^d	-.52 (.23)*	-2.24	-.45 (.18)*	-2.57	-.38 (.23) [†]	-1.67

Notes. ^a $M - 1 SD = 3.36$; ^b $M = 4.42$; ^c $M + 1 SD = 5.47$. ^dNo disclosure was used as the reference group. [†] $p < .10$, * $p < .05$, ** $p < .01$.

more negative brand attitudes via placement attitudes. There were no effects of the covariates age ($p = .60$) or disclosure of the source and intent ($p = .24$) on brand attitude.

The second analysis was conducted with disclosure of the source and intent as the independent variable, and disclosure of the source and age as covariates. This analysis showed a significant negative indirect effect of disclosure of source and intent (vs. no disclosure) on brand attitude via placement attitude ($b = -.44$, $SE = .15$, BCa 95% CI $[-.74, -.16]$). This means that showing a disclosure of the source and intent (compared with no disclosure) led to more negative placement attitudes. In turn, this led to more negative brand attitudes. Thus, there was an indirect effect of disclosing the source and intent of brand placement on brand attitude via placement attitude and no mediated effect, as proposed in H1c. There were no effects of the covariates age ($p = .92$) and disclosure of the source and intent ($p = .89$) on brand attitude.

Interaction between Disclosure Type and Movie Involvement

To test H2 about the interaction between disclosure type and movie involvement, the PROCESS macro was used again (Hayes, 2013; Model 1). The macro provides a statistical test of the moderated effect at three levels of the moderator (M minus 1 SD , M , and M plus 1 SD). For brand placement attitude, two analyses were again conducted, one for each type of disclosure. In each analysis, the other type of disclosure was added as a covariate together with sex, age, brand use, and prior movie exposure. Brand placement attitude was used as the dependent variable and involvement as the moderator. The first analysis showed a significant interaction effect between disclosure of the source and involvement ($b = -.33$, $SE = .15$, $p = .03$). The results showed that disclosure of the source had a significant negative effect on placement attitude for high-involved viewers but not for moderate- or low-involved

viewers (see Table 2). Thus a disclosure of the source led to negative placement attitudes only among high-involved viewers. The covariates in the model with disclosure of source (vs. no disclosure) as independent factor had no significant effects on brand placement attitude ($p > .10$), except for brand use ($b = -.25$, $SE = .09$, $p = .009$) and disclosure of source and intent ($b = -.68$, $SE = .18$, $p = .003$).

The second analysis included disclosure of source and intent as the independent variable and disclosure of source, sex, age brand use, and prior movie exposure as covariates. This analysis showed no significant interaction effect between disclosure of the source and intent and movie involvement ($b = .23$, $SE = .15$, $p = .13$). Table 2 shows that the negative effect of a disclosure of source and intent on attitude toward the placement held regardless of viewers' level of movie involvement. Thus as predicted in H2, both types of disclosures negatively affected attitudes toward brand placement of high-involved viewers, whereas attitudes of low- or moderate-involved viewers were only affected by disclosure of source and intent. This supported H2 for placement attitude. The covariates in the model with disclosure of source and intent (vs. no disclosure) had no significant effects on brand placement attitude ($p > .10$), except for brand use ($b = -.25$, $SE = .09$, $p = .01$).

Also for brand attitude, two analyses were conducted, one for each type of disclosure, with the other type of disclosure, sex, age, brand use, and prior movie exposure as covariates, brand attitude as the dependent variable, and involvement as the moderator. There were no significant interaction effects for either disclosure of the source ($b = -.06$, $SE = .14$, $p = .67$) or disclosure of the source and intent ($b = .06$, $SE = .14$, $p = .65$). As Table 2 shows for all three levels of involvement, there were no effects of disclosing source; however, there were significant effects for disclosing source and intent on brand attitude which means that H2a was not supported, whereas H2b was supported for brand attitude. The covariates in the model with disclosure of source (vs. no disclosure) as independent factor had no significant effects on brand attitude ($p > .10$), except for brand use ($b = -.78$, $SE = .09$, $p < .001$), age ($b = -.13$, $SE = .04$, $p = .002$), and disclosure of source and intent ($b = -.45$, $SE = .18$, $p = .01$).

