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Publication date
2014

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Citation for published version (APA):

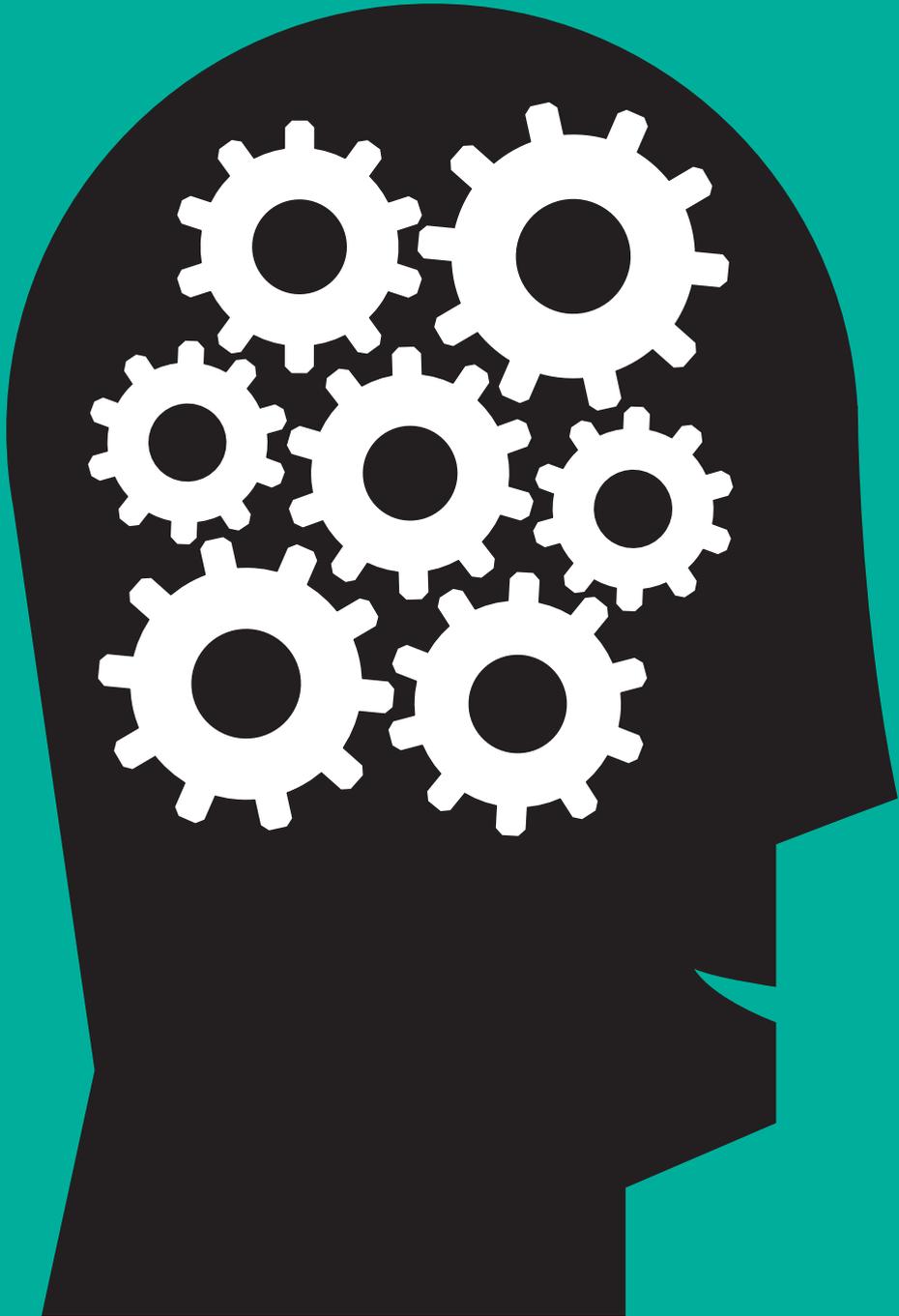
Boerman, S. C. (2014). *"This program contains product placement": Effects of sponsorship disclosure on television viewers' responses.*

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This chapter is submitted for publication as:

Boerman, S. C., Van Reijmersdal, E. A., & Neijens, P. C. (under review). How audience and disclosure characteristics influence memory of sponsorship disclosure.

CHAPTER 1

SPONSORSHIP DISCLOSURE AWARENESS

ABSTRACT

The proliferation of sponsored content in television programs has been a cause of concern as it may violate the right of consumers to know that a message is sponsored. Therefore, new regulations obligate broadcasters to disclose sponsored content. To achieve its goal of informing the consumer, a sponsorship disclosure must be effectively communicated. This study explores how audience and disclosure characteristics influence memory of sponsorship disclosure. Results show that disclosure at the beginning of a program results in less disclosure memory compared to disclosure in the middle or at the end of a program. The duration of the disclosure does not appear to influence disclosure memory. Additionally, viewers' program and disclosure familiarity increase the chance that a disclosure is remembered, while program involvement decreases disclosure memory. These results may be useful in the development of effective sponsorship disclosure, as they indicate several conditions under which disclosures are more likely to be remembered.

INTRODUCTION

Television programs are increasingly integrating sponsored content into editorial content (Smit, Van Reijmersdal, & Neijens, 2009; Sung, de Gregorio, & Jung, 2009). This use of sponsored content ranges from the simple placement of a brand into a television program (i.e., brand placement) to programs in which the brand plays a key role in plotlines and the creative development (i.e., brand integration; Hudson & Hudson, 2006). The goal of such sponsored content is to give (subtle) exposure to brand names and to persuade in an unobtrusive manner (Avery & Ferraro, 2000). Research has indeed demonstrated that sponsored content can alter viewers' attitudes, even if memory for the placement is low (Matthes, Schemer, & Wirth, 2007). This unobtrusiveness has been a cause of concern for policy makers, consumer organizations and academics. By blurring the boundaries between editorial and commercial content, viewers may not recognize sponsored program content as commercial because its source and intent are unclear (Nebenzahl & Jaffe, 1998). Therefore, it has been argued that sponsored content violates the right of consumers to know that a message is sponsored, and hence is unethical and deceptive (e.g., Cain, 2011; Kuhn, Hume, & Love, 2010; Nebenzahl & Jaffe, 1998).

