Brand placement disclosure effects on brand evaluation, moderated by the level of self-control.

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Abstract

A brand placement is the inclusion of a branded product into a movie or series, and this has been practiced for many decades. That’s why multiple aspects of brand placements have been examined. This study investigates to what extent self-control moderates the effect of a brand placement disclosure on brand evaluation. A disclosure is a warning that informs viewers about the presence of a brand placement. Previous studies found mixed results of the effects of disclosures on brand attitude: they either found negative attitudes, or no effects. In total, 142 people participated in a between-subject experiment in which they watched a movie fragment that included a brand placement, either with or without a disclosure. Viewers need a level of self-control in order to resist a persuasive attempt. Therefore, it was hypothesised that, when the viewer has a high level of self-control, he/she will express more negative brand evaluations after exposure to a disclosure. The second hypothesis was: when the viewer has a low level of self-control, he/she will express no more or less positive brand evaluations after exposure to a disclosure. Findings indicated that self-control did not moderate brand placement disclosure effects on brand evaluation. However, self-control did moderate brand placement disclosure effects on purchase intention. More research should be conducted in order to see what the impact is of amount of self-control of a person on the effects of disclosures. Also, more research should find out why mixed results of disclosures on brand attitude were found.

Introduction

When watching movies or series, we often see characters using certain products, for example James Bond enjoying a Heineken beer. This is referred to as a brand or product placement: “a paid product message aimed at influencing movie (or television) audiences via the planned and unobtrusive entry of a branded product into a movie (or television program)” (Balasubramanian, 1994, p. 31). The impact of conventional advertising was declining due to advertising clutter, viewers’ lack of interest and technological developments that gave viewers more control over what they watched. Hence, brand placements have been used more and more often by marketers (Smit, Van Reijmersdal, & Neijens, 2009). A product can be placed in a scene from a movie or it can be integrated into the plot, which can be an effective way to promote a brand for marketers. If the product is integrated into the plot, it is less likely that viewers will avoid the advertisement by zapping as they want to see the movie. Thereby, according to Russell and Puto (1999), viewers who watch their favourite program respond in a more positive manner to product placements and they might not be aware of the persuasive attempt. In response, disclosures were adopted to make viewers aware of this kind of advertising (Audiovisuval Media Services Directive, 2010). However, studies that examined the effectiveness of such disclosures on brand evaluations found mixed results (Jacks &
This is why this study will examine under which circumstances disclosures have or do not have an effect on brand evaluation.

Previous research on brand placements

Various studies have investigated the effects of brand placements on brand evaluations (brand attitude and purchase intention) and found positive effects on brand attitudes. For example, Russell (2002) found that brand placements in television shows evoked a positive brand attitude. According to Van Reijmersdal, Smit, and Neijens (2010), if the program was evaluated positively, viewers also showed a positive brand attitude after seeing a brand placement. Lastly, compared to traditional advertising, brand placements had more positive effects on brand evaluations (Van Reijmersdal, Neijens, & Smit, 2009). Previous studies have also found a positive impact of product placement on purchase intention and choice behavior (Law & Braun, 2000; Yang & Roskos-Ewoldsen, 2007). For example, Yang and Roskos-Ewoldsen (2007) thanked participants for participating in an experiment by asking them to choose a product. The researchers found that the probability that a participant would choose a brand was higher if that brand was placed in a movie (compared to when it was not in the movie). They were also more likely to choose the brand from the movie if they had a positive attitude towards the brand.

Furthermore, multiple studies have examined the effects of brand placements on brand memory (brand recall and brand recognition). For example, Tessitore and Geuens (2013) found that purchase intention was higher when viewers recalled the brand compared to when they did not recall this. Lastly, previous research has shown that prominently placed brands caused viewers to have increased memory of the brand (Gupta & Lord, 1998; Law & Braun, 2000; Van Reijmersdal, 2009). Overall, it appeared that brand placements generally had a positive effect on viewers’ attitudes towards the brand and on brand memory.

Brand placement disclosures

As opposed to these positive effects for marketers, the question arises whether it is fair to confront viewers with placements in movies, especially if the persuasive attempt is not obvious. Law and Braun (2000) concluded that viewers were usually not aware of the fact that a brand placement was a kind of advertisement that aimed to influence them. Thus, viewers could be deceived. This is why public policy analysts realized that viewers should be notified of the presence of brand placements. Recently, EU regulations indicated that “viewers shall
be clearly informed of the existence of product placement. Programmes containing product placement shall be appropriately identified at the start and the end of the programme, and when a programme resumes after an advertising break, in order to avoid any confusion on the part of the viewer” (Audiovisual Media Services Directive, 2010, p. 17). The regulations state that a neutral logo can be used to inform viewers (p. 10), but there are no other specific rules. Therefore, EU countries use various different disclosures in logos and texts. An example of a disclosure that is used in the Netherlands is: “This program contains product placement” (Boerman 2014). By including a disclosure in a movie, viewers could become aware that there will be a persuasive attempt and that they might be influenced.

Effects of disclosures on persuasion knowledge

To date, various studies have examined the effects of brand placement disclosures. These studies have shown that disclosures generally increased brand memory and that a disclosure could make viewers aware of a persuasive attempt. Subsequently, viewers can respond by activating their persuasion knowledge which enables them to recognize the persuasive attempts of a brand placements. Persuasion knowledge is “the set of theories and beliefs about persuasion and its tactics that people develop throughout their lives” (Friestad & Wright, 1994, 1999, as cited in Boerman, Van Reijmersdal, & Neijens, 2014, p. 214). Boerman, Van Reijmersdal, and Neijens (2012) concluded that a 6-second disclosure in a television program offered viewers time to process the content and activate their persuasion knowledge. Not only a disclosure itself and the duration of the visibility of a disclosure, but also the timing of the disclosure was found to have an effect on viewers’ persuasion knowledge. A disclosure that is shown prior to or at the same time as the brand placement allows viewers to protect themselves against the persuasive attempt and respond more critically to the brand (Boerman et al., 2014). In sum, disclosures enable viewers to activate their persuasion knowledge and become aware of the influence that the placement might have.

