

Minors' advertising literacy in relation to new advertising formats

Identification and assessment of the risks



A research report in the framework of the AdLit SBO project

This document forms part of the 'AdLit' (Advertising Literacy) research project. AdLit is a four-year interdisciplinary research project on advertising literacy, which is funded by Vlaio (Agency for Innovation through Science and Technology). The main goal of the AdLit project is to investigate how we can empower children and youth to cope with advertising, so that they can grow up to be critical, informed consumers who make their own conscious choices in today's new media environment.

The AdLit consortium comprises of the following partners:

University of Ghent: Research group CEPEC, Department Education and Research Group CJS

University of Antwerp: Research group MIOS and Department Marketing

KU Leuven: Research group Centre for IT and IP Law (CiTiP)

Free University Brussels: Research group CEMESO

For more information in relation to the project, visit our website (www.AdLit.be) or visit us on Facebook (www.facebook.com/reclamewijs) or Twitter (@AdLitSBO).

This report was written by Ini Vanwesenbeeck, Ralf De Wolf, Ingrid Lambrecht, Liselot Hudders, Veroline Cauberghe, Britt Adams, Kristien Daems, Steffi De Jans, Pieter De Pauw, Silke Lissens, Valerie Verdoodt, Brahim Zarouali, Joke Bauwens, Patrick De Pelsmacker, Eva Lievens, Ingrid Moons, Karolien Poels, Koen Ponnet, Tammy Schellens, Martin Valcke, Peggy Valcke, Michel Walrave

EXECUTIVE SUMMARY

Goal and approach

The overall goal of this research report is to identify and assess the risks connected to new advertising formats targeting minors. These results are essential to determine what is needed to protect and empower minors so they can grow up as critical and informed consumers. The trajectory is also useful for future trajectories of the AdLit project: developing an advertising cue to trigger critical processing of commercial messages, organizing awareness campaigns, providing guidelines for policy and educational programs, etc.

To address the overall goal of this report we investigated minors' advertising literacy towards new advertising formats they are the most exposed to. To be holistic, we also distilled the most important conclusions of previous AdLit research reports to look how minors are empowered and protected. Specifically, five key questions are used to structure, describe and discuss the risk analysis: 1) Which new advertising formats are minors the most exposed to?; 2) What is the current advertising literacy of minors for new advertising formats?; 3) How do parents and advertising professionals perceive new advertising formats?; 4) How do schools help children and teenagers to cope with new advertising formats?; 5) How are these advertising formats (self-) regulated. The latter approach allows for a contextual and holistic understanding of the risks connected to advertising in a new media environment.

Most important findings:

To delineate the risky advertising formats, an initial assessment was made based on media usage (What are the most popular media children and teenagers use and what advertising formats are especially used on these media?) and difficulty (How difficult is the employed advertising format?). Based on these two criteria, the following advertising formats were perceived as highly risky for children: brand integration (e.g., brand placement, AFP, infomercials), advergames and video advertising. For teenagers, integrated television advertising formats, video advertising and advertising connected to social media (e.g., profile targeting, social media influencers) were labelled as risky formats.

The main body of this report is focused on the study of minors advertising literacy towards the advertising formats that were labelled with an average or high risk in the initial assessment. Besides an extensive literature review, many new studies were devoted to investigating children's and teenagers' knowledge, abilities and skills to cope with new types of advertising. While previous literature especially focused on minors' capabilities to recognize and understand advertising, we took into account the multidimensionality of the concept and paid attention to the cognitive, attitudinal and moral dimension of advertising literacy. To formulate it differently, we studied minors' understanding and recognition, their attitude and judgment towards new advertising formats. A total of 10 new studies on minors' advertising literacy are included in this research report.

Core findings on children's advertising literacy

In total, 1343 children between the age of 7 and 12 years old participated in either an experimental study or focus group. The different studies and the main findings are summarized below.

- ❖ De Jans, Hudders and Cauberghe (2016a) conducted a 4-level between-subjects experimental study to examine and compare children's advertising literacy towards television commercials, advergames, online banners and sponsored content. In total, 510 children (age 7-12) participated in the study. They found that children are the most positive towards advergames and especially have difficulties recalling the brand when exposed to online banners. In comparison to television commercials, children have less knowledge and understanding of the other advertising formats. It should be noted, however, that they have a good understanding of online banners. Overall, children have a positive stance towards (new) advertising formats and label them as a fair practice.
- ❖ De Pauw, De Wolf, Hudders and Cauberghe (2016a) investigated the cognitive and moral advertising literacy of children (age 9-11) towards new advertising tactics (personalization, integration and interaction) by means of focus group discussions. The results indicate that children do not know much about new advertising tactics, but once explained they are capable of understanding the tactics and formulating examples they have experienced themselves. That said, children did struggle with grasping the implicit mechanism of unconscious persuasion. Finally, during the discussion of various advertising types it was noticeable how children took multiple perspectives (e.g., consumers, producers, industry) and stakeholders (younger children, parents, etc.) into account to formulate a judgement towards these advertising types.
- ❖ Panic, Cauberghe and De Pelsmacker (2013) examined children's cognitive and attitudinal reactions towards television commercials and advergames. A total of 382 boys and girls between the age of 7 and 9 participated in the study. Their study indicates that children are more positive oriented towards advergames than television commercials, but also have more difficulties with understanding its persuasive intent. More importantly, it was found how through the positive affective reactions towards advergames, children were challenged in using their cognitive advertising literacy and cope with this integrated advertising format.
- ❖ Hudders, Cauberghe and Panic (2016a) also examined children's cognitive and attitudinal reactions towards television commercials and advergames, with a total of 78 participants (age 8-9). In line with other studies they showed how children are more persuaded by an advergame than by television commercials. Moreover, attitudinal defences were found to be more effective than cognitive defences, especially for advergames. Furthermore, cognitive defences only mitigated advertising influence when children also had a high attitudinal advertising literacy.
- ❖ Hudders, Cauberghe, Panic and De Vos (2015) compared children's attitude and knowledge towards advergames and advertising funded programs. 133 children (age 7-9) participated in the study. The results indicate that children are more critical towards an advergame, but no differences were found in the understanding the persuasive intent of both formats. Again it was showed how mainly attitudinal defences impacted advertising effects (such as pester power and materialism) and not cognitive advertising literacy.
- ❖ Limited attention has been devoted to the advertising literacy towards brand placements. Hudders et al. (2015) studied if children recognized and understood latter integrated advertising format. Specifically, a cross-sectional study was set up with two different age groups (second versus fifth grade, or 7 versus 12 years-olds). A total of 180 children participated in the study. The findings show how children from the fifth grade have a higher cognitive advertising level than children from the second grade. However, their increased cognitive level did not decrease brand attitudes.

Core findings on teenagers' advertising literacy

In total, 3304 teenagers between the age of 12 and 18 years old participated in either an experimental or survey study. The different studies and the main findings are summarized below.

- ❖ De Jans, Hudders and Cauberghe (2016b) analysed a biennially survey that measures the digital activity of Flemish teenagers, where an entire section was devoted to advertising literacy. A representative sample of 2663 Flemish teenagers participated ($M_{age} = 14.51$; $SD=1.94$). The survey shows how teenagers claim to largely resist advertising by avoiding and contesting it, and by empowering themselves. Cognitive, attitudinal and moral advertising literacy positively influenced advertising avoidance. Moral and attitudinal advertising literacy positively influenced advertising contesting. A negative

relationship, however, was found between cognitive advertising literacy and contesting advertising. The results further confirm that mainly attitudinal mechanisms ensure teenagers to resist advertising and persuasion intent. Finally, it was found how teenagers who possess more media score higher on cognitive advertising literacy.

