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Sponsorship Disclosure: Effects of Duration on Persuasion Knowledge and Brand Responses

Sophie C. Boerman, Eva A. van Reijmersdal, & Peter C. Neijens

Amsterdam School of Communication Research (ASCoR), University of Amsterdam, 1012 CX Amsterdam, The Netherlands

This study examined how sponsorship disclosure on television influences persuasion knowledge and brand responses (i.e., brand memory and brand attitude). Moreover, we tested whether extending disclosure duration increases its effect. By conducting an experiment (N = 116) we compared the effects of no disclosure to a 3-second and a 6-second disclosure. Results showed that especially a 6-second disclosure activates conceptual and consequently attitudinal persuasion knowledge. Regarding brand responses, we found that disclosure directly increased brand memory, regardless of duration. In addition, a 6-second disclosure indirectly resulted in less favorable brand attitudes through higher rates of attitudinal persuasion knowledge. Theoretically, this study provides insights into how sponsorship disclosure influences the persuasion process and the role of persuasion knowledge within this process.

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Sponsorship disclosure: Effects of duration on persuasion knowledge and brand responses

To reach the consumer, advertisers are increasingly integrating brands, products, or persuasive messages into traditionally noncommercial contexts, such as television programs, magazines, and computer games (Cain, 2011; Van Reijmersdal, Neijens, & Smit, 2007). This phenomenon is called *sponsored content*. Sponsored content can take various forms and encompasses the simple placement of a product or brand into a television program, but also brand integration whereby brands play a key role in plotlines and the creative development of programs (Hudson & Hudson, 2006). Both forms of sponsored content are common and especially the use of brand integration is growing. Brand integration is even seen as “the future of advertising” (Hudson & Hudson, 2006; Smit, Van Reijmersdal, & Neijens, 2009). Examples of sponsored

Corresponding author: Sophie C. Boerman; e-mail: s.c.boerman@uva.nl

content are the insertion of Nike shoes in the *NBA 2K* basketball games and the show *America's Next Top Model* in which the winner wins a \$100,000 Cover Girl Cosmetics contract and various episodes feature competitions using Cover Girl products.

Since sponsored content is embedded in noncommercial media content, the source and persuasive intent of the message is not obvious. This makes it harder for viewers to distinguish between editorial and commercial content. Consequently, viewers may process the persuasive message less critically than traditional advertising (Nebenzahl & Jaffe, 1998), which could lead to unaware persuasion. Therefore, sponsored content is often referred to as deceptive and misleading (Cain, 2011; Nebenzahl & Jaffe, 1998), and is a serious cause of concern for policy makers and consumer organizations. As a result, sponsorship disclosure on television is now obligatory in the European Union, while such regulations are being developed in the United States (Cain, 2011). Although the application and use differ between countries, the principle is the same: Sponsorship disclosure should 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).

Only two studies have investigated the effects of sponsorship disclosures on television. Campbell, Mohr, and Verlegh (2007) found that disclosure can decrease top-of-mind awareness of the brand and alters brand attitude depending on its timing in the television program. Dekker and Van Reijmersdal (2010) focused on different disclosure types but found no significant effects of disclosures on brand attitude and product claim acceptance. Other studies showed a positive effect on brand recall of a disclosure that lists all products appearing in a movie (Bennett, Pecotich, & Putrevu, 1999), and a negative influence on brand attitude of disclosures in radio shows (Wei, Fischer, & Main, 2008).

Interestingly, these studies tested how disclosures alter the effect of sponsored content on brand memory and persuasion. However, the primary goal of disclosures is to discourage deception by activating persuasion knowledge (Cain, 2011). Persuasion knowledge comprises a general understanding of persuasion and knowing how to cope with persuasive attempts (Friestad & Wright, 1994). There is a lack of research investigating the effect of sponsorship disclosures on persuasion knowledge. It is unclear whether sponsorship disclosures are able to inform the audience about content's commercial intent. In addition, activating persuasion knowledge could play a role in the effects of disclosure on brand responses such as brand memory and persuasion. No research has yet examined this mediating role of persuasion knowledge in the persuasion process. Moreover, most persuasion knowledge research has only directed the cognitive aspect of persuasion knowledge and does not consider its attitudinal dimension. Therefore, this study focuses on both conceptual and attitudinal persuasion knowledge and how these influence the effect of sponsored content on brand responses.

Current regulations obligate broadcasters to display a disclosure for at least 3 seconds (e.g., Ofcom, 2011). However, we do not know whether 3 seconds is enough

to inform viewers about sponsored content and its persuasive intent. People may require more time to notice and process a disclosure displayed during a television program. Therefore, in this study we test the effects of the usual 3-second disclosure and examine the effect of doubling the display time.