Effects of disclosures on brand evaluation

Viewers are aware that they are watching advertisements because of disclosures, and it can therefore be expected that viewers’ brand evaluation will also be affected. Campbell et al. (2013) reported that a disclosure both before and after the placement caused viewers to correct their recall of the brand: recall was lower. However, attitude was only negative when the disclosure was shown after the placement. Furthermore, viewers who saw a 6-second
disclosure were able to activate their persuasion knowledge and therefore, their brand attitudes were more negative compared to viewers who saw a 3-second disclosure (Boerman et al., 2012). Boerman et al. (2012) also reported viewers expressed negative attitudes when the persuasive attempt was revealed. Friestad and Wright (1995) stated that “in general, when persuasion knowledge is high, no positive attitude change can be expected at all” (as cited in Matthes et al., 2007, p. 487).

However, Dekker and Van Reijmersdal (2010) found that attitudes were not influenced by disclosures. Additionally, Campbell et al. (2013) noted that when the disclosure appeared before the placement, the attitudes were the same compared to when there was a placement without a disclosure. Van Reijmersdal, Tutaj, and Boerman (2013) found that attitudes were not more critical for respondents who saw a disclosure compared to respondents who did not see a disclosure. Furthermore, a 3-second disclosure did not enable viewers to activate their persuasion knowledge and correct their attitude (Boerman et al., 2012). Lastly, Boerman et al. (2014) found that a disclosure at the end of the program did not enable viewers to: recognise the persuasive attempt, be more critical or correct their attitudes.

To conclude, previous studies have shown inconsistent results: brand evaluations were either negative when a disclosure was included, or no effect was found. The current study aims to clarify the circumstances under which disclosures do or do not lead to resistance against the influence of the placement (expressed by a less positive brand evaluation). Viewers might only be able to resist brand placement influences if they are aware of the influence and if they are able and willing to resist it. It can therefore be expected that the effectiveness of a disclosure depends upon the mental state of a viewer, for example the amount of self-control that a viewer has. The concept of self-control might provide more insights, because a viewer needs self-control to resist a persuasive attempt (Burkley, 2008).

**Self-control**

Self-control has not been examined to a great extent, but it seems promising in this context because the amount of self-control of a person could determine how and if he/she respond to a persuasive attempt (Burkley, 2008). Self-control is “the ability to effectively regulate, oftentimes with much effort, one’s thoughts, feelings, and behaviour” (Vohs & Baumeister, 2004, as cited in Burkley, Anderson, & Curtis, 2011). The idea is that people require certain resources to resist influence and if these resources have been used once, it is more difficult to use them again in a subsequent task (Burkley, 2008; Burkley et al., 2011; Fennis, Janssen, & Vohs, 2009; Wheeler, Briñol, & Hermann, 2007; Baumeister, Vohs, &
Tice, 2007). This decrease of useful resources is called self-control depletion (Burkley, 2008). There are various perspectives on why self-control depletion arises. Inzlicht and Schmeichel (2012) stated that if viewers already had exerted self-control, their motivation to do this again deteriorated. Here, self-control depletion was ascribed to a lack of motivation. According to Baumeister et al. (2007) self-control depletion can be ascribed to a lack of ability, since self-control is a limited resource. These perspectives complement each other because viewers did not have the ability anymore and became less motivated to exert self-control after exerting it earlier. According to Burkley (2008), a viewer needs self-control to resist a persuasive attempt. Thus, depletion increases the likelihood that viewers will be influenced by a persuasive attempt. This suggests that people with depleted self-control are more easily influenced by brand placements, especially after a long day at work. Gillespie, Joireman, and Muehling (2012) explained that viewers have presumably regulated their behaviour throughout the day and, as a result, experience a reduction to regulate this again when watching their favourite evening program. Previous studies showed inconsistent results of disclosure on brand attitude. This is why this study will examine under which circumstances disclosures have or do not have an effect on brand evaluation. As stated before, it can be expected that the effectiveness of a disclosure depends upon the amount of self-control that a viewer has. Therefore, the following research question will be examined:

**RQ.** To what extent does self-control moderate the effect of a brand placement disclosure on brand evaluation?

Furthermore, two hypotheses will be examined:

**H1a.** When the viewer has a high level of self-control, he/she will express more negative brand evaluations after exposure to a disclosure.

**H1b.** When the viewer has a low level of self-control, he/she will express no more or less positive brand evaluations after exposure to a disclosure.

To conclude, results of the effects of disclosures on brand evaluations have been inconsistent, which demonstrates that more research into the circumstances under which disclosures have or do not have an effect on brand evaluation is needed.

This topic was identified as being of importance to practitioners in providing them with insights into how viewers evaluate their brand when a disclosure is included, because practitioners believe that it is very important to portray their product in a favourable light (Karrh, McKee, & Pardun, 2003). It was found that a disclosure can make viewers aware of
the influence of a brand placement and can cause attitudes to be less favourable (Boerman et al., 2012; Boerman et al., 2014), but viewers need a sufficient amount of self-control (motivation and ability) in order to resist persuasive attempts. Whether viewers are able to resist this influence after seeing a disclosure has not been examined before for viewers who have different amounts of self-control. If viewers have a certain amount of self-control and it turns out that a disclosure does not have an effect on brand evaluation, it might not even be useful to show a disclosure at all. Consequently, it might be necessary to find a new way to inform viewers about deception: regulations may have to be changed.

Method

In order to test these hypotheses, an experiment was carried out in which participants watched a fragment from the movie “The Proposal”. Half of the participants had depleted self-control, half did not have depleted self-control. Furthermore, half saw a 6-second disclosure (“This fragment contains product placement [PP]”), half did not. Effects of disclosures on brand evaluation were examined, with self-control as moderator.