- ❖ Zarouali, Ponnet, Walrave and Poels (2016a) studied how adolescents process retargeted Facebook advertisements, using a 2 x 2 between subjects experimental design. In total, 365 adolescents between 16 and 18 years old participated. The study reveals how adolescents prefer to purchase a product in a retargeted ad than in a general non-retargeted one. However, retargeted ads also lead to a higher ad scepticism than the non-retargeted ad, which in turn leads to a lower purchase intention. The participants who scored higher on privacy concern were also more sceptical towards retargeting. No such relationship was found for non-retargeted ads.
- ❖ In another study Zarouali, Poels, Ponnet and Walrave (2016b) studied teenagers' (age 14-16) advertising literacy towards social advertising. A total of 276 teenagers participated in the two experimental studies. The authors show how peer communication among teenagers in the context of social networking sites leads to a lower cognitive advertising literacy towards social advertising. Moreover, peer communication among teenagers with whom they have a strong connection (strong tie) have lower levels of cognitive advertising literacy towards social advertising in comparison to those with whom they have a weak connection (weak tie).

Core findings on vulnerable audiences' advertising literacy

- ❖ Little to no studies have been devoted to the advertising literacy of vulnerable audiences. Because of the shortcomings in the literature Lissens and Bauwens (2016) set up a qualitative study with respondents (n=59; age 11-13) from disadvantaged backgrounds to discuss their opinions and perceptions on new advertising formats. First, it was noticeable how the pre-adolescents were savvy and elaborate when discussing new advertising formats. Most of the respondents, however, referred to advertising formats they observed in the public environment or in traditional media (not new media related advertising formats). Finally, the authors also noted how their respondents also mentioned consumer television shows on foreign channels. The latter affects the amount and nature of advertising they are exposed to.

Core findings on minors' protection and empowerment

Besides the study of minors' advertising literacy, attention was also devoted to how their surrounding offers protection and empowerment. These studies are discussed extensively in other AdLit research reports.

- ❖ Daems and De Pelsmacker (2015b) studied advertising professionals' (survey (n=90) and interview study (n=10) and parents' (survey (n=436)) perspective towards new advertising formats. In their study they found how parents argued that children are capable of understanding different advertising formats from 12 years of age onwards. Overall, new advertising formats are perceived as being ethically and morally acceptable to use from the age of 12 to 13. Finally, children should learn about commercial intentions around 10 years of age. Advertising professionals have a surprisingly similar view as parents: it is perceived as ethical and morally acceptable to use new advertising techniques from the age 12 to 13 years old; when children reach the age of 12 they are perceived as old enough to identify and understand new advertising tactics and from the age 9 to 10 children should be made aware of the persuasion and selling intent of advertising. Although no major differences were found between the two groups, it may be argued that parents embrace a slightly more protective discourse, whereas advertising professionals underline the agency of minors – especially teenagers – and adhere a discourse of empowerment.
- ❖ De Pauw, Hudders and Cauberghe (2016b) studied parents' current level of advertising literacy and the advertising mediation style they adopt among their children. A total of 300 parents participated in the survey study. Most of the parents claim to be aware of the existence of contemporary advertising formats, except for advergames. Moreover, they claim to be critical towards new advertising formats and find it important to know when they are exposed to advertising. Although parents indicate to talk with their children about the selling intent of advertising, they admit to rarely bring up new formats when discussing advertising with their children.
- ❖ Adams, Schellens and Valcke (2015a, 2015b) studied how the Flemish educational system helps children and teenagers cope with new advertising formats. It was found that in both primary and secondary education attention is devoted to advertising literacy. No curriculum standards, however, are formulated for toddlers. Furthermore, it seems that especially

classic advertising formats are exemplified in the curricula, whereas new advertising formats are less or not mentioned. Various educational packages have been developed to aid teachers in increasing minors' advertising literacy. Unfortunately, these packages are mostly directed to primary education (-12).

- ❖ Verdoodt, Lievens, Lambrecht, Valcke and Hellemans (2015, 2016) analysed how commercial communication aimed at minors is regulated at both the EU level and national level. In their analysis they took into account legislation (e.g., the AVMS Directive, the e-Commerce Directive) and alternative regulatory instruments (e.g., ICC code). Their studies show that, as a general principle marketers are legally required to identify digital commercial communications as commercial content. However, at the moment, only very few legislative requirements on the actual implementation in practice exist and alternative regulatory instruments, which contain the same obligation, only offer limited guidance. This gives rise to legal uncertainty both for advertisers and consumers. Aside from the identification requirement, the regulatory framework contains a broad variety of provisions in relation to the content of the commercial communication (e.g. food or alcohol ads aimed at children). Finally, format-specific requirements exist, but only in relation to certain formats: i.e. product placement and sponsoring rules for traditional advertising formats and rules on behavioural ads for new advertising formats. The various rules are enforced both by government regulators (e.g. Flemish Media Regulator) and self-regulatory bodies (e.g. the Jury for Ethical Practices in Advertising; JEP). Currently, however, very few decisions that relate specifically to new forms of commercial communication and children have been issued. There may be several reasons that could explain this finding: a lack of awareness of citizens that complaints with regard to digital advertising formats may be submitted, for instance to the JEP; uncertainty for regulators whether specific rules are applicable to new advertising formats; lack of resources of regulators to instigate investigations on their own initiative; or compliance by advertisers.

After an overview of the studies conducted within the AdLit project, a final risk assessment is discussed. Television commercials pose a lower risk for minors as they are clearly distinguished from media content and labelled as commercial content. Moreover, many schools teach children how to cope with these commercials from the age of eight. More embedded and hybrid advertising formats pose a greater threat. Not only because schools do not yet teach children how to cope with these formats, minors also have less experience with them and they are not clearly indicated as advertising. In addition, parents' knowledge of these embedded formats is rather limited and they rarely discuss these advertising formats with their children. Accordingly, we can conclude that the risk assessment for these embedded and hybrid advertising formats is high.

Therefore, AdLit suggests an all-round approach in which minors are stimulated to develop their advertising literacy by their environment. An all-round approach suggests including minors' immediate environment (i.e. parents and schools) and their non-immediate environment (i.e. advertising professionals and policy makers). To conclude this report, we will discuss the future policy guidelines:

- ❖ Need to develop an advertising disclosure
- ❖ Increasing general knowledge of advertising among minors and train minors on how to cope with advertising
- ❖ Increasing parent's advertising literacy and their parental mediation
- ❖ Increasing awareness among advertising professionals
- ❖ Increasing citizen awareness of complaint mechanisms and better regulatory coordination

The following two years, AdLit will work on initiatives involving not only children, teenagers and vulnerable minors, but also parents, advertising professionals, educational professionals, policy makers and all other stakeholders able to empower children's advertising literacy.

CONTENTS

1.	Introduction	10
2.	Advertising literacy in a new media environment	12
2.1.	Reconsidering advertising literacy	13
2.2.	Dispositional advertising literacy	14
2.3.	Situational advertising literacy	16
2.4.	Advertising literacy in a new media format	16
3.	Which new advertising formats are minors the most exposed to?	18
3.1.	Minors' media activity	19
3.2.	Identification and assessment of new and popular advertising formats	20
4.	Children's advertising literacy	24
4.1.	Introduction	25
4.1.1.	Television commercials	25
4.1.2.	Advergames	26
4.1.3.	Brand Integration	27
4.1.4.	Online banners	28
4.2.	Gaps in the literature and motivation for further study	28
4.3.	AdLit studies investigating children's advertising literacy towards new advertising formats.....	30
4.3.1.	Study 1: Comparing children's advertising literacy towards advergames, brand placement, sponsored content and television commercials	30
4.3.2.	Study 2: Children's knowledge and judgment of new advertising tactics	39
4.3.3.	Study 3: Comparing TV ads and advergames targeting children	42
4.3.4.	Study 4: Children's responses to television commercials versus advergames	45
4.3.5.	Study 5: Children's attitude and knowledge of advergames and advertising funded programs ..	47
4.3.6.	Study 6: Children's attitude and knowledge of brand placement	48
5.	Teenagers' advertising literacy	51
5.1.	Introduction	52
5.1.1.	Television commercials	52
5.1.2.	Advergames.....	52
5.1.3.	Brand integration	53
5.1.4.	Social network games	53
5.2.	Gaps in the literature	54
5.3.	AdLit studies investigating teenagers' advertising literacy towards new advertising formats	55
5.3.1.	Study 1: Teenagers' cognition, attitude and judgment towards new advertising	55
5.3.2.	Study 2: Teenagers' sceptical processing of retargeted Facebook ads	57

