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Disclosing Brand Placement to Young Children

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Abstract:	<p>In spite of the EU's prohibition on brand placement in children's programs, it is argued that children may still be exposed to this advertising format in many occasions. Consequently, and as children may have even more difficulties than adults to distinguish the commercial content from the editorial media content in which it is embedded, an advertising disclosure may be necessary to enable them to cope with brand placement. Entailing two one-factorial between-subjects experiments, the current article examined how different types of brand placement warning cues influenced cognitive advertising literacy and the attitude toward the placed brand, among children between 8 and 10 years old.</p> <p>In a first study, it was investigated how these outcomes were influenced by warning cues with different perceptual modalities (no vs. auditory vs. visual cue, N = 98). The results showed that a visual warning cue was more effective than an auditory warning cue (vs. no warning cue) in triggering cognitive advertising literacy. However, this activated cognitive advertising literacy could not account for the effect of the visual warning cue on brand attitude.</p> <p>In a follow-up study, it was examined whether the effectiveness of this visual warning cue was influenced by the timing of disclosure (cue prior to vs. during media containing brand placement, N = 142). Additionally, it was tested whether the effect of the cue on brand attitude could be explained by cognitive advertising literacy if children's sceptical attitude toward the brand placement format was taken into account. The results showed that cognitive advertising literacy was higher when the cue was shown prior to than during the media content. This cue-activated cognitive advertising literacy resulted in a more positive brand attitude, but only among children who were less sceptical toward brand placement. This positive relation disappeared among moderately and highly sceptical children.</p> <p>These findings have significant theoretical, practical and social implications.</p>

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In a first study, it was investigated how these outcomes were influenced by warning cues with different perceptual modalities (no vs. auditory vs. visual cue, $N = 98$). The results showed that a visual warning cue was more effective than an auditory warning cue (vs. no warning cue) in triggering cognitive advertising literacy. However, this activated cognitive advertising literacy could not account for the effect of the visual warning cue on brand attitude.

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These findings have significant theoretical, practical and social implications.

Keywords: children; sponsorship disclosure; brand placement; advertising literacy; scepticism

Introduction

Public institutions and policy makers increasingly express concerns about covert marketing practices such as brand placement. As brand placement integrates sponsored content in non-commercial, editorial content of e.g. television (TV) programs and movies, the boundaries between advertising and its entertaining context are severely blurred (Balasubramanian, Karrh, and Patwardhan 2006). Therefore, consumers are less likely to identify this format as advertising, and consequently, to activate their advertising literacy. In other words, they will not be triggered to critically reflect on the commercial intent and techniques of the embedded advertisement, and to make use of their advertising-related skills to cope with them (Friestad and Wright 1994). Ultimately, this makes them more likely to be persuaded without being aware of it (see e.g. Nebenzahl and Jaffe 1998). In order to counteract possible deception through unconscious (and perhaps unwanted) persuasion, the European Union (EU) has obliged broadcasters in 2010 to explicitly inform their audience when media content is sponsored, e.g. through sponsorship disclosures (Boerman, van Reijmersdal, and Neijens 2014).

Recent studies have provided fairly convincing evidence for the effectiveness of brand placement warning cues in activating people's advertising literacy and/or altering their susceptibility for persuasion (e.g. Boerman, van Reijmersdal, and Neijens 2012; Tessitore and Geuens 2013). However, as this body of literature is still in its infancy, it is characterized by several gaps and issues.

A first major hiatus is that all of these studies have been conducted among adults. This could be justified by the prohibition of brand placement in children's programs, as commanded by the EU's Audiovisual Media Services Directive (2012). However, the effectiveness of this ban can be called into question, as children may still be exposed to brand placement in at least four occasions. First, it has to be noted that the EU does allow brands to appear in programs when products are provided free of charge. Second, media originating from countries outside

the EU that have a more lax regulation concerning sponsorship identification (such as the United States, where rules applying to brand placement directed at children are lacking (Federal Communications Commission 2008)) are aired on TV anyway, without consideration of the EU ban. Third, the EU directive does not refer to media that are labelled as suitable for all ages, thus including children. Fourth, and related, it cannot be overlooked that children are also exposed to brand placement when they join older siblings and parents watching programs intended for mature audiences. These reservations imply that the need for brand placement disclosures is actually most pressing in the case of children, as they are cognitively immature and more inexperienced as consumers (John 1999; Rozendaal et al. 2011) and therefore less proficient in distinguishing commercial from media content than adults; leaving the door wide open for persuasion outside of their awareness (see e.g. Auty and Lewis 2004).

Second, it is also not known which *types* of warning cues could be most effective in triggering children's advertising literacy to avert unwanted commercial influences. A small number of studies conducted among adults (e.g. Boerman, van Reijmersdal, and Neijens 2014) has already shown that the effectiveness of a cue is highly dependent on its specific characteristics (such as timing and duration). However, this dependency might be even more pronounced among children, as their more limited cognitive capabilities may heighten their sensitivity for the many ways in which cue features may address their scarce attention.