Materials

The first independent variable in this study was the level of self-control depletion. Participants were asked to watch a fragment from the movie “The Proposal”. This level was manipulated prior to watching the fragment. The self-control manipulation task from Janssen and Fennis (n.d.) was used to create two different levels of self-control: either depleted or not depleted. Participants in the no-depletion condition were asked to fill in the missing word in fifteen sayings without any restrictions. Participants in the depletion condition were also asked to fill in the missing word in the same fifteen sayings, but they were not allowed to use the letter “e”, whereas all the answers required this letter. This last group had to deplete their self-control resources, because they had to regulate their thoughts effectively: they had to suppress the tendency to fill in the letter “e”. Directly after this task, a manipulation check for the mood of all participants was done. All participants were asked to answer the question: “Please indicate how you feel right now, at this moment” on a seven-point semantic differential (1 = very negative; 7 = very positive). This was asked in order to find out if the self-control task had influenced the mood of the participants. If it had, they could for example have a more negative attitude towards the brand, therefore this had to be checked.

The second independent variable in this study was disclosure. After performing the self-control depletion task, all participants watched the same fragment from the movie “The
Proposal” either with a disclosure or without a disclosure. If a disclosure was included, it said “This fragment contains product placement [PP]” and it was shown for six seconds, visible in the upper right corner immediately when the fragment started (Boerman et al., 2012; Boerman, 2014). The fragment contained a brand placement of the brand Starbucks. The male principal character bought two Starbucks coffees and rushed to his office. He spilt one of the cups and gave the other to his boss, the female principal character. She picked the cup up, while the Starbucks logo was facing the camera, and asked him why a certain name was written on her cup (this is something Starbucks employees always do). The brand was thus connected to the plot and it was prominently placed. The fragment lasted three and a half minutes and it was kept similar in that it was the same fragment, it contained the same product and the same disclosure (if it was included). A print screen from the start of the fragment that was used in this study can be found in the questionnaire in the appendix.

Participants

In total, 173 participants were asked to participate in this experiment of whom 75.1% were female. On average, participants were 29.08 years old (SD = 12.35; range = 18 – 68). Two participants did not fill in their age, thus the mean age was calculated without the age of these two participants. However, 31 participants were removed from the analysis because they either exceeded the time limit to fill in the questionnaire (one hour), because they had not read the instructions properly or because participants had indicated that they had seen a disclosure, whereas it had not been included. The time limit was chosen because the participants were asked to fill in the questionnaire without taking any breaks. If they took breaks and did, their amount of self-control could either be (much) lower than when they started the questionnaire because they did other activities that depleted their self-control, or it could be higher because they did nothing that would lower their resources. In the end, 142 participants participated in this experiment of whom 72.5% were female. On average, participants were 28.65 years old (SD = 12.06; range = 18 – 59). Again, two participants did not fill in their age, thus the mean age was calculated without the age of these two participants. The most frequent level of education was wo (66, range = vmbo – wo). In total, 141 participants had the Dutch nationality, the other participant had the German nationality. Gender was equally distributed over the four conditions ($\chi^2 (3) = 6.61, p = .086$). Furthermore, a one-way ANOVA showed no significant relation between age and the four conditions ($F (3, 137) = .26 , p = .854$). Participants were approached to participate based on the fragment that was used, which meant that they had to be between 18 and 60 years old.
Research design
A 2 (self-control: depleted/not depleted) x 2 (disclosure: included/not included) between-subject experimental design was used in this study. The participants were randomly assigned to one of the four groups.

Instruments
The first dependent variable in this study was brand evaluation (brand attitude and purchase intention). The second dependent variable was brand memory (brand recall and brand recognition) and the third dependent variable was persuasion knowledge (affective and cognitive). Furthermore, some control variables were included. The questionnaire can be found in the appendix.

Brand evaluation. Brand evaluation consists of brand attitude and purchase intention. Brand attitude was measured by using attitudinal measures adapted from Matthes et al. (2007). Participants were asked to answer the question “In my opinion, the brand Starbucks seems to be …” on five seven-point semantic differentials consisting of the following items: unfriendly – friendly; negative – positive; not appealing – appealing; uninteresting – uninteresting; unattractive – attractive; and not nice – nice. The reliability of brand attitude comprising six items was good: \( \alpha = .92 \). In order to measure purchase intention, one seven-point semantic differential question from Spears and Singh (2004) was used: “I would buy this product” (1 = never; 7 = definitely).

Brand memory. Brand memory consists of brand recall and brand recognition. To measure brand recall, participants were asked: “Did you see brands in this fragment? If so, please indicate which brand(s) you saw in the fragment.” (No; Yes, namely...). Participants could list all the brands that they remembered seeing during the fragment (Russell, 2002). Furthermore, brand recognition was measured with the Memory Characteristics Questionnaire (Johnson, Foley, Suengas, & Ray, 1988, in Law & Braun, 2000). Participants were asked: “A number of brand is presented below. Please indicate which brand(s) you saw in the fragment.” They were given a list of logos of eleven brands: the placed brand Starbucks and ten fillers (Head&shoulders, Rolex, Nike, D&G, Garnier, Sony, Vitaminwater, Starbucks, Peugeot, Chanel, and Apple) in order to see whether participants recognised the placed brand. These specific fillers were chosen because certain objects or actions could be linked to them. The female principal character worked out (Nike, Vitaminwater), took a shower (Head&shoulders, Garnier), and dressed herself (D&G, Chanel). The male principal character got up (Rolex) and crossed a road where there was a traffic jam (Peugeot). There were many computers at the
office (Sony, Apple). The logos were positioned randomly to assure that participants would not immediately see the relations between the brands. The last option that participants could choose was: “I did not see any of these brands in the fragment.”