To avoid any confusion on the part of the viewer, the EU decided to make sponsorship disclosure on television obligatory (Audiovisual Media Services Directive, 2010). Similarly, in the US sponsorship regulations are being reconsidered (Cain, 2011; Federal Communications Commission, 2008). Although the application and use of sponsorship disclosure differ between countries, the purpose is always to explicitly inform the audience when commercial content is integrated into editorial content to guarantee fair communication and avoid persuasion without audience awareness (Cain, 2011; Woods, 2008).

Despite the European regulations and American law-proposals, little scholarly research has been conducted on sponsorship disclosures on television. The few studies that did investigate this subject focused on the effects of disclosures on brand responses (i.e., brand memory and brand attitude) and different forms of persuasion knowledge (Boerman, Van Reijmersdal, & Neijens, 2012a, 2012b; Campbell, Mohr, & Verlegh, 2013; Van Reijmersdal, Tutaj, & Boerman, 2013). Remarkably, two of these studies found that a large number of participants did not recall the sponsorship disclosure (i.e., 52% in Boerman et al. [2012b] and 17% in Campbell et al. [2013]).

Sponsorship disclosure aims to inform audiences so they can guard themselves and use their persuasion knowledge to cope with the persuasive attempt (Cain, 2011; Woods, 2008). Prior research emphasized the importance of sponsorship disclosure memory in achieving its goal of activating persuasion knowledge, as it showed that sponsorship disclosure only had an effect on persuasion knowledge when the viewer recalled seeing a disclosure (Boerman et al., 2012a). Hence, when sponsorship disclosure is not remembered, it most likely does not have its intended effect and may be futile. Despite the importance of disclosure memory, no research has looked into the antecedents of sponsorship disclosure memory. Therefore, this study takes one step back in the hierarchy of effects and aims to explore under which circumstances viewers remember sponsorship disclosure.



By doing so, we hope to contribute to the creation and implementation of more effective and “sound” disclosures (see also Kozup, Taylor, Capella, & Kees, 2012).

Thus, to achieve its goal of informing the consumer a sponsorship disclosure must be effectively communicated. If consumers do not notice sponsorship disclosures, the disclosures cannot produce the positive benefits that it seeks (Goldman, 2006). This study explores the antecedents of memory of sponsorship disclosure by focusing on both the viewers (i.e., audience characteristics) and on the characteristics of the disclosure (i.e., disclosure characteristics). With an experiment ($N = 179$), we specifically investigate the effects of audience’s disclosure familiarity, program familiarity and program involvement, and disclosure timing (beginning, middle, or end of program) and duration (3 or 6 seconds).

ATTENTION TO AND PROCESSING OF DISCLOSURES

Disclosures and warnings directed at consumers are not new phenomena. Although most research focused on disclosures on products and in advertising, as opposed to disclosures of advertising, they do provide some valuable insights into audience attention to disclosures. Interestingly, various studies have demonstrated that different types of disclosures (i.e., fine-print disclosures in TV commercials, and risk and health disclosures) appear to go largely unnoticed (e.g., Morgan & Stoltman, 2002; Popper & Murray, 1989; Stewart & Martin, 1994). Likewise, the few studies that did focus on disclosures of advertising, such as labels of advertorials in magazines, also demonstrate low levels of disclosure memory (Cameron & Curtin, 1995; Kim, Pasadeos, & Barban, 2001).

The extent to which viewers process and hence remember a message can be explained by audiences’ ability, motivation, and opportunity to process that message (MacInnis, Moorman, & Jaworski, 1991). *Ability* refers to viewers’ skills and proficiencies that are necessary to process a message (MacInnis et al., 1991). Viewers may require prior knowledge about the information given in the message to be able to process and comprehend the message (Petty, Cacioppo, Strathman, & Priester, 2005). *Motivation* is defined as the desire or readiness to process a message (MacInnis et al., 1991). Motivation is related to involvement with the message and is usually high when a message is of personal relevance (Andrews, 1988; Petty et al., 2005). *Opportunity* reflects the extent to which the message itself and the circumstances during message exposure affect viewers’ attention to the message. A lack of opportunity may be caused by distractions by for instance other messages or limited exposure time (MacInnis et al., 1991).

People have to be both able and motivated to process a message (Petty et al., 2005). The levels of ability and motivation differ between individuals (Petty et al., 2005), and, hence, largely depend on the viewer. The opportunity to process a message is not in the respondent’s control and relies on the message itself and the exposure circumstances (Batra & Ray, 1986). This means that the level of processing, and consequently the memory of sponsorship disclosure, depends on both the audience and the disclosure.

Therefore, we focus on the effects of both audience and disclosure characteristics on disclosure memory.

Andrews (1988) provides a list of factors that influence the motivation, ability, and opportunity to process information. Based on Andrews' (1988) list and Petty et al. (2005), we test the effects of five audience and disclosure characteristics, which are depicted in Table 1. In our study, ability is operationalized through audience's familiarity with sponsorship disclosure in general, and the program that incorporates the disclosure. Motivation is operationalized through viewers' involvement with the program. Viewers' opportunity to process sponsorship disclosure is studied by testing the effects of the timing and duration of the disclosure.