The aim of this study is to examine how sponsorship disclosure influences persuasion knowledge (conceptual and attitudinal) and brand responses (i.e., brand memory and brand attitude). In addition, we test whether extending the duration of the disclosure could influence its impact. Theoretically, we aim to obtain insight into how sponsorship disclosure influences the persuasion process and the role of persuasion knowledge within this process. To examine this, we conducted an experiment in which we compared the effects of no disclosure to a 3-second and a 6-second disclosure.

Effects of sponsorship disclosure on persuasion knowledge

The Persuasion Knowledge Model (Friestad & Wright, 1994) describes how people develop general knowledge about persuasion and how people use this knowledge to interpret, evaluate, and respond to persuasion attempts. The model emphasizes that people need to be aware of a persuasion attempt before they can activate persuasion knowledge. When a persuasion attempt is recognized, people can retrieve and apply their general persuasion knowledge to cope with the attempt. This is a cognitive process. However, Rozendaal, Lapierre, Van Reijmersdal, and Buijzen (2011) argue that persuasion knowledge (referred to as advertising literacy) research and advertising theories should not only focus on the cognitive aspects of persuasion knowledge but should also take into account its attitudinal aspect. Hence, they divide persuasion knowledge into a conceptual and an attitudinal dimension.

Conceptual persuasion knowledge is the cognitive dimension that embraces the recognition of advertising, its source and audience, and the understanding of the advertising's persuasive intent, selling intent, and tactics (Rozendaal *et al.*, 2011). With the inclusion of a sponsorship disclosure, legislators intend to increase consumers' awareness of the commercial nature of sponsored content so that they can distinguish between editorial and commercial content. Consequently, viewers will be able to understand the persuasive intent of the message and activate cognitive defenses (d'Astous & Chartier, 2000; Nebenzahl & Jaffe, 1998). Hence, as the main goal of disclosure is to raise awareness of the commercial nature of content, this study focuses on one aspect of conceptual persuasion knowledge, that is, the recognition of advertising. Supposing disclosure has its intended effect, we expect a sponsorship disclosure to enable viewers to recognize content as advertising and to activate conceptual persuasion knowledge.

Viewers may also use attitudinal persuasion knowledge to process a message (Rozendaal *et al.*, 2011). Attitudinal persuasion knowledge includes attitudinal mechanisms that can be effective in coping with advertising. The attitudinal dimension comprises critical attitudes, such as skepticism and disliking, applied to a specific persuasion attempt. In other words, it involves critical feelings

about honesty, trustworthiness, and credibility. Sponsorship disclosure may affect attitudinal persuasion knowledge as a result of the activation of conceptual persuasion knowledge. When viewers recognize the persuasion attempt, they may realize that the program and the brand are not neutral and are trying to persuade. This awareness can make the viewer more critical toward the sponsored content. This effect can be explained by the reactance theory (Brehm, 1966). According to this theory, people desire to maintain their freedom, and do not want to be manipulated. In a situation where people feel they are being influenced, they will oppose the persuasive appeal. Therefore, people tend to resist persuasion attempts when they recognize them as such (Sagarin, Cialdini, Rice, & Serna, 2002; Wei *et al.*, 2008). Hence, we propose that the activation of conceptual persuasion knowledge will consequently result in higher attitudinal persuasion knowledge:

H1a: Sponsorship disclosure activates conceptual persuasion knowledge, which consequently leads to higher scores of attitudinal persuasion knowledge.

In addition, we propose that the effect on persuasion knowledge increases as the duration of the disclosure increases. No research has yet investigated the effect of disclosure durations. However, research has shown that longer message duration provides more opportunities for viewers to attend to a message (Janiszewski, 1993) and to cognitively process it (Buijzen, Van Reijmersdal, & Owen, 2010; Mackworth, 1963). The limited capacity model (Lang, 2000) can explain why the effects of a disclosure can change with its duration. People need cognitive resources to process messages and these resources are limited. Consequently, we cannot process all information at once (Buijzen *et al.*, 2010; Lang, 2000).

During a television program, viewers are exposed to the disclosure and program content simultaneously. Hence, when a viewer watches a television program, he or she allocates the resources that are required to process it. When an additional message is integrated (e.g., a sponsorship disclosure), the viewer may not have the necessary cognitive resources available to process both the disclosure and the content of the program. Extending the duration of the disclosure provides viewers more opportunities and time to allocate resources to the disclosure and to process it, making it more likely that the disclosure will have an effect. This leads to the following hypothesis:

H1b: The effect of sponsorship disclosure on persuasion knowledge increases with disclosure duration.