A third issue in most of the extant literature is the belief that cognitive advertising literacy must result in decreased persuasion. However, as children's advertising is typically highly cognitively and emotionally demanding, the assumption that they will be able and motivated to use their cognitive advertising literacy for critically processing integrated commercial messages might be untenable. Therefore, one should also consider the possible affective, attitudinal processing mechanisms which might cost children less effort to cope with the advertising directed at them (Rozendaal et al. 2011).

In order to deal with these issues, the current study examines whether a warning cue is effective in triggering young children's cognitive advertising literacy and altering brand placement effects, and whether this effectiveness is influenced by the cues' perceptual modality (visual vs. auditory) and timing (before vs. during the sponsored content). Additionally, it is tested whether the relationship between the cue-activated cognitive advertising literacy and advertising effects is contingent on children's sceptical attitude toward brand placement.

Warning Cues for Activating Children's Advertising Literacy

Warning cues are implemented in media containing brand placement because they are believed to trigger consumer's advertising literacy, which refers to the ability to recognize, understand and evaluate advertising (Malmelin 2010). This form of literacy mainly relies on persuasion knowledge (referred to as cognitive advertising literacy), which consists of cognitive beliefs about marketers' motives, strategies and tactics (Friestad and Wright 1994). In the first place, these cues aim to alert consumers for the upcoming persuasive attempt, and to help them distinguish the commercial message from the editorial media content in which it is embedded (Tessitore and Geuens 2013). The recognition of the advertisement as such should subsequently make them reflect on the advertisement's commercial intent and persuasive tactics in a critical manner (Friestad and Wright 1994). As this critical processing is believed to function as a 'cognitive defence' against the advertisement (e.g. Brucks, Armstrong, and Goldberg 1988), a cue is assumed to 'mitigate' advertising effects, such as brand attitudes (An and Stern 2011).

Research conducted among adults indeed finds warning cues to be effective in activating cognitive advertising literacy and altering the persuasive effects of brand placement. I.e., some studies show that cues can directly temper intended effects such as brand recall and attitude (Campbell, Mohr, and Verlegh 2013; van Reijmersdal 2015) and product claim acceptance (Dekker and van Reijmersdal 2013). Other studies demonstrate that the cues' weakening impact

on brand placement effects (e.g. brand attitude and purchase intention) occurs through the activation of cognitive advertising literacy (Boerman, van Reijmersdal, and Neijens 2012; Boerman, van Reijmersdal, and Neijens 2014; Tessitore and Geuens 2013; Wei, Fischer, and Main 2008).

It is not known, however, whether such warning cues are equally effective in the case of children. The nature of the contemporary, integrated advertising formats may pose considerable cognitive and affective challenges to children that could nullify the warning cues' endeavour to make them recognize and reflect on the advertising's commercial intentions. Firstly, the highly entertaining and often overstimulating media context in which the advertisement is embedded may demand most of children's already limited cognitive capacity (Buijzen, Van Reijmersdal, and Owen 2010; Lang 2000), leaving few cognitive resources to identify the persuasive elements in the first place (Boerman, van Reijmersdal, and Neijens 2012). Secondly, even when a cue enables children to recognize the commercial content, they may not be motivated to subsequently reflect on the advertisement's commercial intentions, as children's advertising is heavily laden with emotional appeals (Wicks et al. 2009), increasing the likelihood that they will rather affectively engage with the entertaining content (Rozendaal et al. 2011).

A couple of studies indeed found warning cues to be ineffective in activating children's cognitive advertising literacy for advergames (see An and Stern 2011; Panic, Cauberghe, and De Pelsmacker 2013). Advergimes, however, might be a particularly exacting format as they embed advertising in an interactive and highly immersive game environment, which may demand exceptionally much from children's cognitive resources and motivation that could be used to identify and reflect on the integrated commercial elements. Therefore, warning cues might be more promising in case of brand placement in 'traditional' media such as TV programs and movies.

Warning Cue Modality

It is usually neglected that a warning cue may adopt many forms (see e.g. An and Kang 2013), which could influence its intended effects. It has been suggested that when a cue is found not to achieve its desired goal, this may be due to deficiencies in the details of the cue itself (An and Stern 2011). In fact, a small number of studies conducted among adults have shown that the effectiveness of a warning cue for brand placement is largely determined by its characteristics such as duration (Boerman, van Reijmersdal, and Neijens 2012), timing (Boerman, van Reijmersdal, and Neijens 2014) and message content (van Reijmersdal 2015) of the cue.

It is somewhat remarkable, though, that the most prominent cue feature, i.e. its perceptual modality (e.g. whether it is presented visually or auditory), has not yet been the subject of academic research in this context. Moreover, among children, research in which brand placement warning cue characteristics are linked to cue effectiveness is completely lacking. However, as children's cognitive resources are notably more limited than those of adults, it is all the more important to ascertain the most adequate ways in which cues may capture their scant attention. Therefore, the first study within this article aims to investigate whether a warning cue is effective in terms of activating young children's cognitive advertising literacy and adapting their response to the intended effects of brand placement, and more specifically, whether this effectiveness is contingent on the perceptual modality (visual versus auditory presentation) of the cue.