Table 1 *Audience and disclosure characteristics influencing the ability, motivation, and opportunity to process sponsorship disclosure*

Audience characteristics		Disclosure characteristics
Ability	Motivation	Opportunity
Program familiarity	Program involvement	Disclosure timing
Disclosure familiarity		Disclosure duration

Note Based on Andrews (1988) and Petty et al. (2005)

AUDIENCE CHARACTERISTICS

Whether viewers are *able* to process information can be explained by information processing theories such as the limited capacity model of motivated mediated message processing (LC4MP; Lang, 2006) and the processing of commercial media content (PCMC) model (Buijzen, Van Reijmersdal, & Owen, 2010). These models claim that the human ability to process mediated messages is limited. Because people's cognitive resources to process a mediated message are limited, people are not capable of processing all available information at once (Buijzen et al., 2010; Lang, 2000). For instance, when people watch a television program, they can allocate cognitive resources from a fixed pool of limited resources. When a viewer allocates a large amount of resources to the program, there will be few resources left to process other information, such as a disclosure. Consequently, viewers may not process a sponsorship disclosure, or process it with low levels of elaboration and effort, decreasing the chance a disclosure is stored and remembered.

In addition, the ability to process a message relies on knowledge of and familiarity with the information in the message (Andrews, 1988). Novel stimuli in an environment can elicit an orienting response, also called the 'what is it?' response, which is an automatic attention response (Lang, 2006). Therefore, new information gains attention and requires more cognitive resources than familiar information (Johnston, Hawley, Plewe, Elliot, & DeWitt, 1990; Lang, Potter, & Bolls, 1999; Lang, 2000). The ability to process a disclosure



and the television program it is displayed in, and consequently disclosure remembrance, may thus be affected by viewers' familiarity with both the program and disclosure.

Program familiarity

For viewers who are familiar with a television program not everything shown in the program is new. Although the content of an episode can be new to viewers who are familiar with the program, program characteristics such as the presenters or characters, the format, story, and content are not all new information. As new and unexpected information requires more cognitive resources (Johnston et al., 1990; Lang et al., 1999; Lang, 2000), a familiar program requires fewer resources to process compared to a program viewers are unfamiliar with. Viewers that are familiar with the program may thus have more resources available to process the disclosure, making it more likely they are able to notice and store the disclosure, leading to better disclosure memory. Therefore, based on the effect of new and unexpected information, we hypothesize:

H1: Program familiarity has a positive effect on sponsorship disclosure memory.

Disclosure familiarity

Since sponsorship disclosure is a fairly new development, chances are high that not all television viewers are familiar with it. Viewers' familiarity with sponsorship disclosure in general may also influence the ability to process and remember a specific disclosure. The effect of disclosure familiarity on disclosure memory can be explained by the novelty of disclosures, but also by associations in memory. Therefore, we propose two competing hypotheses: The novelty hypothesis and the association hypothesis.

The novelty hypothesis proposes a negative effect of disclosure familiarity on sponsorship disclosure memory and attributes this influence to the extent to which sponsorship disclosure is new to the viewer. When viewers are not familiar with sponsorship disclosures, a disclosure stands out and is unexpected. As new and unexpected information gains attention (Johnston et al., 1990; Lang et al., 1999; Lang, 2000), a sponsorship disclosure may attract attention due to its novelty, which is likely to increase processing and enhance memory. Additionally, when viewers are familiar with sponsorship disclosure, they may not expend the effort required to attend to the disclosure, because its content is already known (Stewart & Martin, 1994). As a result, viewers who are familiar with sponsorship disclosure may not be triggered to pay attention to the disclosure, leading to less disclosure memory.

On the contrary, the association hypothesis proposes a positive effect of disclosure familiarity on disclosure memory because of associative memory networks (Anderson & Bower, 1973). When people already have memory networks associated with a topic, few resources are required to activate this network and to add new information, making it easier to retrieve this information (Lang, 2000). Hence, the ability to process information largely depends on the knowledge that is already acquired about that topic (Celsi & Olson, 1988; MacInnis et al., 1991). With regard to sponsorship disclosure, this means

that for viewers who are familiar with disclosures, it is easier to process and remember a disclosure. Hence, viewers who are not familiar with disclosures do not have associations with sponsorship disclosure in memory, making it harder to process, store and remember the disclosure. As a result, disclosure familiarity would have a positive influence on disclosure memory.

To investigate the two competing hypotheses, we formulate the following research question:

RQ1: What is the effect of disclosure familiarity on sponsorship disclosure memory?

Program involvement

While watching television, the television program and sponsorship disclosure both compete for viewers' attention. Because sponsorship disclosure is displayed during a television program, the chance is high that viewers do not notice the disclosure because they are focusing on the program content (Buijzen et al., 2010). Therefore, sponsorship disclosure memory also depends on viewers' *motivation* to process it, which could be due to their involvement with the program. Involvement is defined as the perceived personal relevance of information (Celsi & Olson, 1988; Zaichkowsky, 1994). When the message is perceived as personally relevant and hence involvement is high, a person is more motivated to process the information. Hence, viewers who are highly involved with the program pay more attention to the program, and put more effort into processing it, than viewers who are not involved with the program (Moorman, Neijens, & Smit, 2007; Moyer-Gusé & Nabi, 2010; Slater & Rouner, 2002). This elaborate processing requires more cognitive resources (Buijzen et al., 2010), leaving few available resources to process the sponsorship disclosure. Thus, high program involvement results in more elaborate processing of the program, which may lead to less attention to and processing of the disclosure. Therefore, we hypothesize that program involvement decreases the chance that the disclosure is remembered:

H2: Program involvement has a negative effect on sponsorship disclosure memory.

DISCLOSURE CHARACTERISTICS

The circumstances in which a sponsorship disclosure is presented and the characteristics of the disclosure influence the *opportunity* to process the disclosure and consequently remember it. Whether viewers are distracted or whether the exposure time is too limited may depend on the moment in the program that the disclosure is shown (i.e., timing) and the time it is displayed (i.e., duration). Earlier disclosure research has shown that both the timing (Campbell et al., 2013; Van Reijmersdal et al., 2013) and duration (Boerman et al., 2012b) of sponsorship disclosures influence its effectiveness. This may be due to differences in whether people actually noticed the disclosure.