**Persuasion knowledge.** Persuasion knowledge consists of affective and cognitive persuasion knowledge. Affective persuasion knowledge involves attitudinal mechanisms, for example critical attitudes towards a persuasive attempt (Boerman et al., 2012). This was measured using eleven seven point Likert scales (1 = totally disagree; 7 = totally agree) from Ham, Nelson, and Das (2015). The statement was: “I think that showing the brand Starbucks in the movie fragment was...”; reliable, convincing, unfair, manipulative, nice, implausible, entertaining, misleading, acceptable, annoying and distracting. Unfair, manipulative, implausible, misleading, annoying and distracting had to be recoded. The reliability of affective persuasion knowledge comprising eleven items was good: $\alpha = .80$. Furthermore, six seven point Likert scales from Ham et al. (2015) were used to measure cognitive persuasion knowledge. This involves the cognitive dimension, for example recall and recognition (Boerman et al., 2012). Participants were asked to indicate to what extent they agreed with six statement, the first two were: “There was advertising in the movie fragment” and “Showing the brand Starbucks in the movie fragment is advertising”. Furthermore, participants were asked to indicate why they thought that the brand Starbucks was shown in the movie (“The brand Starbucks is shown in the movie to...”) for the following four statements: “sell products from Starbucks”; “make sure that the consumers like the brand”; “stimulate the sales of the products of the brand Starbucks” and “influence the consumer” (1 = totally disagree; 7 = totally agree). The reliability of cognitive persuasion knowledge comprising six items was good: $\alpha = .86$.

Additionally, a self-control manipulation check was included (Janssen, Fennis, & Pruyn, 2010). Participants were asked to indicate for four seven-point Likert scales (1 = totally disagree; 7 = totally agree) whether they agreed with the statements or not. The statements were: “I thought the task was difficult”; “The task took much effort”; “I had to suppress an automatic response during the task” and “I had to exercise control over myself during the task”. The reliability of the manipulation measurement comprising four items was good: $\alpha = .88$.

Lastly, some control variables were included. One control variable was familiarity with the brand: “To what extent were you, prior to watching the fragment, familiar with the brand Starbucks?” (1 = totally not familiar; 7 = very familiar). A prior attitude towards the brand could affect the attitude towards the brand in this study. However, when controlled for,
the effect on attitude can be contributed to amount of self-control and/or the inclusion of a disclosure. The second control variable was familiarity with the movie: “To what extent were you, prior to watching the fragment, familiar with the movie “The Proposal”? (1 = totally not familiar; 7 = very familiar). Again, a previous attitude towards the movie could affect the attitude towards the movie. Russell and Puto (1999) stated that viewers who watch their favourite program respond in a more positive manner to product placements, which might influence brand evaluation. A third control variable was how often participants bought something at Starbucks: “How often do you buy something at Starbucks?” (1 = never; 7 = very often). This is important because this could influence the answers for purchase intention. Brand evaluation could be higher if participants already buy the product often. A fourth control variable was whether the participants had seen a disclosure (“Did you see a disclosure?”). The last control variables were general questions about the participants (gender, age, nationality and educational level).

**Procedure**

The survey was submitted into Qualtrics (a provider of online survey software, http://www.qualtrics.com/). Participants were asked to participate via a Facebook message or via an e-mail, which included the link to the online survey. It started with a short description with instructions. Subsequently, all participants were asked to complete a writing task, but only half of the participants received a task that depleted their self-control resources. After this, all respondents were asked to watch a fragment from the movie “The Proposal”, either with or without a disclosure, which was followed by a survey. In the end, participants were told that they could sent an email to a certain address if they would like to receive more information about what this study was about. The experiment was conducted on an individual basis.

**Statistical treatment**

A two-way ANCOVA was used to gain more insight into the effects of disclosures on brand evaluation (brand attitude and purchase intention) moderated by the level of self-control. Persuasion knowledge (affective and cognitive) was also examined with a two-way ANCOVA. In order to attain deeper knowledge of the effects of disclosures on brand memory (brand recall and brand recognition), a logistic regression was conducted.
Results

Manipulation checks

An independent-samples t-test was conducted to determine whether the self-control manipulation check from Janssen, Fennis, and Pruyn (2010) worked. The t-test revealed a significant effect of the self-control manipulation on the perceived self-control ($t(120.76) = 11.18, p < .001$). The depletion version was perceived as more difficult ($M = 4.72, SD = 1.42$) than the no-depletion version ($M = 2.29, SD = 1.12$). This means that the manipulation worked. Furthermore, an independent-samples t-test was conducted to determine if the self-control task had influenced the mood of the participants. The t-test revealed no significant effect of the self-control task on mood ($t(140) = 1.54, p = .125$). Thus, the self-control task did not have an influence on the mood of the participants.

ANCOVAs were conducted with the following covariates: familiarity with the brand Starbucks, familiarity with the movie “The Proposal”, and how often participants bought something at Starbucks, since these might have had an influence on the dependent variables in this study.

Attitude

The hypotheses 1a and 1b stated that not-depleted participants would express a negative brand evaluation and that depleted participants would express no more or less positive brand evaluations. In order to test these hypotheses, a two-way analysis of variance for brand attitude with self-control and disclosure as factors was conducted. It showed no significant main effect of self-control ($F(1, 135) < 1$) and no significant main effect of disclosure ($F(1, 135) < 1$). Lastly, there was no interaction effect between self-control and disclosure ($F(1, 135) < 1$). This means that there were no effects of amount of self-control or inclusion of a disclosure on brand attitude.

Purchase intention

In order to test the hypotheses, a two-way analysis of variance for purchase intention with self-control and disclosure as factors was conducted. It revealed no significant main effect of self-control ($F(1, 135) < 1$). Furthermore, there was no significant main effect of disclosure ($F(1, 135) < 1$). However, the interaction effect between self-control and disclosure was marginally significant ($F(1, 135) = 3.82, p = .053$). The difference between amount of self-control and purchase intention was only found for participants who saw no
disclosure ($F(1, 67) = 4.33, p = .041$): participants who were depleted showed a higher intention ($M = 3.38, SD = 2.08$) to purchase the shown brand (Starbucks) than participants who were not depleted ($M = 2.44, SD = 1.65$). Table 1 shows the means and standard deviations for purchase intention with self-control and disclosure as factors.