5.3.3.	Study 3: Teenagers' knowledge and attitude towards social advertising	60
6.	Advertising literacy and vulnerable YOUNG audiences	63
6.1.	Introduction	64
6.2.	Advertising literacy, minor audiences and the role of SES	66
6.2.1.	SES as a non-issue	66
6.2.2.	SES as an issue of iNstrumentality: describing the sample	67
6.2.3.	SES identified as a factor of influence	68
6.3.	Gaps in the literature and motivation for further study	72
6.4.	Investigating disadvantaged pre-adolescents: exploring their experiences and opinions	73
7.	Parents' view on minors' advertising literacy.....	80
7.1.	Parents' perceptions towards new advertising	81
7.1.1.	Parental advertising literacy and mediation	83
8.	Advertising professionals' view on minors' advertising literacy	92
9.	Education and advertising literacy.....	98
10.	Mapping of Legislation and self-regulation for new advertising formats	103
10.1.	Television ads and ads in on-demand video services ("traditional advertising formats").....	104
10.1.1.	Legislation	104
10.2.	Digital commercial communications ("New advertising formats")	106
10.2.1.	Legislation	106
10.2.2.	Self- and co-regulation	107
10.3.	Personalized advertising formats	108
10.3.1.	Legislation	108
10.3.2.	Self- and co-regulation	110
10.4.	All advertising formats	110
10.4.1.	Legislation	110
10.4.2.	Self- and co-regulation	112
11.	General conclusion	113
11.1.	Study Objectives.....	114
11.2.	Children's advertising literacy for hybrid advertising	115
11.2.1.	Advergames are puzzling young children	115
11.2.2.	Banner blindness, also for young children?	115
11.2.3.	Product Placement, a problematic format for young children.....	115
11.2.4.	The importance of moral advertising literacy	116
11.2.5.	If you didn't notice, you're not persuaded?	116
11.3.	Teenagers Advertising Literacy	116
11.4.	Vulnerable audiences and advertising literacy.....	117
11.5.	Parents' views on advertising towards children	118
11.6.	Advertising professionals	119

11.7. Advertising literacy in educational programmes.....	119
11.8. Regulation and self-regulation	120
11.9. Risk Assessment	121
11.10. Policy Guidelines to Empower Minors to Cope with Hybrid Advertising.....	121
11.10.1. Development of an Advertising Disclosure	121
11.10.2. Increasing general knowledge of advertising among minors	122
11.10.3. Increasing parent’s advertising literacy and their parental mediation.....	122
11.10.4. Increasing awareness among advertising professionals.....	123
11.10.5. Policy makers.....	123

1

INTRODUCTION

R. DE WOLF, L. HUDDERS & V. CAUBERGHE

The ways we communicate have been altered substantially by new media. Smartphones, tablets and laptops surround us and can be considered an integral part of our lives that facilitate communication. Certainly young people are increasingly using online media to connect with their friends, watch videos and play videogames. The importance of new media for young people has not escaped the attention of advertising professionals who are increasingly using new media to spread commercial messages in various ways. Although advertising reaches us into nearly all areas of our lives through the omnipresence of new media, the overall goal of advertising has not changed, that is getting our attention and convincing us to buy a product. The tactics used to accomplish the latter, however, have altered substantially. Commercial messages are often integrated in the media content and the lines between ‘content’ and ‘advertising’ becomes a blur (e.g., advertiser funded program). Moreover, children are often encouraged to actively engage with the commercial content (e.g., advergames). In addition, much personal information that is posted online is also collected and re-used to personalize advertisements (e.g., banner ads or social media advertising). Finally, it should be noted that in general many new advertising formats are highly entertaining. Obviously, advertising has gone through a massive transformation and, consequently, also challenges one’s advertising literacy or an individual’s knowledge, abilities and skills to cope with advertising (Boush, Friestad & Rose, 1994; Buijzen, van Reijmersdal & Owen, 2010). Especially minors have difficulties to recognize these new advertising formats and process them critically. This suggests that they are at risk to be persuaded by advertising without being aware of this. This risk is higher for advertising formats which are often used by marketers to target minors. Therefore, **the overall aim of the current research report is to identify and assess the risks related to advertising formats in a new media environment targeting minors aged 6 to 18** (referred to ‘risk analysis’ in the remainder of this report).

Throughout the report five key questions will be addressed which we consider crucial when formalizing the risk analysis (see table 1). Specifically, we pay attention to how minors are targeted and to what advertising formats they are most exposed to (Q1), their knowledge, abilities and skills to cope with new advertising formats (Q2), as well as to how their immediate (Q3, Q4) and non-immediate (Q5) surrounding empowers and protects them. We believe that this contextual and holistic approach is necessary to adequately identify and assess the risks of advertising in a new media environment. At the end of the report we discuss and summarize the risk analysis and emphasize what is needed to empower and protect minors.

Before we start with discussing and answering the key questions put forward in the risk analysis we will theoretically disentangle the advertising literacy concept and highlight the importance of advertising literacy in a new media environment.

Section	Key question
3	Q1: Which new advertising formats are minors the most exposed to?
4-6	Q2: What is the current advertising literacy of minors for new advertising formats?
7-8	Q3: How do parents and advertising professionals perceive new advertising formats?
9	Q4: How do schools help children and teenagers to cope with new advertising formats?
10	Q5: How are these advertising formats (self-) regulated?

Table 1. Identification and assessment of the risks connected to new advertising formats targeting minors: key questions

2

ADVERTISING LITERACY IN A NEW MEDIA ENVIRONMENT

R. DE WOLF, L. HUDDERS & V. CAUBERGHE

2.1. RECONSIDERING ADVERTISING LITERACY

Over the years many different studies have investigated minors' advertising literacy, which refers to children's knowledge and skills to cope with advertising (Boush et al., 1994). Figure 1 gives an overview of the advertising literacy concept (see page 13). The automatic, affective reactions children hold towards persuasive messages can be attenuated by activating the advertising literacy of children (See figure 1, route 2). Friestad and Wright (1994) differentiate between declarative/factual knowledge, defined as the domain-specific content knowledge (here: related to market principles); and procedural knowledge, defined as the knowledge on how to perform certain activities as acquired through inferences from existing declarative/factual knowledge. Although recent studies related to advertising literacy and children rarely distinguish between both types of knowledge, we follow recent insights (Campbell & Kirmani, 2000; Rozendaal et al., 2011; Waiguny, Nelson & Terlutter, 2014) by explicitly conceptualizing dispositional (referring to factual knowledge) and situational (referring to procedural knowledge) advertising literacy as two important facets within children's advertising literacy (See figure 1, route 3 and 4).