Disclosure timing

Sponsorship disclosures can be displayed at various moments in the program. The new EU regulations require broadcasters to display a disclosure at the beginning and end of the program, and after each commercial break (Audiovisual Media Services Directive, 2010). In the US broadcasters often disclose sponsored content in the end-of-show credits, which are according to Goldman (2006) effectively invisible to most consumers, or not looked at all (Neijens & Smit, 2003). Therefore, law proposals are made to show disclosures at the beginning and during the program (Cain, 2011; Federal Communications Commission, 2008).

Although no research has examined the effect of disclosure timing on disclosure memory yet, Campbell et al. (2013) did find that a disclosure after the sponsored content had a negative effect on brand attitude and top-of-mind awareness of the brand, while a disclosure before the sponsored content decreased top-of-mind awareness. Additionally, Van Reijmersdal et al. (2013) found that brand memory was highest when a sponsorship disclosure was presented during the sponsored content, compared to disclosures at the beginning or at the end of the program. The different effects of disclosure timing, and more specifically, the effect of timing on disclosure memory, can be explained by two mechanisms both related to attention: conventional practices and information density.

First, the timing of a disclosure may determine whether the disclosure stands out and hence attracts attention. At the beginning of a program it is common practice to display (additional) textual information, such as program titles, names, and television content ratings. Hence, viewers are used to texts at the beginning of a program. Therefore, sponsorship disclosure at the beginning of a program may not stand out as much as disclosures at less conventional timings, such as in the middle or toward the end of a program (before the end credits). Consequently, a disclosure at the beginning of a program is possibly less remembered than a disclosure in the middle or at the end of the program.

Second, one important explanation of inattention to disclosures is distraction (Hoy & Lwin, 2007; Stewart & Martin, 1994). At the beginning of the program viewers are exposed to a lot of new information. Viewers need to process various types of information, such as the title of the program, the persons that are introduced, and what the program is about. In other words, there is high information density at the beginning of a program, which may distract the viewers from the disclosure. Therefore, we propose that because of high information density, disclosure memory will be lower when the disclosure is displayed at the beginning of the program, compared to in the middle or toward the end.

Thus, based on conventional practices and information density, we expect that disclosure timing could affect the memory of the disclosure:

H3: The timing of sponsorship disclosure affects sponsorship disclosure memory: Disclosure at the beginning of the program leads to less disclosure memory, than disclosure in the middle or toward the end of the program.

Disclosure duration

When viewers attend to a television program, they are likely to be distracted by the program and do not have the opportunity to process a sponsorship disclosure. In addition, there is less opportunity to process a message when the exposure time of the message is limited (MacInnis et al., 1991). Hence, the exposure time of sponsorship disclosure may influence the remembrance of the disclosure. Previous research has shown that extending the message duration provides more opportunities to attend to a message (Janiszewski, 1993) and to cognitively process it (Buijzen et al., 2010; Mackworth, 1963). Consequently, when information stays on screen longer, this increases message recognition (provided there is not too much information; Gao & Lang, 2009). In line with this reasoning, prior research on sponsorship disclosure demonstrated that the effects of disclosure increased when its duration was extended (Boerman et al., 2012b). Additionally, a study comparing a slow disclaimer in a radio commercial (read in six seconds) and a fast disclaimer (read in three seconds), showed that the effectiveness of a disclaimer depended on its speed (Herbst & Allan, 2006). Moreover, advertisement studies demonstrate that longer commercials facilitate the learning of the message content and consequently increase recall (Singh & Cole, 1993), and that the exposure time of brand placement boosts its recognition (Brennan, Dubas, & Babin, 1999). Therefore, we propose that extending the exposure duration of the disclosure increases disclosure memory:

H4: Disclosure duration has a positive effect on sponsorship disclosure memory.

METHOD

Participants and procedure

To examine our hypotheses and research question we conducted an experiment with a 2 (duration: 3 or 6 seconds) \times 3 (timing: beginning, middle or end of program) between-subjects design. The audience characteristics were measured through a questionnaire. As the program used in the experiment is targeted at students, our sample included 179 students ($M_{\text{age}} = 22.23$, $SD_{\text{age}} = 3.49$; 78% female) of a large European university that were recruited through posters and flyers throughout the university building. They were randomly assigned to one of the six conditions, resulting in approximately 30 participants per condition (Min = 29, Max = 31).

At arrival, participants were asked to take a seat in an isolated cubicle and watch a television program on a computer. The instruction implied that the study was about watching television online. After watching the program, participants filled out an online questionnaire, which first measured program familiarity, followed by program involvement, then disclosure memory, and disclosure familiarity. Participation took about half an hour and participants received eight euros for their participation.



Materials

The television program used in this experiment was *MTV Was Here*, a program about music, fashion, and lifestyle. The episode was approximately 14 minutes long and was edited for this study. The episode consisted of three items, stemming from three different original episodes. The first and last items were fillers and included a report of a dance improvisation festival and an interview with a DJ. The middle item contained sponsored content about a new brand of shoes (Alive Shoes) which links sneakers to social networking. In the item, the presenter visits the Alive Shoes store, talks to the maker about the concept of the shoes, buys the shoes, and links them to social network sites. The sponsored item lasted about four minutes, of which the shoes and/or the brand were visible (either in the background of very prominently) for a total of one and a half minutes. The brand was mentioned seven times.

The sponsorship disclosure inserted in the program stated “This program contains advertising by Alive Shoes” and was displayed at the upper right corner of the screen. The disclosure was clearly readable and its size comparable with the size of common subtitles. In accordance with new regulation proposals in the US (Cain, 2011), the disclosure mentioned both the brand and the fact this brand is advertised in the program. With respect to the disclosure characteristics, we included 2 (*duration*) x 3 (*timing*) variations of the disclosure. In the EU, disclosures are to be shown for three seconds at the beginning of the program, during the program after each commercial break, and toward the end of the program just before the credits (Audiovisual Media Services Directive, 2010). In accordance with these regulations, the disclosure was displayed either three or six seconds and was shown either at the beginning of the program just after the introduction (“Today in *MTV Was Here*...”) and leader, in the middle of the program concurrent the sponsored item, or 30 seconds before the end of the program.