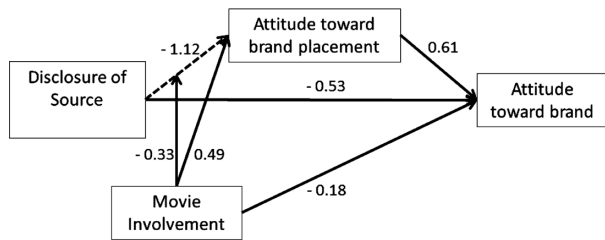


Figure 2. Observed model of the tested moderated mediation effects of disclosure of the source versus no disclosure on attitude toward the brand. Solid arrows represent relationships that are significant at $p < .05$; the dashed arrow represent relationships that are significant at $p < .10$.

Moderated Mediation Effect

To test H3, moderated mediation analyses for the two disclosure types were conducted using the PROCESS macro (Hayes, 2013; Model 8). This macro also offers the possibility to test conditional indirect effects. It provides confidence intervals based on bootstrapping for the mediated effect at three different levels of the moderator. The first analysis tested whether movie involvement moderated the indirect effect of showing a disclosure of the source on brand attitude via placement attitude. This analysis showed a moderated mediation effect ($b = -.20$, $SE = .11$, BCa 95% CI $[-.43, -.01]$), see also Figure 2.

The indirect effect of showing a disclosure of the source, on brand attitude via placement attitude was negative and significant for viewers who were highly involved. This indirect effect was not significant for viewers who were moderately involved or low involved, see Tables 3 and 4. This means that showing a disclosure of the source had a negative effect on brand attitudes via placement attitudes for high-involved viewers. For low- or moderate-involved viewers, showing a disclosure of the source had no effect compared with showing no disclosure. The covariates age and disclosure of source and intent had no significant effects on brand attitude ($p > .10$). Prior movie exposure ($b = .33$, $SE = .12$, $p = .008$), brand use ($b = -.63$, $SE = .07$, $p < .001$), and age ($b = -.12$, $SE = .03$, $p < .001$) had significant effects on brand attitude.

The second analysis compared the effects of showing a disclosure of the source and intent, to no disclosure. This analysis showed no moderated mediation effect ($b = .09$, $SE = .11$, BCa 95% CI $[-.13, .29]$), see also Figure 3. The indirect effect was significant for all levels of movie involvement (see also Tables 3 and 4). This means that disclosing the source and intent resulted in more negative brand attitudes via placement attitudes, for all levels of movie involvement. This means that H3a and H3b were supported by the data. The covariates sex and disclosure of the source had no significant effects on brand attitude ($p > .10$). Prior movie exposure ($b = .35$, $SE = .12$, $p = .004$), brand use ($b = -.63$, $SE = .07$, $p < .001$), and age ($b = -.11$, $SE = .03$, $p < .001$) had significant effects on brand attitude.

Discussion

This study aimed to investigate how different types of brand placement disclosures in movies affect brand placement attitudes and brand attitudes. The effects of disclosing the source of brand placement (the advertiser) versus disclosing the source and persuasive intent were examined. In addition, this study aimed to test whether viewers' involvement with the movie moderates these effects. Based on the findings, several conclusions can be drawn.

First, disclosure effects depend on individuals' involvement with the medium vehicle. The study showed that low-involved viewers became more negative about the placement and subsequently more negative about the brand after disclosure of the source and intent. This means that disclosure of a brand placement's source and intent significantly alters brand effects: Viewers process the brand placement more critically and consequently resist persuasion by the placement. This finding is in line with the expectation that the intent of brand placements needs to be disclosed to trigger resistance toward the placement (Kuhn et al., 2010; Wright et al., 2005). If only the source is revealed, it seems that there is no reason for low-involved viewers to put cognitive effort into critically judging the placement. Thus, low-involved viewers need to be informed about the persuasive intent of the placement to trigger resistance.