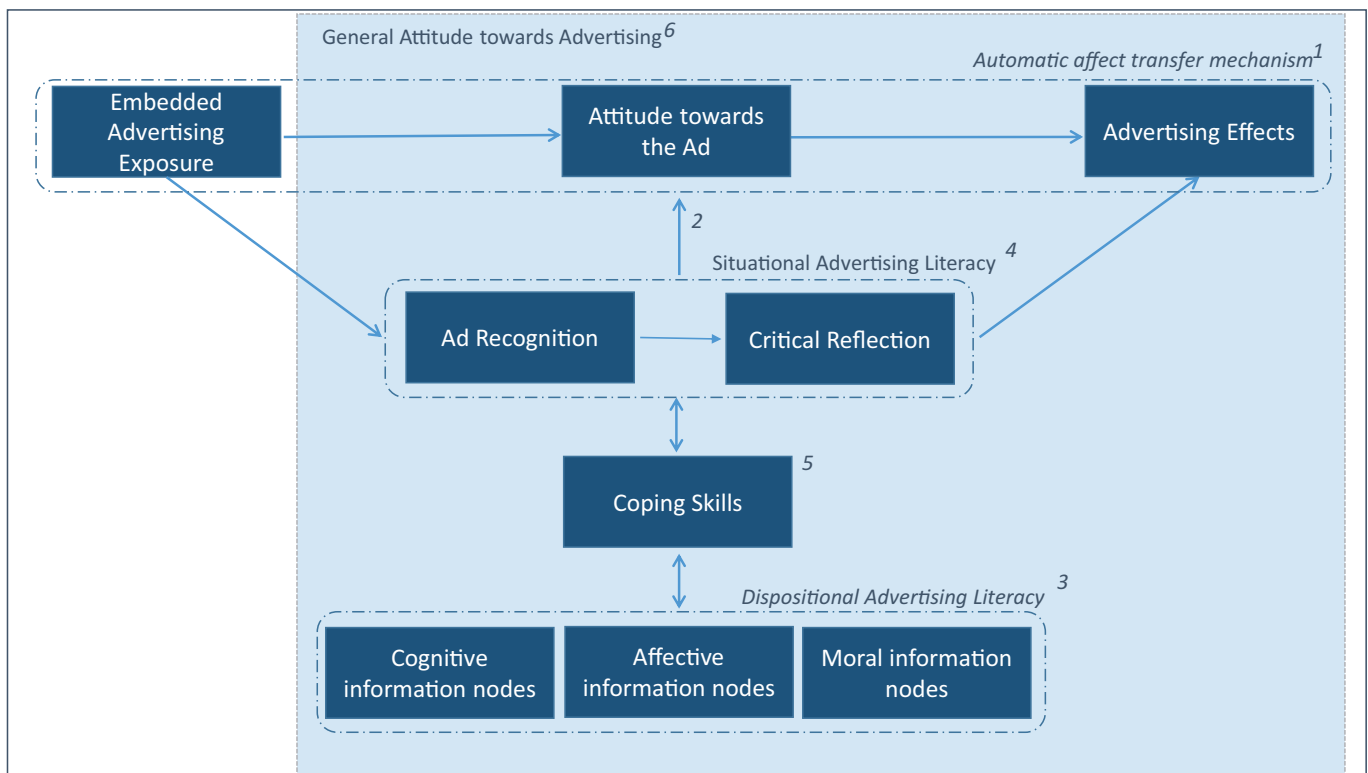


Figure 1. Advertising literacy: concept and dimensions (Hudders et al., 2016b)

An individual's dispositional advertising literacy can be defined as the knowledge, skills and abilities consumers possess regarding persuasion in an advertising context (See Figure 1, route 3). It can be referred to as an associative network, or a schemer schema (Wright, 1986). The associative network theory, originating from the pioneering work of Anderson and Bower (1973), approaches the human brain as a network of separate interconnected chunks of information (nodes). These nodes can either be semantic (i.e. refer to a subject, object or category) or emotional (i.e. refer to a feeling or emotional state) in nature (Bower, 1981). Making an information chunk prominent will automatically trigger the network of interconnected nodes through a network 'spreading activation' process. The stronger the network association, the easier it becomes to retrieve certain information or memories (Keller, 1993). Dispositional advertising literacy consists of an entity of information nodes related to advertising that can be activated when confronted with a persuasive attempt (Friestad & Wright, 1994). These information nodes have cognitive, affective and moral meanings related to advertising. First, the cognitive information node refers to the knowledge children have on the intentions of advertising (e.g. 'advertising is trying to sell something'). Second, the affective information node refers to the affective attitudes (in terms of liking or disliking) towards advertising in general and specific advertising formats. Finally, the morel information node refers to an individual's ability to develop thoughts about the appropriateness of specific advertising formats (Hudders et al., 2016b).

Situational advertising literacy (See Figure 1, route 4) refers to the thoughts and actions an individual undertakes in direct anticipation of a persuasive attempt, as well as during or after exposure. It refers to 1) the recognition of a persuasive attempt, and 2) the critical reflection on this attempt. Recognizing a persuasive attempt is the prerequisite for the critical reflection to be activated and stimulate conscience processing of the persuasive message. The critical reflection which follows upon the recognition will be based on the knowledge one has required in its associative network. The cognitive, affective and moral knowledge one has retrieved will influence the level of critical processing when children are exposed to persuasive attempts. Critical reflection entails reflections on questions such as ‘Which persuasive strategies have been used?’, ‘Which impact does this specific strategy has on me?’, ‘Is this specific strategy appropriate the use?’. Hence, the dispositional advertising literacy plays a crucial role here.

Coping skills (See figure 1, route 5) are an important aspect of an individual’s advertising literacy and are the crucial connection between dispositional and situational advertising literacy (Friestad & Wright, 1994). These coping skills refer to one’s ability “to recognize, analyse, interpret, evaluate, and remember persuasion attempts and to select and execute coping tactics believed to be effective and appropriate” (Friestad & Wright, 1994). This skill determines the extent, speed and accuracy to which the relevant (cognitive, moral and affective) information nodes can be activated in the associative network (dispositional) and helps individuals to activate the matching coping strategy which is required when exposed to a certain ad (situational). Hence, strengthening this facet will make the process of selecting the relevant coping strategy more automatic when being exposed to advertising. The last component which is included in the model is the general attitude toward advertising (See figure 1, route 6). This general evaluation of advertising practices, or put in other words, one’s level of advertising irritation, will influence the overall processing of persuasive messages.

As shown in figure 1, the process of advertising is complex to comprehend and certainly not self-evident. An early study of Henriksen (1996) can serve as an example. In her study, Henriksen (1996) instructed children to *buy* or *sell* certain objects. Children were seated between Bert and Ernie (Sesame Street dolls). Bert, Ernie and the child each received an equal amount of fictitious money and toys. In the study they were instructed to sell/buy toys either directly (e.g., “you buy a train from Ernie”) or indirectly (e.g., “Make Bert sell a train to Ernie”). She found that in the youngest group (ages 6 – 7) two out of three children were able to perform buying correctly, whereas only one out of three was able to perform selling correctly. The older group (ages 8-9) had less difficulties. Four out of five were able to buy correctly, whereas three out of four performed selling correctly. The children showed greater competence when selling/buying toys directly than indirectly. Regardless of these instructions the task performance of selling toys was lower than buying toys. This experiment exemplifies how children are even struggling with the very notions of buying and selling. Besides this basic understanding, however, other and more profound skills are necessary to process advertising in a critical manner, skills that can be referred to as advertising literacy.

In the following subsections we discuss the dimensions of advertising literacy more in depth as well as how they are developed throughout childhood and adolescence.

2.2. DISPOSITIONAL ADVERTISING LITERACY

An individual’s dispositional advertising literacy can be referred to as an associative network that consists of an entity of information nodes related to advertising that can be activated when confronted with a persuasive attempt. As mentioned above, these nodes may have a cognitive, attitudinal and moral meaning related to advertising. The cognitive dimension refers to the knowledge and skills concerning advertisements. Over the years, advertising literacy has mainly been approached from a cognitive perspective (e.g., recognition of advertisements, understanding the selling and persuasive intent, knowing the persuasive tactics that are employed, recognizing the source, etc.). The moral dimension reflects individuals’ ability to develop thoughts about the appropriateness of specific advertising formats and the general moral evaluations individuals hold toward these formats (e.g., advergames, brand placement or TV commercials) and advertising in general. Finally, the attitudinal dimension can be described as a general set of learned attitudes toward advertising in general on the one hand, and toward specific advertising formats on the other hand. To sum up, a high level of dispositional advertising literacy is equal to recognizing and understanding advertising, adhering a critical and nuanced attitude and being capable of judging advertising.

It cannot be assumed that minors possess a high level of advertising literacy. Instead, it is a developmental process that is strongly related to children's cognitive maturation and encompasses multiple skills concerning memory, cognitive resources, message-processing and theory of mind, that is the intuitive understanding of one's own and other people's mental states (Premack & Woodruff, 1978). As children grow older their advertising literacy also increases (Rozendaal et al., 2011). John (1999) argues that three phases can be distinguished in how children comprehend and cope with advertising. Each of these phases will be discussed in light of the dimensions of advertising literacy.

In the *perceptual phase* (age 3-7) children are positive about advertising but have difficulties in taking the perspective of another and are thus mostly ignorant with respect to the persuasive intentions of advertisements. The cognitive skills of children in this age category are mostly characterized by perceptual features and distinctions. Hence, 'brands' or 'retail stores' might be familiar concepts to them, but they rarely develop an abstract level of understanding (e.g., from the age of 5 onwards they are able to distinguish commercials from programs, but have difficulties with explaining the difference between the two). They make decisions based on very limited information (e.g., choosing products based on 'size' or 'attractiveness') and approach situations from an egocentric perspective. In general, it may be argued that children have a positive but naïve attitude towards advertising, a limited understanding, and a very limited ability to develop deep thought on appropriateness and fairness.