Measures

Program and disclosure familiarity

To measure program familiarity, participants were asked whether they were familiar with the television program *MTV Was Here* (0 = no, 1 = yes). Most participants (68%) did not know the program.

To measure disclosure familiarity, participants were introduced to the use of sponsorship disclosure on television in general by stating: “Since recently sponsorship disclosures are shown on television. For instance, in [PROGRAM] they show a PP logo and in [PROGRAM] they state “This program contains product placement.” We then asked whether they had ever noticed such disclosures (0 = no, 1 = yes). Although sponsorship disclosures are fairly new, 43% of the respondents were familiar with sponsorship disclosures. Program and disclosure familiarity were both measured with one item as a single item indicator is sufficient to measure a concrete, singular object (Rossiter, 2011).

Program involvement

Program involvement was measured using Zaichkowsky's (1994) personal involvement inventory. The mean score of the ten 7-point semantic differential scales is used as a measure of program involvement (Eigenvalue = 5.14; explained variance = 51.39%; Cronbach's alpha = .89, $M = 4.41$, $SD = 0.85$).

Disclosure memory

The dependent variable disclosure memory was measured by both disclosure recall and recognition. *Disclosure recall* was measured by directly asking the participants whether they recalled a disclosure for advertising in the episode of *MTV Was Here* (0 = no, 1 = yes). Almost half of the respondents (48%) did recall the disclosure.

To indicate whether participants recognized the disclosure (*disclosure recognition*), we presented the participants four disclosures and asked them which of the four disclosures they had seen. The answers also included a fifth option stating "none of the above." Recognition was then recoded into 0 (*checked wrong disclosure or "none of the above"*) and 1 (*checked the correct disclosure*). Almost half of the respondents (48%) recognized the disclosure correctly. The two memory measures are strongly related, $\chi^2(1) = 134.51$, $p = .000$, $\phi = .886$.

RESULTS

Randomization

Logistic regression analyses and a MANOVA with disclosure timing and duration as predictors demonstrate that the experimental groups did not differ with respect to sex, $\chi^2(5) = 6.72$, $p = .243$, age, $F(5, 173) = .948$, $p = .452$, program familiarity, $\chi^2(5) = 3.77$, $p = .582$, disclosure familiarity, $\chi^2(5) = 4.90$, $p = .428$, and program involvement, $F(5, 173) = .648$, $p = .664$.

Effects of audience characteristics

To test our hypotheses and research question, we conducted two logistic regression analyses. Table 2 presents the results for both disclosure recall (-2LL = 215.06, Nagelkerke $R^2 = .22$, $\chi^2(6) = 32.82$, $p < .001$) and recognition (-2LL = 216.56, Nagelkerke $R^2 = .21$, $\chi^2(6) = 31.31$, $p < .001$).

In agreement with H1, the results show that program familiarity has a significant positive effect on disclosure recall and recognition. Participants who were familiar with the program are almost three times more likely to recall ($b = 1.07$, $OR = 2.90$, $p = .003$) and recognize ($b = 0.98$, $OR = 2.66$, $p = .007$) the disclosure, than participants who were not familiar with the program.



Table 2 Summary of logistic regression analyses for audience and disclosure characteristics predicting disclosure memory

Predictor	Disclosure recall			Disclosure recognition		
	B	SE B	OR	B	SE B	OR
Program familiarity	1.07**	.36	2.90	0.98**	.36	2.66
Disclosure familiarity	0.55	.34	1.73	0.67*	.34	1.96
Program involvement	-0.68***	.21	0.51	-0.67**	.21	0.51
Timing						
Beginning vs. middle	1.02*	.41	2.76	0.84*	.41	2.31
Beginning vs. end	1.00*	.40	2.73	1.16**	.40	3.17
Duration (3 sec vs. 6 sec)	-0.37	.33	0.69	-0.15	.33	0.86
Constant	0.24	1.10	1.27	0.02	1.09	1.02

Note Program involvement ranges from 1 (low involvement) to 7 (high involvement), program familiarity and disclosure familiarity are dichotomous variables with 0 (no) and 1 (yes). Timing is recoded into two dummy variables, duration is a dichotomous variable with 0 (3 seconds) and 1 (6 seconds).

* $p < .05$; ** $p < .01$; *** $p < .001$.

The results regarding disclosure familiarity demonstrate a positive effect on both disclosure recall and recognition. Being familiar with the use of sponsorship disclosures on television significantly increases the odds that the disclosure is recognized ($b = 0.67$, $OR = 1.96$, $p = .048$). As the effect of disclosure familiarity on disclosure recall is not significant ($b = 0.55$, $OR = 1.73$, $p = .107$), results do not indicate that disclosure familiarity also increases the chance people recall seeing a disclosure. Given the significant effect on recognition, our results partly support the association hypothesis, and do not support the novelty hypothesis.

With respect to program involvement, the results demonstrate significant, negative effects on disclosure recall ($b = -0.68$, $OR = 0.51$, $p = .001$) and recognition ($b = -0.67$, $OR = 0.51$, $p = .002$). H_2 is thus supported: As program involvement increases, participants are less likely to recall and recognize the disclosure.

Effects of disclosure characteristics

Regarding disclosure timing, the results in Table 2 demonstrate significant differences for both disclosure recall and recognition. Since we expected a difference between disclosure at the beginning of the program compared to disclosure in the middle of the program and toward the end, we created two dummy variables comparing the beginning condition to the middle and end conditions. Both comparisons are significant and demonstrate an increase of the odds the disclosure is recalled and recognized. This means that when

a disclosure is displayed in the middle ($b = 1.02$, $OR = 2.76$, $p = .014$) or at the end of the program ($b = 1.00$, $OR = 2.73$, $p = .013$), participants are more likely to recall the disclosure, compared to when the disclosure is shown at the beginning of the program. In addition, when a disclosure is displayed in the middle ($b = 0.84$, $OR = 2.31$, $p = .040$) or at the end of the program ($b = 1.16$, $OR = 3.17$, $p = .004$), participants are at least two times more likely to recognize the disclosure, compared to a disclosure shown at the beginning of the program. H_3 is therefore confirmed.