Effects of sponsorship disclosure on brand responses

Next to activating persuasion knowledge, a sponsorship disclosure could also alter the effect of the sponsored content and hence elicit consequences that are not its primary goal. In the following section, we will discuss the possible effects of a disclosure and its duration on brand memory and brand attitude.

Brand memory

A brand only has a chance of entering short- or long-term memory when viewers pay attention to it (Anderson, 1995). Hence, only when viewers attend to the sponsored

content and process the brand information, the brand can enter viewers' memory (Robinson, 1995). Moreover, the greater the activation of a brand in the brain, the greater the likelihood that it is explicitly remembered (Yang & Roskos-Ewoldsen, 2007). Since a disclosure informs viewers about the presence of sponsored content, it puts more emphasis on the sponsored content and the brand that is making the persuasive attempt. Hence, the disclosure functions as an additional prime for the brand. The disclosure may activate associations in memory that are connected to the brand. Consequently when viewers are asked whether they recall any brands, it is easier to retrieve the brand from memory because there are more associations with the brand. In other words, the disclosure increases the chance that viewers attend to the sponsored content and the brand, and makes it easier to retrieve it from their memory. Therefore, we propose that sponsorship disclosure leads to greater brand memory. In accordance with this proposition, Bennett *et al.* (1999) found that sponsorship disclosures in movies had a positive effect on brand recall.

Moreover, 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 (Gao & Lang, 2009). As the brand is mentioned in the disclosure, we expect that a 6-second disclosure will enhance brand memory more than a 3-second disclosure:

H2a: Sponsorship disclosure increases brand memory; this effect increases with disclosure duration.

Furthermore, disclosures could elicit better brand memory indirectly through conceptual persuasion knowledge. When the disclosure activates conceptual persuasion knowledge, this means sponsored content is recognized as advertising. To be able to retrieve and apply persuasion knowledge, viewers must process the message elaborately (Buijzen *et al.*, 2010). Such levels of processing require high attention to the message, in this case the sponsored content (Petty, Cacioppo, Strathman, & Priester, 2005). This means that the activation of conceptual persuasion knowledge requires attention to and awareness of the sponsored content and brand. Hence, when the disclosure activates conceptual persuasion knowledge, this increases attention to the brand even more, leading to greater brand memory:

H2b: The effect of the disclosure and its duration on brand memory is mediated by conceptual persuasion knowledge.

Brand attitude

Although consumers do enjoy and like specific advertisements (Smit & Neijens, 2000), the majority of consumers are quite skeptical toward advertising (Calfee & Ringold, 1994; Obermiller & Spangenberg, 2000). Reminding them that the program they are watching contains sponsored content could therefore negatively influence what people think of the brand. As discussed above, a disclosure may serve as an extra cue for viewers to attend to the sponsored content and brand. Higher

levels of attention to advertising have shown to enable people to activate persuasion knowledge (Campbell, 1995) and use their cognitive defenses, leading to diminished persuasion (Buijzen et al., 2010; Greenwald & Leavitt, 1984; Petty, Ostrom, & Brock, 1981). As people usually do not want to be persuaded (Brehm, 1966), people tend to resist persuasion attempts when they recognize them as such (Sagarin, Cialdini, Rice, & Serna, 2002; Wei et al., 2008). In other words, when sponsorship disclosure activates persuasion knowledge and generates more critical attitudes, this may lead to resistance of the persuasive message.

Research on forewarnings of noncommercial persuasive messages, such as political statements, confirms that revealing the persuasive intent leads to resistance. Forewarnings have proven to result in less opinion change (Allyn & Festinger, 1961), less favorable perceptions of the communicator (Allyn & Festinger, 1961; Campbell & Kirmani, 2000), increased counter arguing (Petty & Cacioppo, 1977; Petty et al., 1981), and less favorable attitudes toward the message (Jacks & Devine, 2000; Wood & Quinn, 2003). When resistance of a persuasive message occurs, it is unlikely that attitudes become more favorable (Tormala & Petty, 2002). In line with this assumption, several studies have shown that the activation of persuasion knowledge leads to a less favorable brand attitude (Campbell, 1995; Lee, 2010; Wei et al., 2008).