In the *analytical phase* (age 7-11) changes take place both on a cognitive and social level. Their information processing abilities, understanding of the marketplace and more complex knowledge about advertising develops. Moreover, they move beyond an egocentric perspective and their own feelings and motives. Children also tend to perceive and judge products on more than one dimension and adopt a more abstract level of reasoning which allows them to process advertiser's motives (e.g., trying to get people to buy something). Children from the age of 8 are more critical and no longer believe that advertising always tells the truth. To sum up, children in this phase have a more developed understanding of advertising and typically recognize commercial content. Their attitude is also more developed by being sceptic towards the truthfulness of advertisements. Moreover, because of their more abstract level of reasoning they are also able to shift between perspectives and develop a basic moral judgement.

Finally, in the *reflective phase* (age 11-16) a more complex understanding begins to emerge. Knowledge about advertising and branding becomes even more nuanced and sophisticated, along with the development of social skills. Because children move into adolescence their own identity becomes more prominent and more attention is devoted to social aspects and decisions are more dependent on the specific situation. Children in the reflective phase are also more critical (and often more negative) and question the truthfulness of advertising and are able to use nuances of voice. Children in the reflective phase thus typically adhere to a nuanced, but predominantly negative attitude towards advertising. The latter, however, provides them with a better understanding of why commercials can be untruthful. Their cognition has matured – although even at the age of 14 the level of understanding is not comparable to that of adults (Boush et al., 1994). Because social awareness and attention towards their (social) surrounding a more advanced level of moral judgement is possible.

It is generally assumed that children are more affected by and susceptible to advertising, while teenagers are supposedly less vulnerable to these persuasive effects as they have a higher advertising literacy level. Dorr (1986) argues that teenagers possess a greater understanding of persuasive techniques that helps them "evaluate advertising claims sensibly and gain more control over the type and amount of influence commercials exert on them" (p. 52). However, it is debated whether teenagers' advertising literacy has already fully matured (Van Reijmersdal, Lammers, Rozendaal & Buijzen, 2016). During adolescence, cognitive abilities along with information processing skills are still developing (Boush, et al. 1994; Friestad & Wright 1994). This means that adolescents' knowledge of advertising techniques and persuasion strategies are not entirely developed. Certainly for new advertising formats their knowledge about these techniques may be limited due to inexperience and unfamiliarity (Mangleburg, Grewal, & Bristol 1997; Verhellen, Oates, De Pelsmacker & Dens, 2014). Consequently, this suggests the possibility that adolescents may not be fully able to critically reflect on advertising on a conscious level, making them a group of consumers at risk of unwanted persuasion effects (Nairn & Fine, 2008).

Lapierre (2015) indicates the process of understanding advertising and persuasion takes time and practice. Moreover, children need to learn to apply their dispositional advertising literacy and cope with the challenges a particular persuasion attempt brings along. The latter brings us to situational advertising literacy.

2.3. SITUATIONAL ADVERTISING LITERACY

Situational advertising literacy refers to the thoughts and actions an individual undertakes in direct anticipation of a persuasive attempt, as well as during or after exposure. Whereas dispositional advertising literacy refers to possessing knowledge, skills and abilities to process persuasion and advertising, situational advertising literacy refers to actually using and applying the latter when exposed to advertising.

The development of dispositional advertising literacy encloses cognitive, emotional and moral development in general (see 2.2). The development of situational literacy is more closely related to coping with a specific persuasion attempt. Specifically, the development of two abilities are central: executive functioning (e.g., inhibitory control and attentional flexibility) and emotion regulation (i.e. the ability to control one's emotional experiences and expressions) for an overview, see Rozendaal, LaPierre, van Reijmersdal, & Buijzen, 2011). When minors are less able to control inhibitions and control their impulses they are more likely to immediately respond to the perceptually salient and appealing features of the message. Then, because they have a hard time controlling their attention, they will be unable to shift their attention away from the affect-based message and focus on their advertising literacy. Lastly, because advertising is often highly entertaining it becomes difficult to not being overwhelmed by emotions. To sum up, the development of situational advertising literacy entails the control of impulses, attention and emotions. Applying knowledge, skills and abilities one's developed seems self-evident.

2.4. ADVERTISING LITERACY IN A NEW MEDIA FORMAT

New advertising formats challenge children and teenagers given the integration of commercial messages in the media content and its fun and engaging nature. To understand advertising literacy in a new media environment in all its complexity it is first necessary to zoom in on the new tactics that are used to target minors. Various new tactics characterize the new advertising formats – whether or not combined. A first tactic is integration, which refers to a blurring or collapse between media content and the commercial message. The commercial message is integrated into the media content, hereby not disrupting the latter like in a traditional TV commercials. Three types of integration can be distinguished: format, thematic and narrative (Buijzen, Van Reijmersdal, & Owen, 2010). Format integration refers to an integration of the commercial message into the editorial context (e.g., magazine advertisement providing information about a product in the style of an article). Advertisements that are placed around thematically congruent content are referred to as thematic integration (e.g., sports brands logo at a football game). Finally, narrative integration refers to an integration of a commercial message into the narrative of certain media content (e.g. brand placement in a movie). A second tactic relies on interaction. Traditional mass media leave little room for users to interact with the media content and commercials. New media technologies, however, allow users more agency. First, people can be interactive with advertisements by managing different types of settings (e.g. managing Facebook adverts or Google profile). Moreover, because of the blur between media content and the commercial message some formats encourage people to play with advertisements (e.g., advergames). Finally, some formats urge people to make/share commercials (e.g., draw an ad). Many new formats rely on personalization, which can be considered a third tactic. Through the emergence of social media, especially social networking sites, a lot of personal information is shared in these contexts. In turn, this information is used to tailor advertising to an individual's characteristics or interests (Sundar & Marathe, 2010). Finally, new advertising formats are highly entertaining and appeal to the emotions of minors, which challenges them to activate their advertising literacy and cope with new advertising formats.

It should be clear by now that these new tactics used by advertising professionals to target children and teenagers demand a high level of advertising literacy, so minors can develop themselves as critical, informed consumers. Moreover, because new advertisements are often 'hidden' and appeal to the emotions of minors it is necessary to theoretically disentangle and update the concept and also pay attention to the attitudes and judgment of minors, besides recognizing and understanding new advertising formats. In particular, Hudders, De Pauw, Cauberghe, Panic, Zarouali, and Rozendaal (2016b) suggest that advertising literacy needs to be triggered when children are exposed to persuasive messages to be able to counterbalance the automatic affective reactions evoked by the fun and entertaining character of current advertising formats (See figure 1, route 1). Buijzen et al. (2010) developed a framework which explains children's processing of commercial content (PCMC model). In this model, a distinction is made between three types of processing, i.e. systematic (high elaboration), heuristic (moderate elaboration) and automatic (low elaboration) processing. According to the PCMC, the level of elaboration will depend on the fit between required and allocated resources to process a persuasive message. High elaboration (and thus systematic processing) will only occur when both allocated and required resources to process a persuasive message are high. In the other cases, heuristic or automatic processing will occur. As the limited capacity model of message processing (Lang, 2000) suggests, individuals only have limited resources to process a message and these resources need to be subdivided between the three underlying processes of information processing, namely message encoding, storage and retrieval, the instances in which a child will process the media content in a systematic way will be limited.

Especially for embedded and hybrid ad formats, which often involve simultaneous processing of media and commercial content, a mismatch is likely to occur between required and allocated resources, leading to a higher cognitive load (which is defined as the total amount of mental resources required to perform a certain task (Paas & Van Merriënboer 1994) and automatic or heuristic processing of the persuasive message. Heuristic processing implies that people are influenced by simple decision rules (e.g. a high price implies a high quality (Gigerenzer 2008)). When automatic processing occurs, individuals are not elaborating the message elements, but are seduced by peripheral cues. In this case, persuasion occurs in an implicit and automatic way, through affect-based learning mechanisms, such as evaluative conditioning, mere exposure, and preconscious emotional associations induced by the fun and entertaining media context (Chartrand, 2005; De Houwer, Thomas, & Baeyens, 2001; Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005; Evans & Park, 2015). In conclusion, the PCMC model implies that when encountering new advertising formats, children will be implicitly persuaded through heuristic or automatic processing.