As disclosures for brand placement in traditional media have been studied almost exclusively by presenting the adult participants with a visual warning cue, it is not known whether the cue's effectiveness varies along its perceptual modality. An and Stern (2011) initially theorized that a visual warning cue should be more adequate than an auditory cue, as

they found solid proof in the psychological literature that picture memory is superior, that visual stimuli are processed more automatically than auditory ones (as the latter calls for more cognitive capacity), and that visual information is better memorized (as it is encrypted in both a visual and a verbal manner). Nonetheless, in their own study on ad breaks for advergaming it was found that an auditory warning cue (i.e., a voice-over when the game started) was more effective than a visual ad break in mitigating advertising effects (here: brand recall and preference) among children. This unexpected result might be explained by Russel (2002) who argued that auditory information is not only more intrusive and alerting, but that it also has the major advantage that it can be processed without looking. As both cues in An and Stern's (2011) study were presented when the game had already started, the auditory cue might have been more efficient than the visual cue in terms of more directly 'detaching' children's limited cognitive resources from the immersive game that was already highly saturated in terms of visual stimuli.

In the first study in the current article, however, children are exposed to either a visual or an auditory warning cue prior to the media including brand placement. In other words, they have the possibility to devote all of their cognitive resources to the cue and its message, without having to share them with the entertaining media content. Therefore, it can be expected that the advantages of visual information, as revealed by many psychological studies, will prevail among children in the case of a forewarning cue for brand placement. The following hypothesis is proposed:

H1: A visual warning cue will be more effective than an auditory warning cue in terms of activating children's cognitive advertising literacy and mitigating brand placement effects (here: brand attitude).

Study 1

Method

Design and procedure

To test the first hypothesis, an experiment was conducted using a single factor (warning cue modality) between-subjects experimental design, including three levels of perceptual modality: no cue, a visual warning cue, and an auditory warning cue. 98 third-grade students between 8 and 10 years old ($M_{\text{age}} = 8.45$, $SD = 0.63$; 50% girls), recruited from four West-European primary schools in a rural area, participated in this study. Children from this age group are believed to have developed basic advertising literacy skills, but are also supposed to need a warning cue for its activation (John 1999). The participants were randomly assigned to one of the three experimental conditions ($N_{\text{nocue}} = 30$, $N_{\text{visualcue}} = 33$, $N_{\text{auditorycue}} = 35$).

Upon their arrival in class, each of the three groups of children were asked to watch a short TV program excerpt including brand placement, preceded by one of the three cue modalities. In this stage of the experiment, the children were not yet aware of the goal of the experiment.

Once the movie had ended, the children were asked to fill out a short questionnaire in order to assess their level of cognitive advertising literacy and their attitudes toward the advertised brand. Considering the limited language and reading skills of the young respondents, the answer options were labelled both verbally and nonverbally with smileys, visual icons or pictures. To support the children in completing the survey, each question was individually displayed using a projected Power Point presentation and read aloud by the researchers.

At the end of the experiment, the children were informed about the study they participated in, and were given a short course on the rise of new advertising formats.

Stimulus material

All of the participating children were asked to watch a 7 minute TV program excerpt (from a popular kids channel in a West-European country) about cooking ‘sausage rolls’. The footage included a prominent brand placement for a well-known ketchup product. This product was well integrated in the ‘story line’ of the movie, as it was repeatedly used in the cooking process. The ketchup bottle came clearly into focus five times, and was once shown intermittently for 33 seconds. Moreover, it was used in a humorous context, appealing to children’s emotions.

In the first experimental condition, the video clip was preceded by a visual cue including a red warning triangle, with the message ‘Caution, this program contains advertising’ (see appendix). The exposure time for the cue was fixed at 6 seconds, which is in accordance to the finding of Boerman et al. (2012) that a 6-second TV sponsorship disclosure is more likely to activate both cognitive advertising literacy and critical feelings toward the sponsored content (in comparison to a shorter, 3-second disclosure). The second group was given an auditory version of the first cue, with the warning triangle replaced by an alarming sound, and the same message being spoken. For the third group, the control condition, the footage was not accompanied by a warning cue.

Measures

The measure for *cognitive advertising literacy* was adapted from Mallinckrodt and Mizerski (2007), and covers the main aspects as identified in the literature, namely the recognition of advertising and the understanding of its commercial nature and intent (for an overview, see Ham, Nelson, and Das 2015). This measure added the scores of the ‘correct’ answers (coded as 1, and the other, ‘incorrect’ ones, as 0) on four questions, resulting in a normally distributed index ranging from 0 to 4 ($M = 1.80$, $SD = 0.93$). The first question probed for advertising/brand recognition, by asking the respondents: ‘Did you see a brand in the program?’ with response options ‘yes’ (1) or ‘no’. After informing the children that ketchup brand X could be seen in

the TV program, a second question assessed their understanding the commercial source: ‘Who placed ketchup brand X in the program?’ with response options ‘the teacher’, ‘the researcher’, ‘the kids channel/ketchup brand X’ (1) and ‘I don’t know’. The third and fourth question assessed the understanding of persuasive intent: a) ‘Why is ketchup brand X shown in the program?’ with answer options ‘to make me cook better’, ‘to make me like the ketchup brand X’ (1), ‘to make me happy’, and ‘I don’t know’; and b) ‘Does this program wants you to eat the ketchup brand X?’ with two answer choices ‘yes’ (1) or ‘no’.