There was no difference between amount of self-control and purchase intention for participants who saw a disclosure ($F(1, 71) < 1$). Lastly, there was no difference between disclosure and purchase intention for neither participants who had depleted self-control ($F(1, 63) < 1$), nor for participants who had not-depleted self-control ($F(1, 75) < 1$).

Table 1. Purchase intention of the product with self-control and disclosure as factors ($N = 142$) (1 = would never buy the product; 7 = would definitely buy the product)

<table>
<thead>
<tr>
<th>disclosure</th>
<th>purchase intention</th>
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<td>$M$</td>
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<tr>
<td>Without disclosure</td>
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<tr>
<td>depleted</td>
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<tr>
<td>not-depleted</td>
<td>2.44</td>
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<tr>
<td>With disclosure</td>
<td></td>
</tr>
<tr>
<td>depleted</td>
<td>2.97</td>
</tr>
<tr>
<td>not-depleted</td>
<td>2.68</td>
</tr>
</tbody>
</table>

Affective persuasion knowledge

A two-way analysis of variance for affective persuasion knowledge with self-control and disclosure as factors showed no significant main effect of self-control ($F(1, 135) < 1$). Furthermore, there was no significant main effect of disclosure ($F(1, 135) < 1$) and there was no interaction effect between self-control and disclosure ($F(1, 135) = 1.94, p = .166$).

Cognitive persuasion knowledge

A two-way analysis of variance for cognitive persuasion knowledge with self-control and disclosure as factors revealed no significant main effect of self-control ($F(1, 135) = 1.12, p = .292$) and no significant main effect of disclosure ($F(1, 135) = 1.45, p = .230$). Lastly, there was no interaction effect between self-control and disclosure ($F(1, 135) < 1$).

Brand recall

A logistic regression for brand recall with self-control and disclosure as factors showed a marginal significant main effect of self-control (Wald (1) = 3.41, $p = .065$). This
means that participants who had depleted self-control (63.1%) had a lower brand recall (67.5%) than participants with not-depleted self-control (Exp(B) = .373, B = -.99, p = .065).

A logistic regression for brand recall with self-control and disclosure as factors also revealed a marginal significant main effect of disclosure (Wald (1) = 3.79, p = .052). This implies that participants who did not see a disclosure (62.3%) had a lower brand recall (68.5%) than participants who saw a disclosure (Exp(B) = .360, B = -1.02, p = .052).

Lastly, the interaction effect between self-control and disclosure was statistically significant (Wald (1) = 3.84, p = .050) This suggests that when a disclosure is included and when participants have not-depleted self-control, recall will be higher (Exp(B) = 4.347, B = 1.47, p = .050). Chi-square tests were conducted in order to see exactly what this interaction effect implies.

A Chi-square test for effect of disclosure on brand recall for participants with depleted self-control was not significant ($\chi^2$ (1) = 0.71, p = .401). In total, 59% of the participants who had depleted self-control and had seen a disclosure said they had seen Starbucks in the fragment. In total, 69.2% of the participants who had depleted self-control and who had not seen a disclosure said they had seen Starbucks in the fragment.

However, a Chi-square test for effect of disclosure on brand recall for participants with not-depleted self-control was significant ($\chi^2$ (1) = 3.92, p = .048). In total, 79.4% of the participants who had not-depleted self-control and had seen a disclosure said they had seen Starbucks in the fragment. In total, 58.1% of the participants who had not-depleted self-control and who had not seen a disclosure said they had seen Starbucks in the fragment. Table 2 displays the percentages for recall (no; yes) with self-control and disclosure as factors.

<table>
<thead>
<tr>
<th>Table 2.</th>
<th>Brand recall with self-control and disclosure as factors (N=142) (No; Yes, namely...)</th>
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<tbody>
<tr>
<td></td>
<td>Self-control</td>
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<tr>
<td></td>
<td>depleted (n = 65)</td>
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<tr>
<td>Recall</td>
<td>disclosure</td>
</tr>
<tr>
<td>yes</td>
<td>59.0%</td>
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<tr>
<td>no</td>
<td>41.0%</td>
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*Brand recognition*

A logistic regression for brand recognition with self-control and disclosure as factors showed no significant main effect of self-control (Wald (1) = 2.16, p = .142). This means that participants who had not-depleted self-control did not have a higher brand recognition than
participants with depleted self-control. Furthermore, a logistic regression revealed no significant main effect of disclosure (Wald (1) = 2.21, \(p = .137\)). This implies that participants who saw a disclosure did not have a higher brand recognition compared to participants who did not see a disclosure. Lastly, the interaction effect between self-control and disclosure was not significant (Wald (1) = 3.02, \(p = .082\)).

**Conclusion and discussion**

Whether viewers are able to resist the influence of a persuasive attempt after seeing a disclosure has not been examined before for viewers who have different amounts of self-control. The purpose of this study was to investigate to what extent self-control moderated the effect of a brand placement disclosure on brand evaluation. The hypotheses that were examined were:

**H1a.** When the viewer has a high level of self-control, he/she will express more negative brand evaluation after exposure to a disclosure.

**H1b.** When the viewer has a low level of self-control, he/she will express no more or less positive brand evaluations after exposure to a disclosure.

Based on the results, it can be said that hypothesis 1a is rejected: a disclosure did not result in more negative brand attitudes due to a high level of self-control. Furthermore, purchase intention was not more negative when a disclosure was included for both depleted and not-depleted participants. Hypothesis 1b is accepted, because no differences in attitude or purchase intention were found for participants who saw a disclosure. The answer to the research question is that self-control does not moderate the effect of a brand placement disclosure on brand attitude. However, self-control does moderate the effect of a brand placement disclosure on purchase intention. Additionally, interesting results were found for brand recall.