Next to the forewarning studies, a few studies investigated the relation between sponsorship disclosures and brand evaluations, however, each leading to different results. Wei et al. (2008) showed a significant negative influence of sponsorship disclosures in radio shows, while Campbell et al. (2007) found that depending on their appearance, disclosures on television can have a positive or a negative effect on brand attitude. Other studies found no significant effect of disclosure on brand liking (Bennett et al., 1999) and brand attitude (Dekker & Van Reijmersdal, 2010). The results of these studies are inconclusive and do not include the influence of persuasion knowledge. Therefore, we also test the effect of a disclosure and its duration on brand attitude through persuasion knowledge. As attitudinal persuasion knowledge may be a result of conceptual persuasion knowledge, we will test the effects of both conceptual and attitudinal persuasion knowledge. On the basis of the reactance theory and forewarning literature we propose:

H3a: Sponsorship disclosure has a negative effect on brand attitude; this effect increases with disclosure duration.

In addition, we hypothesize:

H3b: The effect of the disclosure and its duration on brand attitude is mediated by persuasion knowledge.

Method

Participants and procedure

In total, 209 Dutch college students participated in our experiment. The average age was 22.21 ($SD = 3.36$), 77% were female. Participants were randomly assigned to one of three conditions.

Participants were exposed to either a 3-second disclosure, a 6-second disclosure, or no disclosure (the control condition). Participants were asked to sit down in isolated cubicles behind a computer and to read the instruction before watching a television program. Once participants had watched the whole program, they could directly proceed to the questionnaire. The questionnaire started with control variables regarding the television program (i.e., program familiarity and program involvement), then asked about the brand (i.e., brand recall, brand attitude, and brand familiarity) and participants' persuasion knowledge (i.e., conceptual and attitudinal), and ended with other control variables (recall of disclosure, product interest, and demographics). By measuring the brand responses before persuasion knowledge, we made sure that the brand responses were the result of the stimulus and not a result of the questions about advertising and critical attitudes toward advertising as these reveal the commercial nature of the television program. The experiment took about half an hour and the participants received €8 for their participation.

Materials

The stimulus materials consisted of an edited episode of the television program *MTV Was Here*. The program is aired weekly and each episode includes three or four items on lifestyle, fashion, parties, music, and gadgets. The program used in this study lasted about 14 minutes and was a compilation of three items from three original episodes. The editing was done by a professional and the structure of the edited episode was the same as the original program. The first item was a report of a dance improvisation event and the third item was an interview with DJ Tiësto. The second item incorporated the sponsored content as it discussed a new brand of sneakers, Alive Shoes, which links shoes with social networking sites. In the item, the presenter visits the Alive Shoes store and talks to the creator of the shoes who explains the philosophy of the shoes and the Website that is linked to them. In addition, they take a picture of the presenter while wearing the shoes and link her to the Alive Shoes social network on the Website. The item was 4 minutes and 20 seconds long. The shoes were visible both in the background and very prominently for a total of 1½ minutes and the brand name was mentioned seven times. The disclosure that was inserted in the program in the experimental conditions stated: "This program contains advertising by Alive Shoes." The disclosure was displayed at the upper right corner of the screen for 3 or 6 seconds and covered 2.5% of the screen (which is comparable to the size of common subtitles) and was clearly readable. It mentioned both the brand and the fact that the brand is advertising in the program. This is in accordance with new regulation proposals in the United States (Cain, 2011).

Measures

Persuasion knowledge

To measure persuasion knowledge we developed two measures corresponding to the conceptual and attitudinal dimensions of persuasion knowledge. *Conceptual*

persuasion knowledge (conceptual PK) was measured by asking participants to indicate on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) to what extent the item about Alive Shoes was advertising ($M = 5.62$, $SD = 1.41$). According to Rossiter (2011) a single-item indicator is sufficient to measure a concrete, singular object.

We measured participants' critical feelings toward the sponsored content by creating an *attitudinal persuasion knowledge* scale (attitudinal PK). Attitudinal PK was measured by asking participants whether participants agreed (1 = *strongly disagree*, 7 = *strongly agree*) with the statement, "I think the item about Alive Shoes in *MTV Was Here* is . . ." followed by five attributes based on a scale measuring source trustworthiness (Ohanian, 1990): "honest" (reversed), "trustworthy" (reversed), "convincing" (reversed), "biased," and "not credible." Factor analysis revealed the items load on one factor (Eigenvalue = 2.78; explained variance = 55.64%; Cronbach's alpha = .79). High scores of attitudinal PK correspond to more distrust, whereas low scores correspond to less critical feelings ($M = 3.76$, $SD = 1.09$).

Brand memory

Brand memory was measured by asking participants whether they recalled seeing any brands in the episode of *MTV Was Here*. If they answered yes, they could fill out which brands. Brand recall is coded 1 (*mentioned Alive Shoes*) and 0 (*did not mention Alive Shoes*) and 51% of the participants mentioned Alive Shoes.