The intended advertising effects were operationalized by measuring children’s *attitude toward the brand*, as advertising (and covert marketing tactics in particular) usually aims for a positive evaluation of and affect toward the brand (Campbell, Mohr, and Verlegh 2013). This measure was constructed by asking the participants three questions: ‘How much do you like ketchup brand X?’ (1 = ‘very much’ to 5 ‘not at all’), ‘How much stars would you give ketchup brand X?’ (1 star to 5 stars), and ‘How good do you think ketchup brand X is?’ (1 = ‘not good at all’ to 5 ‘very good’). After reverse-coding the first item, all three items were averaged to a single measure of brand attitude (Cronbach’s Alpha = 0.91, $M = 3.59$ (on 5), $SD = 1.17$). The higher children’s score on this measure, the more positive their attitude toward the advertised brand.

Results

To test H1, two ANOVA analyses with post hoc tests were conducted, including the experimental conditions as the independent variable and 1) cognitive advertising literacy and 2) attitude toward the brand as dependent variables.

The first analysis revealed significant differences in cognitive advertising literacy between the experimental conditions ($F(92) = 8.670, p < .001$) (see Figure 1), and the Scheffé test showed that, compared to no warning cue ($M = 1.26$), a visual cue ($M = 2.18, SE = 0.22, p < .001$) was most effective, as the difference between no cue and the auditory cue ($M = 1.85,$

$SE = 0.22, p < .031$) was smaller and less significant. These results support H1; though it has to be noted that no significant differences were found between the visual and the auditory cue themselves ($p = .29$).

INSERT FIGURE 1 ABOUT HERE

The second analysis showed small but significant differences between the conditions ($F(97) = 3.368, p = .039$) (see Figure 2), and the Scheffé test showed that a visual warning cue ($M = 3.97$) led to a slightly better brand attitude than no cue ($M = 3.23, SE = 0.29, p = .042$). This finding partially contradicts H1, though no significant differences were found between no cue and the auditory cue ($M = 3.52, SE = 0.28, p = .59$), and between the visual and auditory cue ($p = .28$).

INSERT FIGURE 2 ABOUT HERE

Additionally, it was examined whether the effect of the visual warning cue (versus no cue) on brand attitude could be explained by cognitive advertising literacy (which is commonly expected in the research conducted among adults, as addressed earlier), by conducting a simple mediation analysis using Hayes' PROCESS macro for SPSS (Hayes 2013; model 4) (see Figure 3). The analysis was based on 5000 bias corrected bootstrap samples to estimate effects within a 95% confidence interval. The results confirmed that children's cognitive advertising literacy was higher when the brand placement was preceded by a (visual) warning cue than when no warning cue was shown ($b = 0.92, SE = 0.21, p < .001$). However, the activated advertising literacy had no significant effect on brand attitude ($b = 0.09, SE = 0.19, p = .65$) in this mediation model, and an indirect effect of warning cue exposure on brand attitude through advertising literacy was lacking ($b = 0.08, SE = 0.22; [-0.35; 0.50]$).

INSERT FIGURE 3 ABOUT HERE

Discussion

The first study showed that perceptual modality is indeed an important characteristic to consider in optimizing a warning cue's effectiveness among children, as it was found that the visual cue was more adequate than the auditory warning cue (in comparison with no cue) in activating their cognitive advertising literacy for brand placement. This result is in line with the psychological literature finding visual stimuli superior in terms of ease of processing and memorization (see An and Stern 2011).

Now that it is confirmed that a visual warning cue is most adequate in this context, in study 2 it is investigated whether the visual cues' effectiveness can be enhanced further when manipulating its timing. It should be noted, though, that in study 1 children's cognitive advertising literacy was not sufficient to explain the effect of the warning cue on brand attitude. Therefore, study 2 will also take into account children's affective attitudes toward the advertising format.

Study 2

Warning Cue Timing

In a study with adult participants, Boerman et al. (2014) have already proven that disclosure timing strongly influences cue effectiveness, in that they have found that a warning cue shown prior to or concurrent with the sponsored content in a TV program more adequately facilitates people's recognition and critical processing of this content than a cue shown at the end of the program. Among children, however, significant differences in cue effectiveness may also be expected between a forewarning cue and a cue that is presented concurrently with the sponsored content. In particular, a forewarning cue is likely to be more adequate than a concurrently displayed cue among children, considering that their cognitive capabilities are more limited

than adults. I.e., if taking into account the highly entertaining and already visually stimulating media content in which brand placement occurs, children may have few cognitive resources left to direct their attention toward a concurrently played warning cue in the first place, let alone to reflect on the meaning of that cue, and subsequently, on the embedded commercial message. As children may not be expected to process both the disclosure and the editorial plus the commercial content at the same time, a cue that is displayed prior to the media containing brand placement should be more promising. More specifically, the extended time between the disclosure and the sponsored content should give children the opportunity to fully attribute their cognitive resources to the cue and its meaning (and, therefore, to process it more thoroughly; see Lang 2000), and subsequently, to heighten their vigilance for the upcoming persuasive message and to prepare themselves for critically processing the embedded advertisement (see Boerman, van Reijmersdal, and Neijens 2014). Therefore, the following hypothesis is formulated:

H2: A warning cue shown before the media containing brand placement will be more effective in terms of activating children's cognitive advertising literacy and mitigating brand placement effects (here: brand attitude) than a warning cue shown concurrently.