For high-involved viewers, both types of disclosures evoke more negative brand attitudes than no disclosure. Thus, high-involved viewers are more critical toward the

Table 3. Indirect effects of disclosure type on brand attitude via placement attitude for different levels of involvement (moderated mediation)

Disclosure	Involvement		
	Low ^a	Moderate ^b	High ^c
Source ^d	0.008 (0.17) $[-.32, .34]$	-0.21 (0.12) $[-.43, .03]$	-0.42 (0.16) $[-.75, -.12]$
Source & intent ^d	-0.51 (0.19) $[-.91, -.14]$	-0.42 (0.13) $[-.69, -.18]$	-0.32 (0.14) $[-.59, -.04]$

Notes. Bias-corrected 10,000 bootstrap confidence intervals are shown in square brackets. Significant indirect effects are in bold. ^a $M - 1 SD = 3.36$; ^b $M = 4.42$; ^c $M + 1 SD = 5.47$; ^dNo disclosure was used as the reference group.

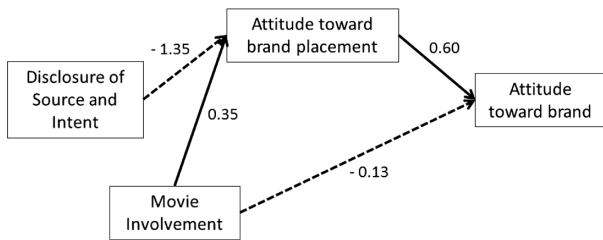


Figure 3. Observed model of the tested moderated mediation effects of disclosure of the source and intent versus no disclosure on attitude toward the brand. Solid arrows represent relationships that are significant at $p < .05$; dashed arrows represent relationships that are significant at $p < .10$.

brand placement and the brand when either type of disclosure is shown. It seems that they do not necessarily need a disclosure of the persuasive intent of the brand placement to trigger resistance: A disclosure of only the source makes high-involved viewers more critical than viewers who are not exposed to a disclosure.

Second, disclosures affected brand attitudes via placement attitudes. For high-involved viewers, effects of disclosing the source were even established only via placement attitude, that is indirectly. Effects via attitudes toward the advertisement, in this case via attitude toward the brand placement, have repeatedly been shown for traditional advertising but not for brand placement. As predicted based on affect transfer theory (J. Kim et al., 1998; Mitchell & Olsen, 1981), the brand seems to suffer from the negative associations with the brand placement that are evoked by the disclosure.

Implications

The findings of this study have important theoretical and practical implications. Theoretically, this study implies that it is crucial to include audience involvement with the medium vehicle in theoretical models about the effects of disclosures for brand placement. This study was the first to underline that disclosures lead to different effects depending on viewers' involvement with the medium vehicle. Thus, involvement is an important factor that can help explain how disclosures impact individual viewers.

Furthermore, the results of the present study add to theory on effects of involvement on narrative persuasion. This theory postulates that viewers who are highly involved with the narrative are less likely to counterargue and resist the persuasive message (Moyer-Gusé, 2008; Slater & Rouner, 2002). The present study showed that when a disclosure of the persuasive content was added, these people did show more negative attitudes toward the placement and the placed brand. This seems to indicate that they do resist the persuasion attempt when a disclosure is presented.

For public policy, the findings show that the type of disclosure determines its effect. If policy makers want to help viewers process brand placement critically and defend themselves against persuasion, a disclosure of the source, in this case "the advertiser" is sufficient for high-involved viewers, whereas for low-involved viewers, a disclosure of both source and intent is imperative. Based on these findings, it is recommended to disclose both the source and the persuasive intent of brand placement. This information helps both high- and low-involved viewers to resist persuasion by brand placement.

For advertisers, the findings show that disclosures lead to negative placement attitudes and, consequently, to negative brand attitudes. It seems that disclosures of brand placement have negative consequences for advertisers, although the audience may appreciate increased transparency about the practice (Cain, 2011; Nebenzahl & Jaffe, 1998).

Limitations and Future Research

This study had several limitations. First, only a clip from one movie was tested. Future research should use clips from other movies to test the generalizability of the findings. In addition, the clip was rather short. There was variance in the level of movie involvement ($SD = 1.05$), and overall people reported being involved with the clip (the mean was above mid-point of the scale). However, involvement levels could be higher for longer movie clips or entire movies. This may lead to stronger interaction effects with disclosures. Therefore, future research is needed to show whether the findings of the present study also hold for longer movie segments or entire movies.