Brand attitude

Brand attitude was measured using six 7-point semantic differential scales: bad/good, unpleasant/pleasant, unfavorable/favorable, negative/positive, dislike/like, and poor quality/high quality (e.g., Bruner, 2009; Campbell, 1995). Factor analysis revealed the items load on one factor (Eigenvalue = 4.10; explained variance = 68.27%; Cronbach's alpha = .90). The mean score of the six items is used as a measurement of brand attitude ($M = 4.81$, $SD = 1.11$).

Control variables

A number of control variables were measured to make sure that effects of disclosure duration were not caused by other differences between the experimental groups. To measure *program familiarity* and *program viewing frequency*, we asked participants whether they knew the television program *MTV Was Here* (0 = *no*, 1 = *yes*) and how often they watched the program (1 = *never*, 2 = *once or less a month*, 3 = *twice or three times a month*, 4 = *weekly*, 5 = *daily*). Most participants (58%) did not know the program and 68% ($SD = 0.64$) never watched the program. We measured *program involvement* using ten 7-point semantic differential scales from Zaichkowsky's (1994) personal involvement inventory. The mean score of the 10 items is used as a measure of program involvement (Eigenvalue = 5.16; explained variance = 51.56%; Cronbach's alpha = .89, $M = 4.23$, $SD = 0.87$). Furthermore, we asked participants whether they were *familiar* with the brand before participating in the study (96% said no) and

whether they *owned* the shoes (100% said no). Based on a scale by Van Reijmersdal, Neijens, and Smit (2007), *product interest* was measured by asking participants to indicate to what extent they agreed with the items (1 = *strongly disagree*, 7 = *strongly agree*): “I like buying shoes,” “I like to watch programs about shoes on television,” and “I am interested in shoes” (Eigenvalue = 2.33; explained variance = 77.65%; Cronbach’s alpha = .86, $M = 4.66$, $SD = 1.53$). *Recall of disclosure* 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*). Finally, *sex* and *age* were measured.

Results

Fifty-two percent of the participants ($n = 93$) that were exposed to a disclosure indicated they did not recall the disclosure. Because we focus on the effects of disclosure duration, only participants that recalled the disclosure were included in the analyses, leaving a sample of 116 participants (control $n = 30$, 3-second disclosure $n = 46$, 6-second disclosure $n = 40$). There was no significant difference in recall of disclosure between the 3- and 6-second conditions, $\chi^2(1) = 0.68$, $p = .409$.

Randomization

The experimental groups did not differ with respect to sex, $\chi^2(2) = 4.45$, $p = .108$, age, $F(2, 113) = 0.65$, $p = .522$, program familiarity, $\chi^2(2) = 1.58$, $p = .455$, program viewing frequency, $\chi^2(4) = 0.11$, $p = .998$, product interest, $F(2, 113) = 0.14$, $p = .872$, and program involvement, $F(2, 113) = 0.32$, $p = .728$. In addition, since 96% of the participants were not familiar with Alive Shoes before participating in the study, $\chi^2(2) = 2.34$, $p = .311$, and no participant owned the shoes, the program and/or the disclosure are most likely the main antecedents of brand attitude. We included program involvement and product interest as control variables in all analyses, to make sure that they do not confound the effects.

Persuasion knowledge

To test H1a and H1b, we used Preacher and Hayes’ (2008) method that estimates the path coefficients in a mediator model and generates 95% bootstrap confidence intervals for total and specific indirect effects of disclosure duration on attitudinal PK through conceptual PK. This method uses 5,000 bootstrapped samples to estimate the bias corrected and accelerated confidence intervals (BCACI). To test the effect of any disclosure compared to no disclosure, and the effect of disclosure duration, we used orthogonal contrast coding. We constructed two contrast variables, the first corresponding to a contrast of no disclosure versus the 3- and 6-second disclosures, and the second corresponding to a contrast between the 3- and 6-second disclosures.

The results showed that, controlling for program involvement and product interest, sponsorship disclosure had a positive effect on conceptual PK ($b = .71$, $p = .016$). Participants who were exposed to a 3- or a 6-second disclosure had significant higher

conceptual PK than participants that were not exposed to a disclosure. A disclosure did not directly influence attitudinal PK ($b = .24, p = .222$). However, conceptual PK has a significant positive effect on attitudinal PK ($b = .13, p = .042$) and results showed a significant indirect effect (indirect effect = $.09, SE = 0.07, 95\% BCACI [.01, .29]$).¹ This means that a sponsorship disclosure increases conceptual PK, which consequently leads to higher scores in attitudinal PK, supporting H1a.