The Moderating Impact of Scepticism towards the Format

The fact that study 1 could not find an association between (cue-activated) cognitive advertising literacy and a reduced susceptibility for advertising effects forms no exception in similar studies on contemporary advertising formats directed at children, as was noted earlier by Rozendaal et al. (2011). The authors explain this phenomenon by the fact that children's contemporary advertising strongly appeals to their emotions, which may distract them from processing the commercial message in a cognitive, elaborate way, and may ultimately prevent them to critically evaluate the advertisement, the advertised brands or products. They argue that in such conditions, in which children's cognitive abilities and motivation are put under severe pressure,

the processing of advertising may occur more effortlessly when it is done in an attitudinal rather than a cognitive manner. In particular, they claim that children's coping with advertising will mainly depend on their level of attitudinal advertising literacy, including their level of scepticism toward advertising (Rozendaal, Oprea, and Buijzen 2014; Rozendaal et al. 2011). Therefore, study 2 foresees an important role for children's scepticism toward the brand placement format. More specifically a moderated mediation model is tested, as several studies conducted among adults have shown that a disclosure can modify advertising effects through the activation of cognitive advertising literacy, depending on people's scepticism toward the covert marketing tactic to which they are exposed (e.g. Lee, Sung, and Choi 2011; Milne, Rohm, and Bahl 2009; Nelson, Wood, and Paek 2009; Wei, Fischer, and Main 2008; Yoo 2009). Yoo (2009), for instance, demonstrated that priming cognitive advertising literacy by disclosing the tactic of keyword search ads made people less likely to click on such ads, when they regarded the practice as inappropriate or unacceptable – this negative effect was attenuated when they perceived the advertising tactic as fair. Similarly, Wei et al. (2008) showed that activating cognitive advertising literacy by disclosing that a brand had paid to be mentioned in a radio show decreased people's brand evaluation when they perceived the tactic as unfair - this negative impact was also mitigated when perceiving this practice as fair, and the stronger activation of cognitive advertising literacy even led to more favourable brand evaluations in case of a highly familiar brand. As study 2 exposes the participants to a movie excerpt including brand placement for a product that is popular among children, following hypothesis is formulated:

H3: When children have a strong sceptical attitude toward the brand placement tactic, a warning cue will negatively affect their brand attitude due to a negative effect of cognitive advertising literacy on brand attitude. When children have a weak sceptical attitude toward the brand placement tactic, a warning cue will positively affect

children's brand attitudes due to a positive effect of cognitive advertising literacy on brand attitude.

Method

Design and procedure

To test the second and third hypothesis, an experiment was conducted using a single factor (disclosure timing) between subjects-experimental design, entailing two levels of warning cue timing, i.e. prior to versus during the media content. 142 third-grade students between 8 and 10 years old ($M_{\text{age}} = 9.04$, $SD = 0.73$; 54% boys), recruited from four West-European primary schools, were randomly assigned to either the forewarning cue condition ($N = 68$) or the simultaneous cue condition ($N = 74$).

Once arrived in class, each of the two groups of children were first informed that they were about to participate in a study on watching TV, and were then asked to watch a short movie excerpt (containing brand placement), accompanied by one of the two differently timed warning cues.

After watching the movie passage, the children were invited to fill out a short questionnaire that assessed their level of cognitive advertising literacy, their attitude toward the placed brand, and their level of scepticism toward the brand placement format. The surveying researcher looked at each individual question together with the children, in order to avoid deviant interpretations. To facilitate questionnaire comprehension, the survey response options were labelled both verbally and nonverbally with smileys, visual icons or pictures.

Stimulus material

The children from both groups were asked to watch a 5 minute excerpt from a popular children's movie, including a frequent and prominent brand placement for a well-known chocolate candy brand. As in study 1, the product was well integrated into the movie script, as one of the movie's

main characters repeatedly engaged in lengthy dialogues with one of the brand's plush character dolls. These conversations were meant to be humorous, and to bring about positive affect in children.

In the first condition, a visual warning cue (that is nearly indistinguishable from the cue used in study 1) was shown before the movie excerpt. In the second condition, that same warning cue was shown during the whole movie fragment, at the bottom of the screen.

Measures

The items for measuring *cognitive advertising literacy* ($M = 2.01$, $SD = 1.04$) and *brand attitude* (Cronbach's Alpha = 0.89, $M = 4.21$ (on 5), $SD = 0.82$) were almost identical to those in study 1, except that 'ketchup brand X' was replaced by 'candy brand X'.

Sceptical attitude toward brand placement was measured by asking the respondents 'How much do you like that brands like candy brand X appear in the movie?' (1 = 'not at all' to 5 = 'very much'; which was then reverse-coded so that a higher score on this measure represents a more sceptical attitude toward brand placement) ($M = 1.96$, $SD = 0.97$). This item explicitly probes for 'liking', as Rozendaal et al. (2014) established the 'disliking of advertising' as one of the defining components of children's attitudinal processing of advertising. Unlike these authors, the present study does not measure children's attitudes toward TV advertising in general, but their attitudes toward the advertising format under study in present research. Thereby this format is not explicitly labelled as 'brand placement', as this concept may be too abstract for the young participants in this study, but more comprehensibly described as the appearance of brands in movies.