Second, to avoid attracting attention to the brand placement, the present study did not use a pre-post measure

Table 4. Moderated mediation effects

Disclosure	Path in the Moderated Mediation Model						
	a1	a2	a3	b	c1	c2	c3
Source ^a	-1.12 [†] (0.67)	0.49** (0.09)	-0.33* (0.15)	0.61** (0.05)	-0.53* (0.50)	-0.18** (.07)	0.14 (0.11)
Source & intent ^a	-1.35 [†] (0.69)	0.35** (0.09)	0.15 (0.15)	0.60** (0.05)	0.08 (0.51)	-0.13 [†] (.07)	-0.03 (0.11)

Notes. Unstandardized b-coefficients (with boot *SE* in parentheses) are presented. ^aNo disclosure was used as the reference group. [†] $p < .10$, * $p < .05$, ** $p < .001$.

design, but only a post measure of brand attitude. By random assignment to the experimental groups and adding a control group, the effects of different types of disclosures on brand attitude were examined. However, future research may use a pre-post measure of attitudes to further enhance our knowledge of the effects of disclosures on brand attitude change within individuals.

Third, the brand that was placed (Dr. Pepper) was rarely used among the participants. Although brand use was entered as a covariate in analyses, future research is needed to show whether a placement for a brand that is more frequently used leads to the same findings, because studies have shown that brand use is an important determinant of brand attitudes (Castleberry & Ehrenberg, 1990). It could be that attitudes toward brands that are more frequently used are less affected by disclosures.

The study showed the eminent importance of viewer involvement as a moderator of effects of disclosing brand placement, but future studies may also examine other characteristics such as people's level of persuasion knowledge, and age. These factors have been found to impact advertising processing and may therefore moderate effects of placement disclosures as well (Buijzen et al., 2010; Campbell & Kirmani, 2000; Van Noort, Anthéunis, & van Reijmersdal, 2012).

In conclusion, this study adds to the literature in two important respects. First, in contrast to previous studies, this study systematically examined the effects of different types of disclosures instead of providing one disclosure. Second, this study was the first to examine the differences in individual susceptibility to the effects of disclosures due to involvement. As such, it forms a significant basis for future research on the effects of brand placement disclosures on individuals.

Acknowledgment

The author would like to thank Frank van den Heuvel for his assistance during data collection.