Now that we have shortly summarized the importance of advertising literacy we commence with the risk analysis in section 3. It should be noted that throughout the risk analysis it is our intention to take into account the layering of the advertising literacy concept and pay attention to the cognitive, attitudinal and moral dimension as well as to how advertising literacy is applied by minors.

3

WHICH NEW ADVERTISING FORMATS ARE MINORS THE MOST EXPOSED TO?

R. DE WOLF, L. HUDDERS & V. CAUBERGHE

The goal of this section is to map minors' media usage and the various new advertising formats used on popular media to address the first question in the risk analysis: **"Which new advertising formats are minors the most exposed to?"** First, we will map minors' media usage, given that their media is a good proxy to estimate the exposure occurrence to certain advertising formats. Next, we will examine which formats are the most popular in these media. This approach enables us to detect the advertising formats children and teenagers are the most exposed to and also paves the road in investigating children's advertising literacy towards these formats (see section 4-6).

3.1. MINORS' MEDIA ACTIVITY

Newspapers and magazines. In general, newspapers and magazines have lost many of their readers. After the turn of the century these classic media have made way for less traditional media formats, such as the personal computer and the internet. Nowadays, children rarely read magazines and even less so newspapers. Van Coillie & Raedts (2014) found that 45.1% (between the ages of 9-12 in Flanders) never reads magazines and that almost 50% never reads newspapers. A similar trend can be seen among teenagers. Only one out of four teenagers (between the ages of 15-18 in Belgium) reads a newspaper on a daily basis (Eurobarometer, 2014). Of course, more and more newspapers and magazines are now available online, hereby also drawing the attention of young consumers. 49% of the Dutch population between the ages of 13-17 consults the newspaper digitally (GfK, 2013). To be informed most teenagers rely on social media. 70.5% indicate to be informed primarily through social media (Apestaartjaren, 2016).

Radio. Most Flemish families listen to the radio on a daily basis (Vanhaelewyn, Pauwels, Maes & De Marez, 2014). Not much is known about children's radio usage. About 58% of teenagers listens to the radio almost every day (Eurobarometer, 2014). Because of the digital evolution, the radio is also listened to on other platforms, such as the smartphone, computer and tablet. However, traditional devices are still preferred (Vanhaelewyn et al., 2014).

Television. Most children and teenagers watch television together with friends and/or family (Van Bauwel, 2010). Despite the strong presence of online media, television remains extremely popular among minors. For children, watching television can be considered the most popular media activity, together with gaming (Van Coillie & Raedts, 2014; Apestaartjaren, 2016). Seven out of ten watches more than four hours of TV every week (Van Coillie & Raedts, 2014). Four out of ten teenagers watches between one and two hours of television on a weekday (European Social Survey, 2012). The digitalization of the television has made watching on demand or postponed very popular among teenagers (Van Bauwel, 2010), hereby putting aside the traditional linear model. Increasingly often television content is consumed on other devices, such as the tablet or smartphone (Vanhaelewyn et al., 2014; Vanhaelewyn et al., 2016). More than half of the families in Flanders also have a Smart TV at home (Apestaartjaren, 2016).

Computer and Internet. 98% of the Flemish families with children have a computer at home (Apestaartjaren, 2014; Apestaartjaren, 2016). In 2014 38% of children (9-12 years old) had a computer of their own (Apestaartjaren, 2014), in 2016 this further increased to two thirds (Apestaartjaren, 2016). Young children (3-4 years old) mainly search for video clips online (e.g. YouTube) and play online games. As they grow older they also expand their motives to go online, such as information seeking and doing homework. Social networking sites (SNS) are also increasingly popular among children. Different sites, such as the Ketnet website or Wanago-go, now integrate different social-media like features into their websites. Playing games, however, can be considered their main online activity (Apestaartjaren, 2016).

Most teenagers own a laptop (93%) and are connected to the internet (Apestaartjaren, 2014; FOD Economie, 2014a). Facebook, YouTube and digital learning environments (e.g., Smartschool) are the most popular websites (Apestaartjaren, 2016). Communicating with peers is very important to teenagers. To do this they do not rely on e-mail, but mainly use chat functions integrated in SNSs. Playing games can be considered a shared interest between children and teenagers. A big difference, however, can be noticed between boys and girls, who respectively play 14 hours a week and less than 6 hours a week on average. Whereas, children mostly play games online, teenagers are preoccupied with their social network and especially drawn to social media such as Facebook and Snapchat (Apestaartjaren, 2016).

Mobile phone. More than half of the children (age 9-12) own a mobile phone in Flanders (Apestaartjaren, 2014). The device is mostly used for sending text messages and calling. However, the emergence of the smartphone made sure that different sorts of applications are also installed and used. Moreover, 48% of the applications installed were reported to be games (e.g., Flappy Bird) (Apestaartjaren, 2014). Especially teenagers are very active when it comes to their mobile phone behaviours. Almost every teen has his/her own mobile phone, of which 92,3% who have a smartphone (Apestaartjaren, 2016). Sending text messages is still very popular. However, new communication apps, such as Snapchat and WhatsApp, are also used regularly. Most of the time teenagers download free applications. 66% reported to have never paid for a mobile application (Apestaartjaren, 2014). Most teenagers prefer free games, songs and music videos with advertisements than paying for media without advertisements (56.2%) (ibid., 2016).

Tablet. In 2014 33% of the Belgian households who have an internet connection owned a Tablet (FOD Economie, 2014b). Nowadays, 17.9% of children and 40.6% of teenagers have their own tablet (Apestaartjaren, 2016). Especially games and social media are popular apps used on the tablet.

Analysing the media usage of children and minors we can definitely say that a variety of online media is used. Moreover, different types of media converge and seem to fulfil similar needs. For example, teenagers use mobile phones to call and send text messages, but also to browse websites, watch videos and play games. Besides media convergence it also seems that multiple screens are used simultaneously, e.g., a child playing a video game on tablet while watching a movie on television. Table 2 summarizes the activity level on each medium for children (age 6-12) and teenagers (age 12-18). To sum up, we can conclude that classic media such as newspapers and magazines are not popular with both children and teenagers. The television, tablet and computer and internet on the other hand are extremely popular and are part of their everyday life. Although more and more children have a mobile phone, it is especially teenagers who use mobile phones to keep connected to their social network anywhere and at any time.

Media	Newspaper/ magazine	Radio	Television	Computer and Internet	Mobile Phone	Tablet
Children (-12)	Low	Average	High	High	Average	High
Teenagers (12-18)	Low	Average	High	High	High	High

Table 2. Media activity of children and teenagers (Low, Average, High)

3.2. IDENTIFICATION AND ASSESSMENT OF NEW AND POPULAR ADVERTISING FORMATS

Considering the media activity of minors we first *identify* the formats that are especially used on these media to target children and teenagers. We solely focus on advertising formats on television, computer and internet, mobile phone and tablets. Next, these formats will be further assessed taking into account popularity and difficulty of the particular format. Table 3 provides an overview of the advertising formats children and/or teenagers are the most exposed to. For a complete description of the advertising formats and its tactics we refer to Daems and De Pelsmacker (2015a).