Results

The proposed model in which the forewarning cue (versus the concurrently displayed cue) influences brand attitude through the activation of cognitive advertising literacy, depending on

children's sceptical attitude toward brand placement, was tested by conducting a moderated mediation analysis (PROCESS model 14; Hayes 2013) (see **Error! Reference source not found.**).

INSERT FIGURE 4 ABOUT HERE

The results for path A in the model show that children's cognitive advertising literacy was higher when the movie excerpt was preceded by a warning cue than when the cue was shown during the movie excerpt ($b = 0.50$, $SE = 0.17$, $p = 0.004$), supporting H2.

As concerns the B path, the model turns out to be highly significant, and is able to explain 35% of the variability in the brand attitude score ($R^2 = 0.35$, $p < 0.001$). The index of moderated mediation shows that the indirect effect of the (fore)warning cue on brand attitude through cognitive advertising literacy was moderated by children's sceptical attitude toward brand placement ($b = -0.04$, $SE = 0.03$; BCBI [-0.12; -0.01]).

In particular, this analysis provides results for testing the conditional indirect effects of the warning cue on brand attitude (via cognitive advertising literacy) at three values of the moderator, i.e. sceptical attitude toward brand placement. The cue-activated cognitive advertising literacy yielded a significant effect on brand attitude ($b = 0.06$, $SE = 0.04$; BCBI [0.01; 0.16]), but only at the lowest value of the moderator ($M = 1.01$). This means that the cognitive advertising literacy as activated by the forewarning cue (vs. the simultaneous cue) resulted in a more positive brand attitude, but only among children who were less sceptical toward brand placement. Cognitive advertising literacy resorted no significant effects on brand attitude among children who were moderately ($M = 1.97$) sceptical ($b = 0.03$, $SE = 0.03$; BCBI [-0.02; 0.09]) or highly ($M = 2.94$) sceptical ($b = -0.01$, $SE = 0.04$; BCBI [-0.11; 0.05]) toward brand placement. As such, H3 is only partially supported.

Discussion

The second study showed that is imperative to not only consider the perceptual modality of a disclosure but also its timing, as it was found that the forewarning cue was more effective than the concurrently displayed cue in triggering children's cognitive advertising literacy for brand placement. This indicates that the forewarning cue successfully functions as a prime that gives children sufficient time and opportunity to activate the cognitive advertising literacy that is needed to process the embedded commercial message that is about to follow.

Furthermore, the results support the findings in studies conducted among adults that consistently show that a warning cues' impact on advertising effects can be explained by consumers' cognitive advertising literacy, *if* their sceptical attitudes toward the advertising format are taken into account. In particular, it was found that cognitive advertising literacy increased brand attitudes, but only among children with a low sceptical attitude toward the brand placement format. This suggests that the children who recognized and understood the integrated commercial message had a better attitude toward the placed brand because they critically evaluated the used tactic in a positive manner.

General Discussion

This study aimed to examine how different types of brand placement warning cues may trigger young children's cognitive advertising literacy and influence their attitudes toward the placed brand. The first experiment demonstrated that a visual warning cue was more effective than an auditory warning cue (in comparison with no cue) in activating cognitive advertising literacy, but also that this activated advertising literacy alone was insufficient to explain the cue-induced changes on children's brand attitudes. In the second experiment it was shown that a visual

warning cue presented prior to the sponsored media content was more adequate than a concurrently displayed cue in triggering cognitive advertising literacy. Additionally, it was found that this cognitive advertising literacy positively influenced brand attitudes, though only among the children that were least sceptical toward the brand placement format. Among the more sceptical children, this relationship disappeared.

Implications

The current article contributes to the academic, political and public debate on how to enable young children to cope with the contemporary, possibly deceptive embedded advertising formats directed at them, and to protect themselves from hidden persuasion attempts that rely on unconscious, automatic processing of the commercial message.

First, both studies in current article underscore the importance of the characteristics of warning cues in effectively disclosing brand placement. The finding that visual (versus auditory) warning cues presented prior to (versus concurrently with) the sponsored content are most effective in triggering children's cognitive advertising literacy forms a direct recommendation for academics and authorities that aim to design a cue that adequately enables young consumers to cope with brand placement – which is particularly relevant since the EU is still deliberating on warning cue presentation, and the US on giving shape to regulations regarding brand placement (Boerman, van Reijmersdal, and Neijens 2014). As these results do not correspond with comparable studies among adults and/or concerning other advertising formats, this study argues for academics to consider children's limited cognitive abilities to simultaneously process a warning cue and the branded media.

Second, as the proposed moderated mediation model in study 2 explained a myriad of the variation in children's brand attitude, this research recommends academics interested in the relation between (cue-activated) cognitive advertising literacy and advertising effects to acknowledge the indispensable moderating role of sceptical or critical attitudes toward the

advertisement or its format; otherwise they may wrongfully perceive warning cues as ineffective when not directly decreasing persuasion susceptibility. Relatedly, and important for public policy and legislation (and indirectly for advertisers), this finding suggest that one should focus on disclosures' potential to stimulate critical processing of advertising (of which the result could also be in favour of the advertised brand), rather than solely on the obstruction of advertising's intended effects – which would be useless, as advertisers will always find new ways to persuade. This critical processing can help both adults and children to actively use advertising to make conscious decisions about products and services, and, as stated by Friestad and Wright (1994), to '*adaptively respond to these persuasion attempts so as to achieve their own goals*' (Friestad and Wright 1994, 1).