With regard to disclosure duration (H1b), results showed that, controlling for program involvement and product interest, there was no difference in conceptual PK between the 3- and the 6-second disclosure ($b = .19, p = .516$). This means there was no significant effect of the independent variable (disclosure duration) on the mediator (conceptual PK), and hence there was no mediation or indirect effect (indirect effect = $.02, SE = 0.04, 95\% BCACI [-.03, .14]$). However, results did show a significant direct effect of a 6-second disclosure on attitudinal PK, compared to a 3-second disclosure ($b = .42, p = .042$). This means that, although there was no difference in conceptual PK between the 3-second and 6-second disclosure, attitudinal PK was significantly higher for the participants who were exposed to a 6-second disclosure. H1b is thus supported for attitudinal PK.

Brand responses

Brand memory

To test the direct effect of disclosure duration on brand memory, we conducted a logistic regression analysis with disclosure duration as categorical predictor and program involvement and product interest as control variables. Again, we used orthogonal contrasts to compare the effect of any disclosure compared to no disclosure, and the effect of a 6-second disclosure compared to a 3-second disclosure. The results in Table 1 show that exposure to any disclosure significantly increase the odds of recalling the brand compared to no disclosure. After being exposed to a disclosure participants are more likely to recall the brand ($-2LL = 144.24, Nagelkerke R^2 = .18, \chi^2(4) = 16.54, p = .002$). The results show no significant difference in brand recall between the 3- and 6-second disclosure. This means that, controlling for program involvement and product interest, disclosure leads to greater brand memory, regardless of its duration. Hence, H2a is partly supported.

Mediation analyses with the orthogonal contrasts as independent variables and program involvement and product interest as covariates revealed that the confidence intervals for conceptual PK did contain zero (see Table 2). Hence, there is no significant mediation or indirect effect of disclosure duration on brand memory through conceptual persuasion knowledge, and H2b is not supported.

Brand attitude

An analysis of covariance was conducted to test the effects of disclosure duration on brand attitude, with program involvement and product interest as covariates. The results showed no statistically significant main effect of disclosure duration on brand attitude, $F(2, 111) = 0.39, p = .675, \eta^2 = .01$. Brand attitudes did not differ after no

Table 1 Summary of Logistic Regression for Disclosure Duration Predicting Brand Memory, Controlled for Program Involvement and Product Interest

Variable	<i>b</i>	<i>SE b</i>	Odds Ratio
Disclosure duration			
No disclosure versus 3- and 6-second disclosure	1.74	.50	5.67***
3- versus 6-second disclosure	0.21	.45	1.24
Program involvement	0.48	.26	1.62 [†]
Product interest	-0.06	.14	.95
Constant	-1.90	1.10	.15 [†]

Note: [†] $p < .10$; *** $p < .001$.

Table 2 Indirect Effect of Disclosure Duration on Brand Memory and Brand Attitude Through Persuasion Knowledge, Controlled for Program Involvement and Product Interest

Variable	Indirect effect	<i>SE</i>	95% BCACI	
			<i>LL</i>	<i>UL</i>
Disclosure duration: No versus 3- and 6-second disclosure				
Brand recall				
Conceptual PK	-.03	.13	-.36	.19
Brand attitude				
Conceptual PK	.02	.05	-.07	.14
Attitudinal PK	-.09	.08	-.28	.06
Disclosure duration: 3- versus 6-second disclosure				
Brand recall				
Conceptual PK	-.02	.06	-.21	.06
Brand attitude				
Conceptual PK	.00	.02	-.02	.09
Attitudinal PK	-.15	.08	-.36	-.02

BCACI = bias corrected and accelerated confidence interval; LL = lower limit; PK = persuasion knowledge; UL = upper limit.

disclosure ($M = 4.91$, $SD = 1.19$), the 3-second disclosure ($M = 4.74$, $SD = 1.05$) or the 6-second disclosure ($M = 4.82$, $SD = 1.15$). This means that H3a is not supported.