References

- Aggarwal, P. (2004). The effects of brand relationship norms on consumer attitude and behavior. *Journal of Consumer Research*, *31*, 87–101.
- Anand, P., & Sternthal, B. (1990). Ease of message processing as moderator of repetition effects in advertising. *Journal of Marketing Research*, *27*, 345–353.
- Batra, R., & Stayman, D. M. (1990). The role of mood in advertising effectiveness. *Journal of Consumer Research*, *17*, 203–214.
- Benjamin, B. M. (2005). Better disclosure: How to make product integration more transparent for viewers. *Mediaweek*, *15*, 19.
- Boerman, S. C., van Reijmersdal, E. A., & Neijens, P. C. (2012). Sponsorship disclosure: Effects of duration on persuasion knowledge and brand responses. *Journal of Communication*, *62*, 1047–1064.
- Boerman, S. C., van Reijmersdal, E. A., & Neijens, P. C. (2014). Effects of sponsorship disclosure timing on the processing of sponsored content: A study on the effectiveness of European disclosure regulations. *Psychology & Marketing*, *31*, 214–224.
- Brown, S. P., & Stayman, D. M. (1992). Antecedents and consequences of attitude toward the ad: A meta-analysis. *Journal of Consumer Research*, *19*, 34–51.
- Buijzen, M., van Reijmersdal, E. A., & Owen, L. H. (2010). Introducing the PCMC model: An investigative framework for young people's processing of commercialized media content. *Communication Theory*, *20*, 427–450.
- Cain, R. M. (2011). Embedded advertising on television: Disclosure, deception, and free speech rights. *Journal of Public Policy & Marketing*, *30*, 226–238.
- Campbell, M. C., & Kirmani, A. (2000). Consumers' use of persuasion knowledge: The effects of accessibility and cognitive capacity on perceptions of an influence agent. *Journal of Consumer Research*, *27*, 69–83.
- Campbell, M. C., Mohr, G. S., & Verlegh, P. W. J. (2013). Can disclosures lead consumers to resist covert persuasion? The important roles of disclosure timing and type of response. *Journal of Consumer Psychology*, *23*, 483–495.
- Castleberry, S. B., & Ehrenberg, A. S. C. (1990). Brand usage: A factor in consumer beliefs. *Marketing Research*, *2*, 14–20.
- Cowley, E., & Barron, C. (2008). When product placement goes wrong. *Journal of Advertising*, *37*, 89–98.
- Dekker, K., & van Reijmersdal, E. A. (2013). Brand placement disclosures to mitigate persuasion: The role of celebrity endorsement and disclosure type. *Journal of Promotion Management*, *19*, 224–240.
- Edwards, S. M., Li, H., & Lee, J. (2002). Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of Advertising*, *31*, 83–95.
- Friestad, M., & Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, *22*, 1–31.
- Hass, R. G., & Grady, K. (1975). Temporal delay, type of forewarning, and resistance to influence. *Journal of Experimental Social Psychology*, *11*, 459–469.
- Hayes, A. F. (2013). *Introduction to mediation, moderation and conditional process analyses*. New York: Guilford Press.
- IMDB. (2013). *User ratings for Spider-Man*. Retrieved from http://www.imdb.com/title/tt0145487/ratings?ref_=tt_ov_rt
- Jöckel, S., Blake, C., & Schlutz, D. (2013). Influence of age-rating label salience on perception and evaluation of media: An eye-tracking study. *Journal of Media Psychology: Theories, Methods, & Applications*, *25*, 83–94. doi: 10.1027/1864-1105/a000086
- Kim, B., Pasadeos, Y., & Barban, A. (2001). On the deceptive effectiveness of labeled and unlabeled advertorial formats. *Mass Communication and Society*, *4*, 265–281.
- Kim, J., Lim, J.-S., & Bhargava, M. (1998). The role of affect in attitude formation: A classical conditioning approach. *Journal of the Academy of Marketing Science*, *26*, 143–152.
- Kuhn, K. L., Hume, M., & Love, A. (2010). Examining the covert nature of product placement: Implications for public policy. *Journal of Promotion Management*, *16*, 59–79.
- Lord, K. R., & Putrevu, S. (1993). Advertising and publicity: An information processing perspective. *Journal of Economic Psychology*, *14*, 57–84.
- MacKenzie, S. B., Lutz, R. J., & Belch, G. E. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations. *Journal of Marketing Research*, *23*, 130–143.
- Mitchell, A. A., & Olsen, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, *18*, 318–332.