Limitations and Further Research

The proposed explanation for the moderating role of scepticism in the present research (i.e. that the advertising literate children's favouring of the brand was induced by a positive critical evaluation of the used tactic) should be approached with caution, as it may overestimate the young participants' level of cognitive processing. Especially with respect to critical, elaborate (and perhaps even moral) reasoning, more research is needed on children's age development in this area. Nonetheless, this finding demonstrates that young children's cognitive advertising literacy does not straightforwardly translates into diminished advertising effects, and suggests that future research should take into account children's advertising-related attitudes to have a better understanding of this relation's underlying process, especially in the context of the non-traditional, integrated advertising that is directed at them.

In that context, the somewhat unexpected finding that cognitive advertising literacy did not lead to a lower brand attitude among the more sceptical children deserves further attention. In all probability, this is the statistical consequence of a too small number of cases with a negative attitude toward the brand that the children were presented with in the second study –

a brand that is indeed well known, and of which the products are very popular among children. As such, a possible negative evaluation of the placed brand through cue-activated cognitive advertising literacy may have been obscured by a lack of variation in children's preference or desire for the advertised product. This explanation is supported by the previously mentioned study of Wei et al. (2008), in which was found that cognitive advertising literacy resulted in more positive brand evaluations when the brand was highly familiar (if at least it may be assumed that familiar brands are also the most popular brands with the most desired products). Therefore, it is recommended that future research on the relation between advertising literacy and effects also incorporates brand familiarity or product desirability (and, by preference, manipulates experimental conditions based on the exposure to brands that vary in terms of these characteristics).

Finally, it should be emphasized once again that warning cues may come in an infinite number of shapes. The present study focused on two essential warning cue characteristics, i.e. modality and timing, but other studies show that brand placement disclosure effectiveness also varies along features such as disclosure duration (Boerman, van Reijmersdal, and Neijens 2012) and cue message (van Reijmersdal 2015) – at least in the case of adults. Moreover, An & Kang (2013) have mentioned a heap of other cue features that may influence cue effectiveness, such as its colour, size, readability, and placement. In other words, there are many research opportunities left untouched to investigate the effectiveness of various types of warning cues in triggering children's advertising literacy for contemporary advertising formats.

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No potential conflict of interest was reported by the authors.

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APPENDIX

INSERT FIGURE 5 ABOUT HERE

LIST OF FIGURE CAPTIONS

Figure 1. Effect of warning cue modality on cognitive advertising literacy

Figure 2. Effect of warning cue modality on brand attitude

Figure 3. Mediation analysis of warning cue modality on brand attitude via cognitive advertising literacy

Figure 4. Moderated mediation analysis of warning cue timing on brand attitude via cognitive advertising literacy by sceptical attitude toward the advertising format