To check for differences in disclosure memory between the disclosure at the end of the program and the disclosure in the middle of the program, we conducted additional logistic regression analyses with two dummy variables comparing the end condition to the other timing conditions. Results demonstrated there is no significant difference between the middle and end condition for both disclosure recall ($b = .01$, $SE b = .40$, $OR = 1.01$, $p = .978$) and recognition ($b = -.32$, $SE b = .40$, $OR = 0.73$, $p = .431$). This provides extra support for H_3 , there is only a difference between the beginning condition and the two other timing conditions.

The results show no significant effect of the duration of the disclosure on disclosure recall ($b = -0.37$, $OR = 0.69$, $p = .268$) and recognition ($b = -0.15$, $OR = 0.86$, $p = .657$). Displaying the disclosure for six seconds instead of three seconds does not increase the chance people recall or recognize the disclosure. Hence, H_4 is not supported.

DISCUSSION

To protect the consumer from being persuaded without being aware, broadcasters are now obligated to disclose sponsored program content. In order to achieve its goal of informing the viewer, a sponsorship disclosure must be effectively communicated. The first step of effective communication is to be noticed and remembered. The present study explores the antecedents of viewers' memory of sponsorship disclosure. Our results show that both audience and disclosure characteristics influence disclosure memory (i.e., recall and recognition). Based on our results, we can draw five important conclusions.

First, regarding the audience characteristics, the extent to which viewers are familiar with the program increases disclosure recall and recognition. This means that viewers are more likely to remember the disclosure when they are familiar with the program. This could be because a familiar program requires fewer resources to process, compared to a program viewers are unfamiliar with, or because the disclosure attracted attention because it was new and unexpected for viewers who are familiar with the program.

Second, with respect to the positive effect of disclosure familiarity, our results support the association hypothesis: Viewers who are familiar with sponsorship disclosure have acquired associations with sponsorship disclosure, leading to greater disclosure recognition. This is in agreement with studies arguing that familiar information requires less cognitive resources than new information (Gao & Lang, 2009; Johnston et al., 1990; Lang, 2000). The results do not support the alternative novelty hypothesis that predicts that disclosure memory is higher if the disclosure is new to viewers.



Third, our study shows that program involvement has a negative effect on disclosure memory. This finding confirms the notion that viewers who are involved with the program most likely attend to the program and consequently are not motivated to process the disclosure. Consequently, as program involvement increases, participants are less likely to recall and recognize the disclosure.

Fourth, with regard to the disclosure characteristics, the results demonstrate that a disclosure displayed at the beginning of a program results in lower disclosure recall and recognition, compared to a disclosure displayed in the middle or at the end of a program. This confirms the idea that a disclosure at the beginning does not stand out, as it is common practice to provide additional textual information at the beginning of a program. At the beginning of the program, viewers are probably distracted by other information. This distraction does not take place for disclosures in the middle or at the end of the program, making it more likely that the disclosure is remembered.

Fifth, although the limited cognitive capacity theory and earlier research suggest a positive effect of disclosure duration, results demonstrate no significant influence of duration on disclosure memory. This means that the opportunity to remember sponsorship disclosure depends on the moment the disclosure is displayed within the program and not on the exposure duration. This finding indicates that an exposure time of six seconds – compared to three seconds – is too limited to increase disclosure memory. Further research should investigate whether extending the duration more would increase disclosure memory.

This study also showed the importance of the measurement of sponsorship disclosure memory through two measures (recall and recognition). The positive effect of disclosure familiarity on disclosure memory was only significant for disclosure recognition and merely approaching marginal significance for disclosure recall. This shows the value of the two different memory measures. Although the recall and recognition scores were correlated, they are formed through different processes (Bradley, 2007; Smit & Neijens, 2011). Recognition indicates whether information is encoded, while recall scores indicate whether the message is processed at a high level and information was stored thoroughly (Greenwald & Leavitt, 1984; Lang, 2000). Hence, our results imply that disclosure familiarity makes it easier to encode the disclosure, but that it does not necessarily mean that the disclosure is deeply processed and stored.

The effects of disclosure timing are ascribed to conventional practices and high information density. However, there are other mechanisms that could also explain the different effects on disclosure memory. For instance, due to the manipulation of disclosure timing, the time between the disclosure and the memory measures (taken after the program) differ between conditions. The time lag increases as the disclosure is placed closer to the beginning of the program, which may lead to a recency effect: Disclosures at the end or in the middle program are better remembered than disclosures at the beginning of the program. In addition, the amount of information viewers are exposed to after the disclosure increases as more time between disclosure and the measurement of disclosure

memory elapses. Since mental storage capacity is limited (Cowan, 2000), this increase in time and the amount of information between disclosure and memory measurement could lead to a decay of disclosure memory. This could explain the lower scores of disclosure recall and recognition for the viewers exposed to a disclosure at the beginning of the program, compared to disclosures in the middle or at the end of the program. Further research may explore the different levels of processing during the disclosure timings and investigate a possible recency effect.

Our findings have important theoretical implications. This study is the first to provide insight into the antecedents of disclosure memory. Our results are in line with the LC4MP (Lang, 2006) and the PCMC model (Buijzen et al., 2010), and show that information processing theories also apply to the phenomenon of sponsorship disclosure. Cognitive resources are limited and as sponsorship disclosure is additional, textual information displayed during a television program, both the disclosure and the television program compete for viewers' resources. Based on Andrews (1988), we tested five audience and message characteristics that influence disclosure memory. Our results support the notion of MacInnis et al. (1991) that viewers must have the ability, motivation, and opportunity to process and consequently remember a message. Viewers are more likely to allocate resources to the disclosure when they are uninvolved with the program (motivation variable), and familiar with the program and sponsorship disclosure (ability variable). Moreover, a disclosure in the middle or the end of a television program enables viewers to allocate resources to the disclosure and remember it (i.e., due to opportunity), than a disclosure at the beginning of the program.