- Moorman, M., Neijens, P. C., & Smit, E. G. (2007). The effects of program-involvement on commercial exposure and recall in a naturalistic setting. *Journal of Advertising*, 36, 121–137.
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: explaining the persuasive effects of entertainment-education messages. *Communication Theory*, 18, 407–425.
- Nebenzahl, I. D., & Jaffe, E. D. (1998). Ethical dimensions of advertising executions. *Journal of Business Ethics*, 17, 805–815.
- Nelson, M. R., Wood, M. L. M., & Paek, H. (2009). Increased persuasion knowledge of video news releases: Audience beliefs about news and support for source disclosure. *Journal of Mass Media Ethics*, 24, 220–237.
- Petty, R. E., Cacioppo, J. T., & Schumann, N. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10, 135–146.
- Phelps, J. E., & Hoy, M. G. (1996). The aad-ab-pi relationship in children: The impact of brand familiarity and measurement timing. *Psychology & Marketing*, 13, 77–105.
- Preacher, K. J., & Hayes, A. F. (2008). Contemporary approaches to assessing mediation in communication research. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *Advanced data analysis methods for communication research* (pp. 13–30). Thousand Oaks, CA: Sage.
- Russell, C. A., & Belch, M. (2005). A managerial investigation into the product placement industry. *Journal of Advertising Research*, 45, 73–92.
- Singh, S. N., & Cole, C. (1993). The effects of length, content, and repetition on television commercial effectiveness. *Journal of Marketing Research*, 30, 91–104.
- Slater, M. D., Karan, D., Rouner, D., & Walters, D. (2002). Effects of threatening visuals and announcer differences on responses to televised alcohol warnings. *Journal of Applied Communication Research*, 30, 27–49.
- Slater, M. D., & Rouner, D. (2002). Entertainment-education and elaboration likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, 12, 173–191.
- Sood, S. (2002). Audience involvement and entertainment-education. *Communication Theory*, 12, 153–172.
- Stichting Filmonderzoek. (2014). *Bioscoopmonitor 2013/2014*. Retrieved from <http://www.filmonderzoek.nl/wp-content/uploads/2014/09/DEF-Bioscoopmonitor-2013-2014-webversie.pdf>
- Stuart, E. W., Shimp, T. A., & Engle, R. W. (1987). Classical conditioning of consumer attitudes: Four experiments in an advertising context. *Journal of Consumer Research*, 14, 334–349.
- Tavassoli, N. T., Schultz, C. J., & Fitzsimons, G. J. (1995). Program involvement: Are moderate levels best for ad memory and attitude toward the ad. *Journal of Advertising Research*, 35, 61–71.
- Teinowitz, I. (2008). Product placement scrutinized. *Television Week*, 27, 1–20.
- Tessitore, T., & Geuens, M. (2013). PP for ‘product placement’ or ‘puzzled public’? *International Journal of Advertising*, 32, 419–442.
- Van Noort, G., Antheunis, M. L., & van Reijmersdal, E. A. (2012). Social connections and the persuasiveness of viral campaigns in social network sites: Persuasive intent as the underlying mechanism. *Journal of Marketing Communications*, 18, 39–53.
- Van Reijmersdal, E. A., Smit, E. G., & Neijens, P. C. (2010). How media factors affect audience responses to brand placement. *International Journal of Advertising*, 29, 279–302.
- Van Reijmersdal, E. A., Tutaj, K., & Boerman, S. C. (2013). The effects of brand placement disclosures on skepticism and brand memory. *Communications: The European Journal of Communication Research*, 38, 127–146.
- Wei, M., Fischer, E., & Main, K. J. (2008). An examination of the effects of activating persuasion knowledge on consumer response to brands engaging in covert marketing. *Journal of Public Policy & Marketing*, 27, 34–44.
- Wentzel, D., Tomczak, T., & Herrmann, A. (2010). The moderating effect of manipulative intent and cognitive resources on the evaluation of narrative ads. *Psychology & Marketing*, 27, 510–530.
- Wood, M. L. M., Nelson, M. R., Atkinson, L., & Lane, J. B. (2008). Social utility theory: Guiding labeling of VNRs as ethical and effective public relations. *Journal of Public Relations Research*, 20, 231–249.
- Wood, W., & Quinn, J. M. (2003). Forewarned and forearmed? Two meta-analytic synthesis of forewarning of influence appeals. *Psychology Bulletin*, 129, 119–138.
- Wright, P., Friestad, M., & Boush, D. M. (2005). The development of marketplace persuasion knowledge in children, adolescents, and young adults. *Journal of Public Policy & Marketing*, 24, 222–233.
- Zaichkowsky, J. L. (1994). Research notes: The personal involvement inventory: Reduction, revision, and application to advertising. *Journal of Advertising*, 22, 59–70.
- Zuckerman, A., & Chaiken, S. (1998). A heuristic-systematic processing analysis of the effectiveness of product warning labels. *Psychology & Marketing*, 15, 621–642.
- Zuwerink, J. J., & Cameron, K. A. (2003). Strategies for resisting persuasion. *Basic and Applied Social Psychology*, 25, 145–161.

Date of acceptance: April 23, 2015

Published online: October 28, 2015



Eva van Reijmersdal is assistant professor of persuasive communication in the Amsterdam School of Communication Research (ASCoR), University of Amsterdam. Her research focuses on the effects of brand placement in various media. She has published in various journals including *Psychology & Marketing*, *International Journal of Advertising*, *Computers in Human Behavior*, and *Communication Theory*.

Eva A. van Reijmersdal
ASCoR, University of Amsterdam
PO Box 15791
1001 NG Amsterdam
The Netherlands
Tel. +31 20 525-3986
Fax +31 20 525-3681
E-mail e.a.vanreijmersdal@uva.nl