Figure 5. Visual warning cue

FIGURES

Figure 1. Effect of warning cue modality on cognitive advertising literacy

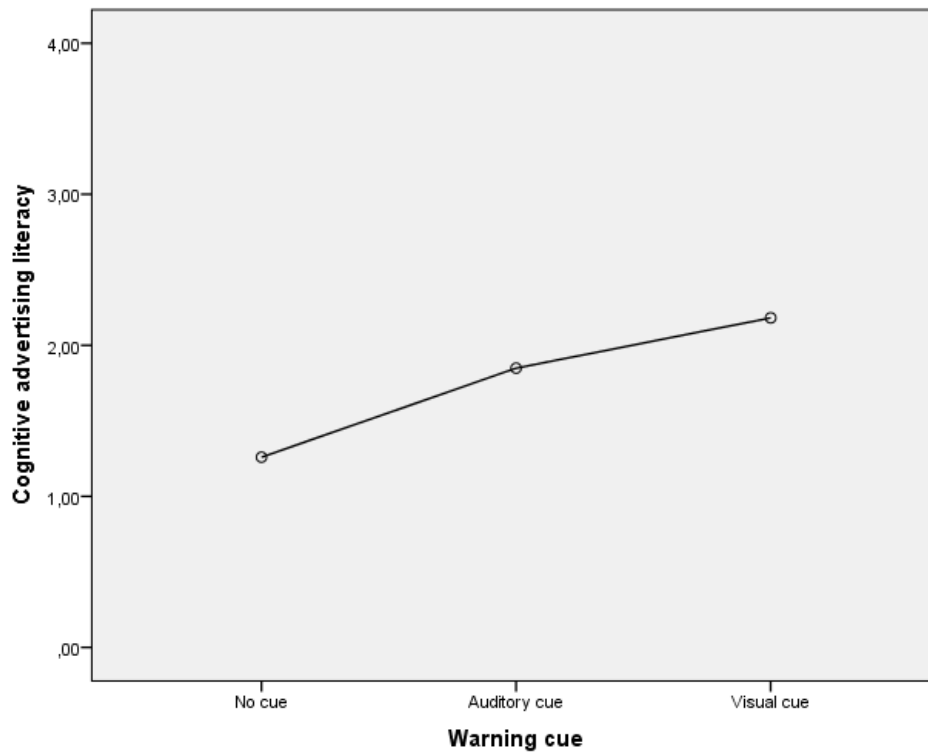


Figure 2. Effect of warning cue modality on brand attitude

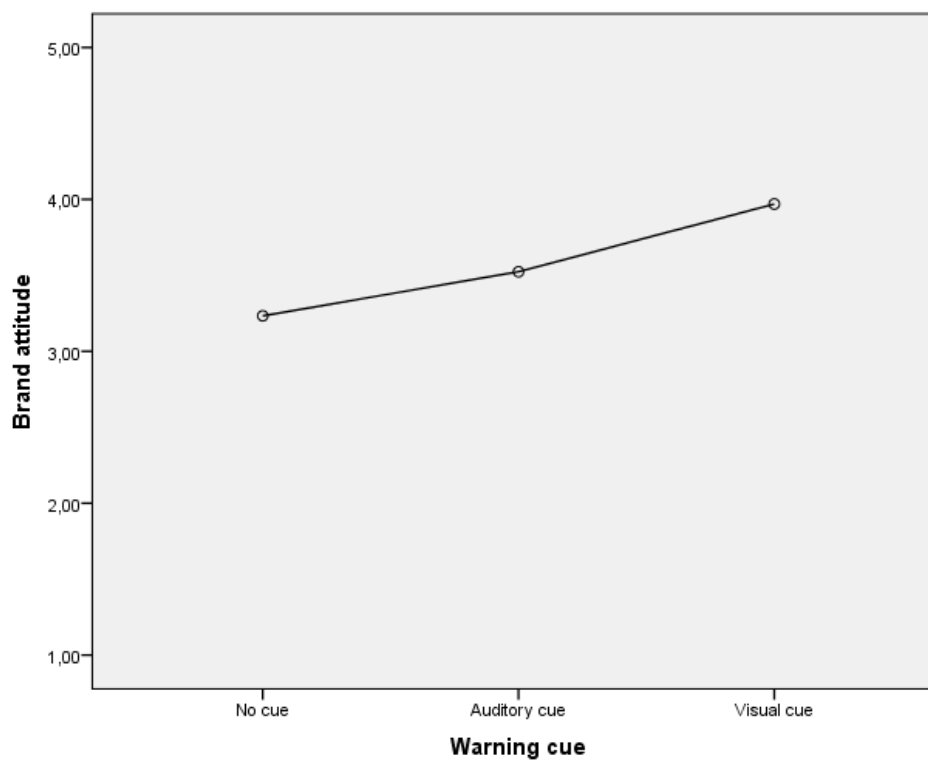


Figure 3. Mediation analysis of warning cue modality on brand attitude via cognitive advertising literacy

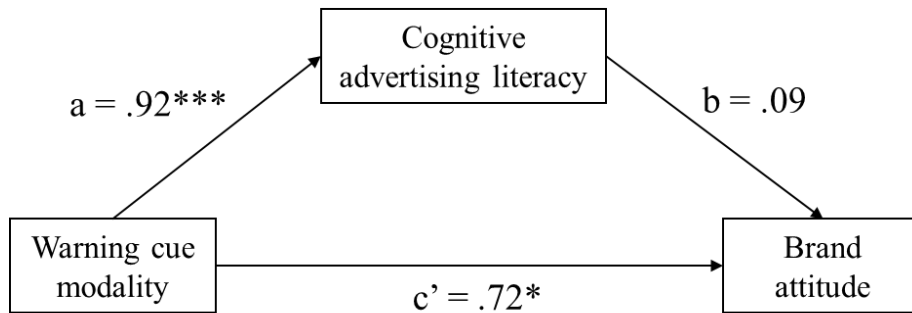


Figure 4. Moderated mediation analysis of warning cue timing on brand attitude via cognitive advertising literacy by sceptical attitude toward the advertising format

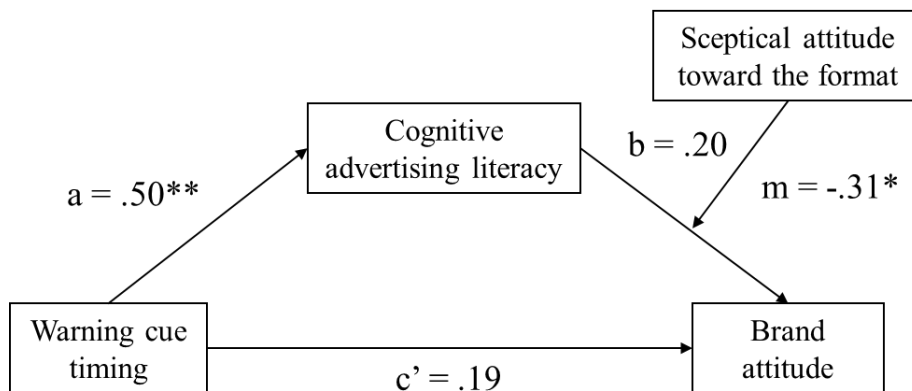


Figure 5. Visual warning cue