To test for a possible indirect effect we again used Preacher and Hayes' (2008) method with the two orthogonal contrast variables as independent variables. The results in Table 2 show that, although there is no significant total effect of disclosure duration on brand attitude, we did find a significant indirect effect. The confidence intervals for conceptual PK did contain zero, meaning that there is no significant mediation or indirect effect of disclosure duration on brand attitude through conceptual PK. Regarding attitudinal PK, Table 2 shows that there is no significant indirect effect of any disclosure (vs. no disclosure) via attitudinal PK on brand attitude, as the confidence interval includes zero. In other words, a disclosure does not result

in less favorable brand attitudes as a result of higher attitudinal PK (i.e., more distrust). However, there is a significant indirect effect when comparing the 6-second disclosure to the 3-second disclosure (indirect effect = $-.15$, $SE = 0.08$, 95% BCACI [$-.36, -.02$]). The 6-second disclosure results in significant less favorable brand attitudes ($b = -.36$, $p < .001$) as a result of higher attitudinal PK ($b = .40$, $p = .046$) compared to the 3-second disclosure. An additional analysis with indicator dummy variables comparing the 6-second disclosure to the control condition, controlling for the 3-second disclosure, program involvement and product interest, showed the same significant indirect effect of the 6-second disclosure compared to no disclosure (indirect effect = $-.16$, $SE = 0.10$, 95% BCACI [$-.40, -.01$]). A 6-second disclosure increases the critical feelings toward the sponsored program item, leading to a less favorable brand attitude. Hence, the results offer support for H3b, but only via attitudinal PK and only for a 6-second disclosure.

Discussion

This study examined the influence of sponsorship disclosure and its duration on persuasion knowledge (conceptual and attitudinal) and brand responses (i.e., brand memory and brand attitude). Our outcomes emphasize that disclosures affect both conceptual and attitudinal persuasion knowledge and the effects of sponsored content on brand memory and brand attitude. In addition, the effect of sponsorship disclosure depends on its duration. This means that a disclosure can elicit its intended effect (i.e., increase persuasion knowledge) but also influences brand responses.

The primary goal of disclosures is to inform audiences about sponsored content and consequently raise awareness of advertising and its persuasive intent. We found that disclosures can activate both conceptual and attitudinal persuasion knowledge. First, sponsorship disclosure activates conceptual persuasion knowledge. This means that after exposure to a sponsorship disclosure, viewers are better able to distinguish commercial from editorial content compared to viewers who are not exposed to a disclosure. Second, as a result of the activation of conceptual persuasion knowledge, viewers show higher rates of attitudinal persuasion knowledge (i.e., more distrust of the sponsored content). These results emphasize the necessity to take both the cognitive and attitudinal dimension of persuasion knowledge into account, in theory and in future research. Disclosures can directly lead to recognition of advertising and consequently influence critical feelings toward the advertising.

In addition, in accordance with our expectations based on the limited capacity theory (Lang, 2000), our results show that especially a longer disclosure duration leads to these effects. This study shows that the duration of the disclosure influences its effect on attitudinal persuasion knowledge. Although there is no difference in conceptual persuasion knowledge after exposure to a 3- or 6-second disclosure, attitudinal persuasion knowledge is significantly higher for the participants who were exposed to a 6-second disclosure. This means that, when conceptual persuasion knowledge is activated, a 6-second disclosure leads to even more critical attitudes

toward the sponsored content (i.e., higher attitudinal persuasion knowledge) than a 3-second disclosure. As message processing theories claim that high levels of attention and processing are needed to activate persuasion knowledge (Buijzen *et al.*, 2010; Campbell, 1995; Greenwald & Leavitt, 1984; Petty *et al.*, 1981), our results show that especially after a 6-second disclosure viewers process the content elaborately enough to generate critical attitudes.

With regard to brand responses, we found that sponsorship disclosure elicits two processes. The first process is a direct effect of sponsorship disclosure on brand memory. Results show that disclosures, regardless of their duration, lead to greater brand memory. The disclosure repeats the brand name and exposes the viewer to the brand name in a different manner, namely in an additional text which is not directly embedded in the program. Hence, in accordance with learning theories and associative memory theory (Anderson, 1995; Robinson, 1995), the disclosure functions as an additional prime and enhances viewer's recall of the brand by increasing the attention to and the processing of the brand. The effect of a disclosure on brand memory is not mediated by persuasion knowledge. Participants' conceptual persuasion knowledge did not influence brand recall.