Furthermore, this study has important practical implications. Sponsorship disclosure legislation is fairly new and still in development in both the US and the EU. Prior research highlighted the importance of disclosure memory, as it demonstrated that disclosure only activated persuasion knowledge when it is recalled (Boerman et al., 2012a). To achieve its goal of informing the consumers about sponsored content, it is vital to communicate the disclosure successfully. Our results may therefore be useful in the development of effective and sound sponsorship disclosure, as they indicate several conditions under which disclosures are more likely to be remembered. Drawing on the ability, motivation, and opportunity framework, we can identify some concrete guidelines.

Our results indicate that to increase the ability to process and recognize sponsorship disclosure, viewers should be familiar with sponsorship disclosure. That implies that the ability to process sponsorship disclosure may be increased by making the knowledge that is required to interpret the disclosure available (MacInnis et al., 1991). Hence, interventions that address audience's familiarity with disclosures, such as commercials informing the audience about sponsorship disclosure, may help making disclosures better known and hence more effective. Additionally, to enhance sponsorship disclosure memory, the disclosure should be displayed in the middle or at the end of the program. Furthermore, although the effects of program familiarity and involvement are interesting, they are less manageable in practice. Also, the exposure duration of a disclosure does not appear to



alter disclosure memory.

Although these findings are valuable for theory and practice, we note that only one type of disclosure was investigated in the study. Therefore, we have to be careful generalizing the results. Especially since prior disclosure research demonstrated that the type of disclosure affects the recall of the disclosure (Stewart & Martin, 1994), more research is needed to explore the antecedents of memory of other types of disclosures, such as product placement (PP) logos.

In sum, this study explored how audience and disclosure characteristics influence sponsorship disclosure memory. Sponsorship disclosure aims to inform audiences about sponsored content so they can guard themselves and use their persuasion knowledge to cope with the persuasive attempt. Although disclosure may have implicit effects when viewers do not recall or recognize it, it is unlikely it has its intended effect (Boerman et al., 2012a). Consequently, sponsorship disclosure may be futile when viewers do not remember it. As this study provides insight into when and why viewers remember sponsorship disclosure, it can be seen as a valuable contribution to sponsorship disclosure research and to memorable and possibly more effective sponsorship disclosure.

REFERENCES

- Anderson, J. R., & Bower, G. H. (1973). *Human associative memory*. Washington, DC: Winston.
- Andrews, J. C. (1988). Motivation, ability, and opportunity to process information: Conceptual and experimental manipulation issues. *Advances in Consumer Research*, 15(1), 219-225.
- Audiovisual Media Services Directive. (2010). *Directive 2010/13/EU of the European parliament and of the council*. Retrieved from http://ec.europa.eu/avpolicy/reg/tvwf/index_en.htm
- Avery, R. J., & Ferraro, R. (2000). Verisimilitude or advertising? Brand appearances on prime-time television. *Journal of Consumer Affairs*, 34(2), 217-244.
- Batra, R., & Ray, M. L. (1986). Situational effects of advertising repetition: The moderating influence of motivation, ability, and opportunity to respond. *Journal of Consumer Research*, 12(4), 432-445.
- Boerman, S. C., Van Reijmersdal, E. A., & Neijens, P. C. (2012a). Zijn sponsorvermeldingen in televisieprogramma's effectief? [Are sponsorship disclosures in television programs effective?]. *Tijdschrift Voor Communicatiewetenschap*, 40(4), 46-59.
- Boerman, S. C., Van Reijmersdal, E. A., & Neijens, P. C. (2012b). Sponsorship disclosure: Effects of duration on persuasion knowledge and brand responses. *Journal of Communication*, 62(6), 1047-1064.
- Bradley, S. D. (2007). Dynamic, embodied, limited-capacity attention and memory: Modeling cognitive processing of mediated stimuli. *Media Psychology*, 9(1), 211-239.
- Brennan, I., Dubas, K., M., & Babin, L. A. (1999). The influence of product-placement type and exposure time on product-placement recognition. *International Journal of Advertising*, 18(3), 323-337.
- 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(4), 427-451.
- Cain, R. M. (2011). Embedded advertising on television: Disclosure, deception and free speech rights. *Journal of Public Policy & Marketing*, 30(2), 226-238.
- Cameron, G. T., & Curtin, P. A. (1995). Tracing sources of information pollution: A survey and experimental test of print media's labeling policy for feature advertising. *Journalism & Mass Communication Quarterly*, 72(1), 178-189.
- 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(4), 483-495.
- Celsi, R. L., & Olson, J. C. (1988). The role of involvement in attention and comprehension processes. *Journal of Consumer Research*, 15(2), 210-224.
- Cowan, N. (2000). The magical number 4 in short-term memory: A reconsideration of mental storage capacity. *Behavioral and Brain Sciences*, 24(1), 24-114.
- Federal Communications Commission. (2008). Notice of inquiry and notice of proposed rulemaking in the matter of sponsorship identification rules and embedded advertising. *Federal Register*, 73(143), 43194-43200.
- Gao, Y., & Lang, A. (2009). *Dimensions of information density and cognitive load*. Paper presented at the 59th Annual Conference of the International Communication Association, Chicago, IL. Retrieved from http://www.allacademic.com/meta/p299205_index.html