Advertising format	Description	Audience
Advergame	Advergames are online games designed to promote a certain brand or product.	Children

TV commercial	A television commercial is shown in between television programming	Children and teenagers
Brand placement	<p>The inclusion of brand identifiers into media programs (e.g., an actor drinking a soda while pointing the brand in the direction of the camera).</p> <p>Related formats: Advertising funded programs (AFP) can be considered as a further developed and more integrated form of product placement, where the advertiser determines the program content</p> <p>An infomercial is a television commercial that blurs the lines between editorial and persuasive content, and has longer exposure time than traditional TV commercials</p>	Children and teenagers
Online banner	Online banners are embedded, typically rectangular advertisement images in websites	Children and teenagers
In-game advertising	In game-advertising refers to brands integrated into a video game	Children and teenagers
Native advertising	Native advertising refers to a blending of a website's content and a commercial message	Children and teenagers
Video advertising	Use of video content distributed via the internet as an advertising channel. It can be placed before (pre-roll), during (mid-roll) or after video content (post-roll)	Children and teenagers
Virtual worlds	Virtual worlds refers to brand to brands integrated into online platforms	Teenagers
Profile targeting and social media advertising	Profile targeting refers to directing advertisements to certain audiences based on specific profile characteristics and behaviours (e.g., profile information on Facebook, search queries, likes, etc.). Especially on social media different types of social advertisements – that responds to the social network of people – have emerged (e.g., sponsored stories)	Teenagers
Application advertising	Brand related software that can be downloaded on smartphone and/ or tablet	Teenagers
Location based advertising	Much personal and location-based information can be gathered. In turn, advertisements can be directed towards customers based on their location	Teenagers

Table 3. Popular advertising formats used to target children and/or teenagers

Ideally, *all* advertising formats should be studied. For practical reasons it is, however, not possible to study the advertising literacy towards all advertising formats for all age groups, while also taking into account the complexity of the advertising literacy concept (see section 2). Therefore in this section a further selection is made for both children and teenagers, depending on the popularity and difficulty of the particular format. With difficulty, we refer to the level of difficulty to recognize and understand the medium. Table 4 and 5 provide an overview of the low, average and highly risky advertising formats.

Although the television commercial is a non-integrated, non-interactive and non-personalized advertising format and thus easier to recognize and understand, it remains a very important format to reach children. Because both children and teenagers are so highly exposed to television commercials we consider this format important to take into account into the analysis. Moreover, it can serve as a bench mark, i.e. a point of reference to compare with other advertising formats.

In contrast to the TV advertising format, advergames stimulate consumers to actively engage with the media content – that is also

difficult to discern from the commercial message.¹ The popularity of advergames combined with its integrated and interactive character make it a highly risky advertising format to children. This advertising format, however, is less popular among teenagers.

Brand integration, such as brand placement, advertiser funded programs and infomercials, are non-interactive but also blur the lines between media and commercial content. As will become clear in section 4, the study of the impact of advergames among children has received more attention by scholars, but brand placement and advergames cannot be seen as one and the same format. Matthes and Naderer (2015c) argue that brand placement can show products in a more realistic manner (e.g., main figure drinking a soda), and consumers are more likely to identify with the actors. It should also be noted that there are various levels of integration. For example, advertisers determine the content in AFPs, while in brand placement products are only displayed. The popularity combined with the various degrees of integration make these formats important to take into account in further study for both children and teenagers.

Online banners can be static or dynamic (e.g., moving images), can be non-interactive or interactive (e.g., allow users to play games), and can be non-personalized or personalized (e.g., based on previous key word searches). Almost all online websites make use of online banners. Hence, online banners are popular and *can* be difficult to recognize and understand (Zarouali, Walrave, Ponnet, Poels & Vanwesenbeeck, 2016c). We label online banners as an average risk for children and teenagers.

A recent study showed how children and teenagers like to watch movies and television online (Apestaartjaren, 2016). Many online video(sharing) websites make use of video advertising (pre, mid or post rolls) and tailor advertising to individual consumer preferences through collecting personal information. The popularity of this format combined with personalization makes this a highly risky format for both children and teenagers.

Native advertising, or the integration of brand identifiers into the context of a website or social media site, is less popular to target children than teenagers because they are more drawn to online games, television and movies than reading. Native advertising, however, is often sophisticated. For media consumers in general it is hard to identify the commercial content as a form of advertising and to understand the commercial intent of the program. We label native advertising as an average risk for children and highly risky for teenagers.

Finally, advertising formats that rely on online personal information and/or are coupled to one's social network is often very difficult to recognize and comprehend (profile targeting, social media advertising, social media influencers, etc.). Social media, however, are mostly used by teenagers. Moreover, many social media such as Facebook require users to be at least 13 years old. Hence, children are less or not exposed to aforementioned advertising formats. We label these formats as a low risk for children and because of its omnipresence and difficulty as a high risk for teenagers.

Advertising format	Difficult?	Popular?	Risk?
Television commercial	No	Yes	Average (benchmark)
Advergames	Yes	Yes	High
Brand integration	Yes	Yes	High
Online banners	No	Yes	Average
Video advertising	Yes	Yes	High

**Table 4. Assessment of the advertising formats for children based on popularity and difficulty
(Risk = high, average, low).**

¹ It should be noted that the research of Rifon et al. (2014) found that children (age 5-10) who watched an advergame liked the brand as much as those who played the game.

Advertising format	Difficult?	Popular?	Risk?
Television commercial	No	Yes	Average (benchmark)
Advergames	Yes	No	Average
Brand integration	Yes	Yes	High
Online banners	No	Yes	Average
Video advertising	Yes	Yes	High
Native advertising	Yes	Yes	High
Virtual worlds, Profile targeting, Social media advertising, Location based advertising, Social media influencers	Yes	Yes	High

Table 5. Assessment of the advertising formats for teenagers based on popularity and difficulty

(Risk = high, average, low).

Section 3 identified the advertising formats minors are the most exposed to (see table 3). Moreover, an initial assessment was made based on difficulty and popularity of the particular format (table 4 and 5). From this assessment, we can conclude that integrated forms of advertising, such as brand integration or native advertising, pose a high risk for children's understanding and critical advertising processing. The goal of the initial assessment is to clearly delineate the advertisements formats that will be taking into account in further study. At the end of this research report, we will take this assessment into account to answer all key questions of the risk analysis as proposed in the introduction.

4

CHILDREN'S ADVERTISING LITERACY

R. DE WOLF, P. DE PAUW, S. DE JANS, L. HUDDERS & V. CAUBERGHE

4.1. INTRODUCTION

The goal of section 4 to 6 is to address question 2 in the risk analysis: **“What is the current advertising literacy of minors for new advertising formats?”** The advertising literacy of children (6-12), teenagers (12-18) and vulnerable audiences will be discussed respectively. In each section a literature review is provided, an identification of the research gaps, and a short summary of our own studies to fill these gaps.

In the following subsections we zoom in on the literature that has studied children’s advertising literacy towards specific formats (age 6-12).² To our knowledge no studies have been devoted to video advertising and brand placement with regard to children’s advertising literacy. Television is still the most popular medium for children. However, children also spend increasingly more time on other media such as the tablet and computer, where they are confronted with more interactive and integrated formats. In general, it is argued that awareness of integrated/interactive formats (implicit tactics) is considerably lower for children in comparison to traditional formats (explicit tactics). Freeman and Shapiro (2014, p.53) state that “children ages 12 and younger targeted with implicit promotional messages will not succeed in recognizing the influence attempt.”

4.1.1. TELEVISION COMMERCIALS

Since the early seventies, television advertising directed to children grew into a major issue because of two concerns: children were thought to a) have difficulty differentiating between program content and advertising, and to b) lack the ability to grasp the nature of advertising (Kunkel, 1988). Ever since, various studies have been devoted to children’s knowledge and skills with regard to the TV commercial.

Early studies have indicated how most children aged 6 and younger have difficulties or are unable to understand the selling purpose of advertising (for an overview, see Kunkel, 1988). Brucks, Armstrong and Goldberg (1988) argue, however, that these studies overestimated the skills of children by asking direct questions rather than using a cognitive response approach to assess the advertising literacy of children. Specifically, they found that even older children (age 9-10) were not more engaged to express critical thoughts when exposed to a TV commercial. Similar results were obtained by Bijmolt, Claassen and Brus (1998): using non-verbal measures most children (age 5-8) were able to differentiate between commercials and programs and showed cognition of advertising intent; using verbal measures, they found that the understanding of TV advertising was substantially lower.