The second process that emerges from our results is an indirect effect of the disclosure on brand attitude through attitudinal persuasion knowledge. Sponsorship disclosure does not directly alter consumers' perception of the brand. However, a 6-second disclosure leads to less favorable brand attitudes as a result of higher rates of attitudinal persuasion knowledge. When viewers are informed for 6 seconds about the appearance of sponsored content, they report higher rates of attitudinal persuasion knowledge (i.e., more distrust of the sponsored content), which consequently results in resistance to persuasion, as showed by more negative brand attitudes. This is in accordance with forewarning literature that showed that revealing the persuasive intent of a message results in skepticism (Jacks & Devine, 2000; Wood & Quinn, 2003) and resistance (Allyn & Festinger, 1961; Lee, 2010; Petty & Cacioppo, 1977; Petty *et al.*, 1981; Quinn & Wood, 2004). Conceptual persuasion knowledge does not have the same effect. Contrary to earlier findings (Sagarin *et al.*, 2002; Wei *et al.*, 2008) and the reactance theory (Brehm, 1966), people do not resist the persuasive appeal of the sponsored content as soon as they recognize the persuasive attempt. This means that the recognition of sponsored content is not enough to alter its persuasive effect. People need to generate a certain degree of distrust and skepticism toward the advertising before a disclosure actually alters their brand attitude.

A total of 52% of our participants did not recall seeing a disclosure. Since this did not appear to relate to disclosure duration, displaying a disclosure longer does not seem to influence the chance people recall the disclosure. This leaves us wondering why television viewers do or do not recall a disclosure. Since disclosures have only just been introduced, we would expect viewers to notice them in television programs due to their novelty. We therefore suggest that further research should investigate what makes people notice and pay attention to a disclosure and consequently what makes them recall the disclosure. In addition, participants may indicate that they

did not remember the disclosure, because they misunderstood the disclosure as part of the advertising message and not as a message in its own right. More research is needed to investigate whether viewers understand the disclosure and whether this is related to their recall of the disclosure. In addition, it would be interesting to study whether in the future the decay of novelty and a learning effect would cause more routine for viewers. This may change the degree to which viewers notice and respond to disclosures.

This study shows the importance of a disclosure and of its duration, and given the paucity of previous research on this topic, we think this study is an initial and important step into a complex area. This study shows the theoretical importance of both conceptual and attitudinal persuasion knowledge within the persuasion process, and that the effects of sponsorship disclosure depend on display duration. However, we need to use caution in generalizing the results because of several limitations. First, we need to take into account the context in which we tested the effects. Our results show that a 6-second disclosure has an effect on both persuasion knowledge and brand responses in this particular program, with this sponsored content, this brand, for this audience and this disclosure. More research is needed to test the effects of different types of disclosures, with different durations, in other television programs with other sponsored content. This could also show whether 6 seconds is also necessary in other contexts. Nonetheless, we can conclude that longer disclosure duration increases the effect of the disclosure on persuasion knowledge and brand responses.

Second, we focused on one specific disclosure, while the characteristics of disclosures are different between and within countries. Some broadcasters only display a PP (product placement) logo, while others use disclosures similar to the one used in this study. Since health and commercial disclaimer research has shown that disclosure characteristics affect their consequences (Liebert, Sprafkin, Liebert, & Rubinstein, 1977; Mason, Scammon, & Fang, 2007), future research is needed to understand the effects of different types and contents of disclosures.

Third, we only considered sponsored content in which the brand played a very central role in the item. The program item was an example of brand integration in which the product played a key role both visually and verbally. Further research is needed to investigate the effects of disclosures for other types of sponsored content, such as traditional brand placements.

As a sponsorship disclosure attempts to raise awareness of the brand's presence to avoid unaware persuasion, it might prevent or reduce a mere exposure effect. The mere exposure effect is the emerging preference for an object due to repeated exposures to this object (Zajonc, 2001). Mere exposure effects appear to be clearer and stronger when subjects are unaware of the repeated exposure (Zajonc, 2001). Hence, when a disclosure makes the viewer more aware of the exposure to the brand, this awareness could reduce or even prevent the mere exposure effect of sponsored content. Although our results do not provide evidence for differences in brand attitude between groups, further research might explore this process.

Notwithstanding the limitations, our results show that sponsorship disclosure is an effective tool to inform audiences about embedded advertising such as sponsored content, and to elicit more distrust toward the advertising. Theoretically, our findings provide new insights into how sponsorship disclosure influences the persuasion process and the role of persuasion knowledge within this process. Our results also emphasize the importance of separating persuasion knowledge into a conceptual and an attitudinal dimension. Furthermore, this study has important practical implications for the current legislation. Our findings show that the current obligated 3-second disclosure (Ofcom, 2011) does achieve its goal, as it activates conceptual and consequently attitudinal persuasion knowledge. However, when conceptual persuasion knowledge is activated, a longer disclosure duration is even more effective in generating critical attitudes toward the sponsored content. Therefore, based on our outcomes, extending the obligated duration of disclosures is recommended.

Note

- 1 See Preacher and Hayes (2008) and Rucker, Preacher, Tormala, and Petty (2011) for discussion and approval of indirect effects without a significant total effect.

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