**Hypotheses and research question**

Firstly, hypothesis 1a is rejected. A disclosure does not result in more negative brand attitudes as a result of a high level of self-control and purchase intention was also not more negative. This means that there were no effects of amount of self-control or inclusion of a disclosure on brand attitude. This finding is in line with some of the previous research. Some, because mixed results were found: existing studies have shown that brand evaluations were either negative when a disclosure was included, or no effect was found (Jacks & Devine, 2000; Wood & Quinn, 2003; Dekker & Van Reijmersdal, 2010; Campbell, Mohr, & Verlegh,
This study found no effect on attitude, which corresponds with Campbell et al. (2013), who found that attitude was as high when there was a disclosure prior to the persuasive attempt, as without a disclosure. Moreover, Dekker and Van Reijmersdal (2010) found that attitudes were not influenced by disclosures. In accordance to that, Van Reijmersdal et al. (2013) found that attitudes were not more critical for respondents who saw a disclosure compared to respondents who did not see a disclosure. Gillespie et al. (2012) found that attitude towards a prominently placed brand did not differ for both depleted participants and not-depleted participants.

However, the finding of brand attitude of the current study is not in line with the studies that found negative brand evaluations. According to Jacks and Devine (2000) and Wood and Quinn (2003), a disclosure leads to negative attitudes towards the brand. A disclosure that is shown prior to or at the same time as the brand placement allowed viewers to protect themselves against the persuasive attempt and they responded more critically to the brand (Boerman et al., 2014). Campbell et al. (2013) reported that inclusion of a disclosure after the brand placement caused viewers to have a more negative attitude. Lastly, Boerman et al. (2012) noted that a 6-second disclosure enabled participants to process the content, which led to critical evaluation and negative attitudes. Thus, previous studies that reported no more or less positive attitudes are in line with the results from this study.

Secondly, hypothesis 2b is accepted. Attitudes did not differ between depleted and not-depleted participants. Furthermore, findings for purchase intention revealed no difference in purchase intention between depleted and not-depleted participants for the fragment with a disclosure. A possible explanation for this finding might be that participants were tired and therefore more easily influenced by the product placement (Gillespie et al., 2012). The current finding does not correspond with previous research, which has shown that people with depleted self-control are more easily influenced. For example, Fennis et al. (2009) found that depleted participants were more likely to sign up to volunteer compared to participants who were not depleted. Wheeler et al. (2007) reported that participants with depleted self-control showed less resistance and a more positive attitudes towards a message consisting of weak arguments than not-depleted participants, even when these were not in line with their own attitude. Lastly, Burkley (2008) found that depleted participants showed less resistance towards strong arguments. These are examples of studies that show that people with depleted self-control are more easily influenced. But hardly any studies have examined purchase intention within disclosure effects with self-control as a moderator. Therefore, this study adds
something to the research body: no differences were found between depleted and not-depleted participants on brand attitude and purchase intention when a disclosure was included. Because significant effects were found on purchase intention, it can be stated that self-control moderates the effect of a brand placement disclosure on purchase intention (RQ).

**Brand recall and recognition**

It was found that participants who had depleted self-control had a lower brand recall than participants with not-depleted self-control. Furthermore, participants who saw a disclosure had a higher brand recall compared to participants who did not see a disclosure. Results also showed that participants who had not-depleted self-control and had seen a disclosure indicated more often that they had seen Starbucks in the fragment, compared to not-depleted participants who had not seen a disclosure. This suggests that the inclusion of a disclosure can enhance brand recall of people with not-depleted self-control. Amount of self-control and inclusion of a disclosure thus affects brand recall. Previous research found similar results. Brand memory increased when a disclosure was shown (Van Reijmersdal et al., 2013). Prominently placed brands also caused viewers to have increased memory of the brand (Gupta & Lord, 1998; Law & Braun, 2000; Van Reijmersdal, 2009). The brand in this study was connected to the story and prominently placed, which could be a possible explanation for the increase in recall that was found. Furthermore, Boerman et al. (2012) concluded that participants who saw a disclosure were more likely to recall the brand compared to participants who did not see a disclosure. However, these studies did not consider the role of self-control within brand recall. Moreover, there have been no studies to date that have investigated the effects of amount of self-control of a person on brand recall. Thus, the findings for brand recall add something to the research body of self-control: brand recall was found to be higher when a disclosure was included and when participants had not-depleted self-control. Thus, the amount of self-control of a person can determine whether a brand is recalled or not, and a disclosure can enhance this effect.

However, amount of self-control and inclusion of a disclosure did not have an influence on brand recognition, although Starbucks was prominently placed in the fragment. A possible explanation for the fact that no differences were found between depleted and not-depleted participants in brand recognition might be that a prominent placed brand can be recognised easily because it is connected to the plot (Gupta & Lord, 1998). In correspondence with the current findings, Gillespie et al. (2012) found that recognition of a prominently placed brand did not differ for both depleted participants and not-depleted participants.
Affective and cognitive persuasion knowledge

For affective persuasion knowledge, no significant main or interaction effects of self-control and disclosure were found. This means that there were no effects of amount of self-control and inclusion of a disclosure on this dependent. In general, previous research concluded that disclosures enable viewers to activate their persuasion knowledge and become aware of the influence that the placement might have. This was also stated to make the viewer more critical (Boerman et al., 2012; Boerman et al., 2014). However, this contrasts with the results of this study, where no effects of a disclosure on persuasion knowledge, neither affective nor cognitive, were found. What’s more, not many studies have investigated the role of amount of self-control within this.

Furthermore, neither amount of self-control, nor inclusion of a disclosure did influence cognitive persuasion knowledge. The current findings for cognitive persuasion knowledge do also differ from previous research. Boerman et al. (2012) found that participants who saw a disclosure had higher cognitive persuasion knowledge compared to participants who did not see a disclosure. They stated that persuasion knowledge is an important mechanism when examining the effects of disclosures on brand attitude. In contrast to this statement, the current study did not find any effects of self-control or inclusion of a disclosure on persuasion knowledge. Again, it has to be note that this study and other previous studies did not consider the role of amount of self-control within this.