- Goldman, E. (2006). Stealth risks of regulating stealth marketing: A comment on Ellen Goodman's 'Stealth marketing and editorial integrity'. *Texas Law Review*, 85(11), 11-15.
- Greenwald, A. G., & Leavitt, C. (1984). Audience involvement in advertising: Four levels. *Journal of Consumer Research*, 11(1), 581-592.
- Herbst, K. C., & Allan, D. (2006). The effects of brand experience and an advertisement's disclaimer speed on purchase: Speak slowly or carry a big brand. *International Journal of Advertising*, 25(2), 213-222.
- Hoy, M. G., & Lwin, M. O. (2007). Disclosures exposed: Banner ad disclosure adherence to FTC guidance in the top 100 U.S. web sites. *Journal of Consumer Affairs*, 41(2), 285-325.
- Hudson, S., & Hudson, D. (2006). Branded entertainment: A new advertising technique or product placement in disguise? *Journal of Marketing Management*, 22(5-6), 489-504.
- Janiszewski, C. (1993). Preattentive mere exposure effects. *Journal of Consumer Research*, 20(3), 376-392.
- Johnston, W. A., Hawley, K. J., Plewe, S. H., Elliot, J. M. G., & DeWitt, M. J. (1990). Attention capture by novel stimuli. *Journal of Experimental Psychology: General*, 119(4), 397-411.
- Kim, B., Pasadeos, Y., & Barban, A. (2001). On the deceptive effectiveness of labeled and unlabeled advertorial formats. *Mass Communication & Society*, 4(3), 265-281.
- Kozup, J., Taylor, C. R., Capella, M. L., & Kees, J. (2012). Sound disclosures: Assessing when a disclosure is worthwhile. *Journal of Public Policy & Marketing*, 31(2), 313-322.
- Kuhn, K. L., Hume, M., & Love, A. (2010). Examining the covert nature of product placement: Implications for public policy. *Journal of Promotion Management*, 16(1), 59-79.
- Lang, A. (2000). The limited capacity model of mediated message processing. *Journal of Communication*, 50, 46-70.
- Lang, A. (2006). Using the limited capacity model of motivated mediated message processing to design effective cancer communication messages. *Journal of Communication*, 56, S57-S80.
- Lang, A., Potter, R. F., & Bolls, P. D. (1999). Something for nothing: Is visual encoding automatic? *Media Psychology*, 1(2), 145-163.
- MacInnis, D. J., Moorman, C., & Jaworski, B. J. (1991). Enhancing and measuring consumers' motivation, opportunity, and ability to process brand information from ads. *Journal of Marketing*, 55(4), 32-53.
- Mackworth, J. F. (1963). The duration of the visual image. *Canadian Journal of Psychology*, 17(1), 62-81.
- Matthes, J., Schemer, C., & Wirth, W. (2007). More than meets the eye. Investigating the hidden impact of brand placement in television magazines. *International Journal of Advertising*, 26(4), 477-503.
- Moorman, M., Neijens, P. C., & Smit, E. G. (2007). The effects of program involvement of commercial exposure and recall in naturalistic setting. *Journal of Advertising*, 36(1), 121-137.
- Morgan, F. W., & Stoltman, J. J. (2002). Television advertising disclosures: An empirical assessment. *Journal of Business and Psychology*, 16(4), 515-535.
- Moyer-Gusé, E., & Nabi, R. L. (2010). Explaining the effects of narrative in an entertainment television program: Overcoming resistance to persuasion. *Human Communication Research*, 36(1), 26-52.
- Nebenzahl, I. D., & Jaffe, E. D. (1998). Ethical dimensions of advertising executions. *Journal of Business Ethics*, 17(7), 805-815.

- Neijens, P. C., & Smit, E. G. (2003). Audience reactions towards non-spot advertising: Influence of viewer and program characteristics. In F. Hansen, & L. Bech Christensen (Eds.), *Branding and advertising* (pp. 266-283). Copenhagen: CBS Press.
- Petty, R. E., Cacioppo, J. T., Strathman, A. J., & Priester, J. R. (2005). To think or not to think. Exploring two routes of persuasion. In T. C. Brock, & M. C. Green (Eds.), *Persuasion. Psychological insights and perspectives* (2nd ed., pp. 81-116). Thousand Oaks, CA: Sage.
- Popper, E. T., & Murray, K. B. (1989). Communication effectiveness and format effects on in-ad disclosure of health warnings. *Journal of Public Policy & Marketing*, 8(Health and Safety Issues), 109-123.
- Rossiter, J. R. (2011). *Measurement for the social sciences. The C-OAR-SE method and why it must replace psychometrics*. New York: Springer Science+Business Media.
- Singh, S. N., & Cole, C. A. (1993). The effects of length, content, and repetition on television commercial effectiveness. *Journal of Marketing Research*, 30(1), 91-104.
- Slater, M. D., & Rouner, D. (2002). Entertainment-education and elaboration likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, 12(2), 173-191.
- Smit, E. G., & Neijens, P. C. (2011). The march to reliable metrics: A half-century of coming closer to the truth. *Journal of Advertising Research*, 51(1), 124-135.
- Smit, E. G., Van Reijmersdal, E. A., & Neijens, P. C. (2009). Today's practice of brand placement and the industry behind it. *International Journal of Advertising*, 28(5), 761-782.
- Stewart, D. W., & Martin, I. M. (1994). Intended and unintended consequences of warning messages: A review and synthesis of empirical research. *Journal of Public Policy & Marketing*, 13(1), 1-19.
- Sung, Y., de Gregorio, F., & Jung, J. (2009). Non-student consumer attitudes towards product placement. *International Journal of Advertising*, 28(2), 257-285.
- Van Reijmersdal, E. A., Tutaj, K., & Boerman, S. C. (2013). The effects of brand placement disclosures on scepticism and brand memory. *Communications. The European Journal of Communication Research*, 38(2), 127-147.
- Woods, L. (2008). The consumer and advertising regulation in the television without frontiers and audiovisual media services directives. *Journal of Consumer Policy*, 31, 63-77.
- Zaichkowsky, J. L. (1994). The personal involvement inventory: Reduction, revision, and application to advertising. *Journal of Advertising*, 23(4), 59-70.