Limitations and recommendations

A potential limitation of this study might be that the brand placement in the fragment was impossible to miss, because it was clearly incorporated into the plot and quite prominently visible. Future studies should also examine less prominent brand placements, because previous research found that less prominent placements had more effect on depleted participants, e.g. their attitudes were more positive, compared to not-depleted participants (Gillespie et al., 2012).

Different durations of the visibility of disclosures were also found to reveal different results in previous studies. Boerman et al. (2012) found that a 3-second disclosure did not enable viewers to activate their persuasion knowledge and correct their attitude. To enhance this activation, this study included a 6-second disclosure. Although Boerman et al. (2012) concluded that a 6-second disclosure in a television program offered viewers time to process the content and activate their persuasion knowledge, this study did not find this effect. However, this was concluded based on a television program. Thus, future studies could also
examine differences of effects of disclosure in different media e.g. movies and television programs.

Furthermore, the timing of a disclosure has been researched before. The current study included a disclosure prior to the placement and did not find effects on brand attitude. Mixed results were found previously: some concluded that a disclosure prior to or at the same time as the brand placement allowed viewers to protect themselves and change their attitude (Boerma et al., 2014). Others reported that inclusion of a disclosure after the brand placement caused viewers to have a more negative attitude (Campbell et al., 2013). More research should be conducted in order to find out what causes this difference in brand attitude: is it due to the type of disclosure or the type of program? And because self-control moderates brand placement disclosure effects on purchase intention, the role of self-control within this should also be examined. Additionally, different countries use different types of disclosures. Thus, this study could be replicated with a different disclosure type to see if results on brand attitude would differ for viewers form other countries.

Although it is useful in an experiment to conduct the research on an individual basis, for example to avoid interaction effects, it could also be a limitation. Investigating a group setting may provide interesting answers, since people often watch series or movies (with product placements) with others (Gillespie et al., 2012). Furthermore, an experimental setting is different from a real life setting, which usually causes participants to pay more attention to the stimuli. This could than influence brand memory (Van Reijmersdal, Neijens, & Smit, 2007). Perhaps a mix of different research methods may be able to avoid some of these disadvantages of an experiment.

Another possible limitation could be that this study did not know at what time participants participated filled in the survey. As stated by Gillespie et al. (2012), people regulate their behaviour throughout the day and, as a result, experience a reduction to regulate this again when watching their favourite evening show. This means that people have more resources earlier on a day, compared to in the evening. Studies could compare this, which may indicate why previous studies found different results of effects of disclosures on brand attitude.

**Implications**

From a practical perspective, it is useful to know for marketers that brand attitudes were not affected by the amount of self-control of a viewer or the inclusion of a disclosure, because brand attitudes are very important for marketers and their products. The findings
indicate that if the brand attitude prior to watching this fragment was good, it did not change. Disclosures have to be included nowadays and the current results show that this does not affect attitudes, which is not what legislators hoped to achieve. Furthermore, if legislators want to avoid audiences being influenced by brand placements, disclosures prior to the placement could be perceived as counterproductive as this study found that it results in increased brand recall, but has no effect on attitude. This result, however, is interesting for advertisers who wish to draw attention to their brands, without changing brand attitudes. It has to be stated that previous studies found different results for different disclosure timings. As mentioned earlier, this could be a subject of future research. Furthermore, the inclusion of a disclosure did not result in a more or less high purchase intention, which could imply that a disclosure can at least make people aware of the persuasive attempt in movies.

This study found no effects of amount of self-control and disclosure inclusion on persuasion knowledge. However, Boerman et al. (2012) stated that this was important and previous research has shown that disclosures enable viewers to activate their persuasion knowledge. This study found different results, namely no effects on persuasion knowledge, which implies that more research should be conducted to see if persuasion knowledge can really help people to become aware of the influence, even when they have a certain amount of self-control.

It was expected that self-control could provide answers to the mixed results of disclosures on brand attitude because a person needs self-control in order to resist a persuasive attempt (Burkley, 2008). However, the current study found that self-control does not seem to moderate the effects of a disclosure on brand attitude. This could indicate that it might not even be useful to show a disclosure at all, and that it might be necessary to find a new way to inform viewers about deception. Yet, interesting results were found of effects of a disclosure on purchase intention and brand recall, which suggests that self-control does moderate effects of disclosures on some concepts. More research should be conducted in order to find out what the role of amount of self-control is within disclosure effects. Other circumstances that can lead to resistance against the influence of the placement could also be examined.

Literature


**Appendix**

Survey:

Q1
Beste deelnemer,

Q2
Maak een grammaticaal correcte zin. LET OP: je mag de letter “e” NIET gebruiken! Gebruik dus alleen woorden waarin de letter “e” niet voorkomt.
1. Na ………… komt zonneschijn.
2. ………… stinkt niet.
3. Door de ………… het bos niet meer zien.
4. In ………… leggen alle vogels een ei.
5. Een ………… voor de dorst.
6. Zo ………… als gras.
7. ………… duurt het langst.
8. Melk is goed voor …………
10. Zo gek als een …………
11. Snoep gezond, ………… een appel!
12. Meedoen is belangrijker dan …………
13. Als er één schaap over de dam is, volgen er …………
14. De aanval is de beste …………
15. De pot verwijt de ………… dat hij zwart ziet.

Maak een grammaticaal correcte zin.
1. Na ………… komt zonneschijn.
2. ………… stinkt niet.
3. Door de ………… het bos niet meer zien.
4. In ………… leggen alle vogels een ei.
5. Een ………… voor de dorst.
6. Zo ………… als gras.
7. ………… duurt het langst.
8. Melk is goed voor …………
10. Zo gek als een …………
11. Snoep gezond, ………… een appel!
12. Meedoen is belangrijker dan …………
13. Als er één schaap over de dam is, volgen er …………
14. De aanval is de beste …………
15. De pot verwijt de ………… dat hij zwart ziet.

Q3
Geef aan hoe je je nu, op dit moment, voelt.
Heel erg negatief O O O O O O O Heel erg positief

Q4
Bekijk het filmfragment op de volgende pagina. Bekijk het volledige fragment, zonder tussentijds te pauzeren, terug- of vooruit te spoelen. Ga na het fragment direct door met het beantwoorden van de vragen.

Q5
Zonder disclosure:
Q6
Je hebt zojuist een fragment uit de film “The Proposal” bekeken. Geef hieronder aan welke gedachten er door je heen gingen tijdens het bekijken van dit fragment.
[open vraag]

Q7
Heb je in dit fragment merken voorbij zien komen? Zo ja, geef hieronder aan welk(e) merk(en) je in het fragment hebt gezien.
O Nee
O Ja, namelijk...

Q8
Hieronder is een aantal merken weergegeven. Geef aan welk(e) merk(en) je in het fragment hebt gezien.
Ik heb geen van deze merken in het fragment gezien.

Q9
De volgende vragen hebben betrekking op het merk Starbucks. Geef hieronder aan wat je van dit merk vindt. Naar mijn mening is het merk Starbucks:

<table>
<thead>
<tr>
<th>Eigenschap</th>
<th>Merken</th>
<th>Vriendelijk</th>
<th>Positief</th>
<th>Aansprekend</th>
<th>Interessant</th>
<th>Aantrekkelijk</th>
</tr>
</thead>
</table>
Q10
Hoe waarschijnlijk is het dat je de komende maand een product van Starbucks zou willen kopen?
Zeer onwaarschijnlijk  O O O O O O  Zeer waarschijnlijk

Q11
Geef aan in hoeverre je het eens bent met de volgende stellingen over het filmfragment dat je zojuist hebt bekeken:
“In het filmfragment werd reclame gemaakt.”
Helemaal mee oneens  O O O O O O  Helemaal mee eens

Q12
“Het tonen van het merk Starbucks in het filmfragment is reclame.”
Helemaal mee oneens  O O O O O O  Helemaal mee eens

Q13
Het merk Starbucks wordt getoond in het filmfragment om...
de consument te informeren.
Helemaal mee oneens  O O O O O O  Helemaal mee eens

producten van Starbucks te verkopen.
Helemaal mee oneens  O O O O O O  Helemaal mee eens

de consument het merk leuk te laten vinden.
Helemaal mee oneens  O O O O O O  Helemaal mee eens

de consument te vermaken.
Helemaal mee oneens  O O O O O O  Helemaal mee eens

de verkoop van producten van het merk Starbucks te stimuleren.
Helemaal mee oneens  O O O O O O  Helemaal mee eens

de consument te beïnvloeden.
Helemaal mee oneens  O O O O O O  Helemaal mee eens

Q14
Ik vind het tonen van het merk Starbucks in het filmfragment:
Betrouwbaar  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Overtuigend  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Oneerlijk  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Manipulatief  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Leuk  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Ongeloofwaardig  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Vermakelijk  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Misleidend  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Acceptabel  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Irritant  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Afleidend  Helemaal mee oneens  O O O O O O  Helemaal mee eens
Q15
Beantwoord de volgende vragen over het fragment uit de film “The Proposal” dat je zojuist hebt bekeken door aan te geven in hoeverre je het eens bent met de volgende stellingen:
“Ik heb genoten van het fragment.”
Helemaal mee oneens  O O O O O  O  Helemaal mee eens

Q16
“Terwijl ik het fragment bekeek, kon ik me de gebeurtenissen levendig voorstellen.”
Helemaal mee oneens  O O O O O O  O  Helemaal mee eens

Q17
“Terwijl ik het fragment bekeek, kon ik mijn gedachten er niet goed bij houden.”
Helemaal mee oneens  O O O O O O  O  Helemaal mee eens

Q18
“Terwijl ik het fragment bekeek, ging ik helemaal op in het verhaal.”
Helemaal mee oneens  O O O O O O  O  Helemaal mee eens

Q19
“Terwijl ik het fragment bekeek, was ik me bewust van de dingen die om me heen gebeurden.”
Helemaal mee oneens  O O O O O O  O  Helemaal mee eens

Q20
In hoeverre was je voorafgaand aan het bekijken van het fragment bekend met de film “The Proposal”?
Helemaal niet bekend  O O O O O O  O  Heel erg bekend

Q21
In hoeverre was je voorafgaand aan het bekijken van het fragment bekend met het merk Starbucks?
Helemaal niet bekend  O O O O O O  O  Heel erg bekend

Q22
Hoe vaak koop je iets bij Starbucks?
Nooit  O O O O O O  O  Heel vaak

Q23
De volgende vragen gaan over de schrijfopdracht die je voorafgaand aan het bekijken van het fragment hebt gemaakt. Geef aan in hoeverre je het eens bent met de volgende stellingen.
“Ik vond de taak moeilijk.”
Helemaal mee oneens  O O O O O O  O  Helemaal mee eens

“De taak kostte me veel inspanning.”
Helemaal mee oneens  O O O O O O  O  Helemaal mee eens

“Tijdens de taak moest ik een automatische respons onderdrukken.”
Helemaal mee oneens  O O O O O O  O  Helemaal mee eens
“Tijdens de taak moest ik controle over mezelf uitoefenen.”
Helemaal mee oneens O O O O O O Helemaal mee eens

Q24
Hieronder volgt een aantal algemene vragen:
Ben je een man of een vrouw?
O Man
O Vrouw

Q25
Wat is je nationaliteit?
O Nederlands
O Anders, namelijk...

Q26
Wat is je leeftijd?
[open vraag]

Q27
Wat is je hoogst genoten opleiding? (deze hoeft nog niet te zijn afgerond)
O vmbo
O havo
O vwo
O mbo
O hbo
O wo

Q28
Heb je tijdens het bekijken van het fragment een melding gezien dat het fragment een product placement bevat?
O Ja
O Nee

Q29
Bedankt voor je deelname aan dit onderzoek! Mocht je interesse hebben in de resultaten van dit onderzoek, dan kun je na 10 juni 2015 een mailtje sturen naar rianne.meijer@student.ru.nl