Nowadays, most recent literature is in agreement that before the age of five children primarily view TV advertising as entertainment and that by the age of seven to eight a basic understanding of advertising and persuasive intent starts to emerge (Kunkel, Wilcox, Cantor, Palmer, Linn, & Dowrick, 2004; Oates, Blades, & Gunter, 2002; Rozendaal, Buijzen, & Valkenburg, 2010; Rozendaal et al., 2011; Oprea & Rozendaal, 2015).³

Contemporary research in the area of children’s advertising takes a more comprehensive and analytical perspective on advertising literacy. Carter, Patterson, Donovan, Ewing and Roberts (2011) much of the previous literature has been criticised for failing to differentiate between children’s awareness of ‘selling’ versus ‘persuasive’ intent, the latter representing a more sophisticated understanding and superior cognitive defence. Unfortunately there is little literature to suggest at what age awareness of ‘persuasive intent’ emerges; our aim was to address this important issue. Children (n = 594) argue that early research has neglected the difference between ‘selling intent’ and ‘persuasive intent’. In line with previous literature they found that most children (around the age of 8) are able to understand the purpose to sell (selling intent). Awareness of the purpose to increase one’s desirability towards

² It should be noted, however, that the majority of the literature has studied children’s advertising literacy with regard to TV commercials and advergames.

³ Flemish children are taught basic knowledge and skills concerning television advertising and advertising in general nowadays (see section 8). It is therefore quite natural that children have developed a basic advertising literacy level.

the advertised product (persuasive intent) emerges much more slowly. Even among the oldest group (age 11-12) in their study only 40% was aware of the persuasive intent. Rozendaal, Buijzen and Valkenburg (2008) drew similar conclusions in their research.

On another level, Rozendaal, Buijzen and Valkenburg (2009) have argued that early studies assumed that children who have acquired cognitive advertising skills automatically process advertising messages. In their study, however, they found no such relation between recognizing advertisements and understanding selling intent and the persuasive influence of advertising. Understanding advertising's persuasive intent did reduce the impact of advertising exposure on children's advertised product desire, but only for children age 11 – 12. This pioneering study paved the road to take into account the attitudinal dimension of advertising literacy and differentiate between children's dispositional and situational (or performance) advertising literacy (see Rozendaal et al., 2011; Ham, Nelson, & Das, 2015; Hudders et al., 2016). For a complete overview of the advertising literacy concept and its dimensions we refer to section 2.

Although the study of the attitudinal dimension of advertising literacy and situational advertising literacy is still in its infancy, some preliminary conclusions can be drawn for TV commercials. In line with the results on cognitive advertising literacy, Oprea & Rozendaal (2015) found older children (age 12) to have a higher scepticism, disliking and understanding over advertising's bias than younger ages (8-9). One way to operationalize children's situational advertising literacy is by looking at their resistance strategies, such as paying no attention to advertisements, getting angry, questioning the arguments in advertisements, etc. Oprea & Rozendaal (2015), however, found that children (age 8-12) rarely apply resistance strategies when confronted with advertising. Again, older children (age 10-12) were more likely to engage in resistance strategies. In their research they also found a positive relationship between attitudinal advertising literacy and situational advertising literacy. In other words, those who were found to be more critical, and thus had a higher attitudinal advertising literacy, more often engaged in resistance strategies. No such relationship was found between cognitive and situational advertising literacy.

To conclude, children below the age of 5 have a low level of advertising literacy and are mostly unable to differentiate between commercials and programming. From ages 5 to 6 onwards, children are able to make a differentiation. Nevertheless, it's only at the age of 7 to 8 that a basic understanding starts to emerge and children understand the purpose to sell. Awareness of increasing one's desirability towards the advertised product is even more difficult for children to comprehend. This more developed understanding starts to emerge around the age of 12. Older children (age +12) also seem to be more critical than younger children (age 8-9) and more frequently apply resistance strategies.

4.1.2. ADVERGAMES

AdvergAMES are often developed to promote unhealthy food (Coca-Cola, McDonald's). Various studies have shown how children who are exposed to advergAMES that feature an unhealthy snack are more likely to choose unhealthy food snacks afterwards (Dias & Agante, 2011; Mallinckrodt & Mizerski, 2007; Folkvord, Anschütz, Buijzen & Valkenburg, 2013). Not surprisingly, many studies have been devoted to children's advertising literacy towards advergAMES.

When it comes to cognitive advertising literacy An, Jin and Park (2014) found that three quarters of the children (age 8-9) in her sample did not recognize advergAMES as a type of advertising. Similar conclusions were drawn by Waiguny et al., (2014) and Verhellen et al., (2014) when comparing advergAMES and TV commercials. Waiguny et al. (2014) showed that children (age 8-10) had a higher ability to identify the commercial backdrop in TV commercials than when playing advergAMES. Recalling the brand they (children age 11-14) were exposed to also seemed to be more difficult for advergAMES than traditional television advertisements (Verhellen et al., 2014). Wollslager (2009) found that children (age 9-12) have a positive attitude towards advergAMES but do not grasp its purpose. Only 23% were able to identify the purpose of advertising.

Especially because of the fun and immersive nature of the format children are unlikely to retrieve and activate their advertising literacy. Van Reijmersdal, Rozendaal and Buijzen (2012) showed that, even if children understand advergames, they do not use that knowledge to cope with the advergames' effects. Because advergames also arouse emotions among children, Vanwesenbeeck, Ponnet and Walrave (2016a) studied how advergame experience affect cognitive advertising literacy. In contrast to what was expected, a positive relation was found between experience and cognitive advertising literacy. Rifon, Quilliam, Pack, Weatherspoon, Kim and Smreker (2014) also showed how playing a game activated greater persuasion knowledge. It seems that enjoyment/engagement does not necessarily decrease the motivation of children to activate their advertising literacy. However, these results are in contrast with the study of Waiguny et al. (2014), who found that a child's presence (i.e. level of engagement with the medium) in the advergame moderated the effect of cognitive advertising literacy on identification of commercial content. Moreover, presence mitigated the effects of cognitive advertising literacy on persuasion outcomes in two ways: children who were more engaged with the game are less critical to process the advergame; children who were more engaged were less able to identify advergames as commercial information.

Beside the 'classic' one-on-one advergame children also enjoy to play social network games – an online space where they can interact with (new) friends and play games (e.g., club penguin). Although this game is not designed for advertising purposes, this type of game does provide opportunities for advertisers to interact with children. Rozendaal, Slot, van Reijmersdal and Buijzen (2013) studied the advertising literacy of children (9-12) regarding social games and found how most children (2 out of 3) recognized the advertisements. Most children also displayed an understanding of the selling and the persuasive intent. Only a minority, however, correctly identified the source of advertising (43%). In addition, children hold a relatively positive attitude towards the games. More importantly, they also made a comparison between those who are active players and non-players. Although no (or a minor) difference was found in their cognitive advertising literacy, the study shows how a better recognition and understanding reduced the susceptibility for the effects of advertising only for active players. Hence, active players were found to be better in activating their advertising literacy. Finally, they demonstrated how a critical attitude was more important in reducing the persuasive effect of advertising than a higher conceptual knowledge.

To conclude, children have more difficulties to recognize advergames as a type of advertising compared to TV commercials. Children older than 9 to 10 years old, are more likely to recognize advergames as commercial content compared to younger ages. Because advergames also arouse emotions of children it might be more difficult for them to activate their literacy. The findings with respect to the latter have been inconclusive.

4.1.3. BRAND INTEGRATION

Only a handful of studies have studied the effects of brand placement on children. To our knowledge, no studies have investigated the advertising literacy with respect to brand placement or related formats (e.g., advertising funded programs, infomercials) among children.

An early study by Auty and Lewis (2004) showed how children (aged 6-12) were more likely to consume soft drinks of a particular brand (Pepsi cola) after watching a movie in which the drinks were shown. Specifically, after watching a scene of *Home Alone* in which Pepsi Cola was shown, the participants were more likely to select a Pepsi Cola than a Coca Cola afterwards. Thus, brand placement directly influenced the consuming behaviours of children. However, they only found significant effects for children who already saw the movie previously. Matthes and Naderer (2015), on the contrary, found that even without prior viewing brand placement had an impact. In their research they also took into account the frequency of the brand placements (moderate and high placement frequency). The participants (aged 6-14) saw a movie fragment of *Alvin and the Chipmunks* with placements of Utz Cheese Balls. Participants in the high placement frequency condition were more likely to consume the Utz Cheese Balls afterwards in a product-choice task, where they had to choose between three food products. In their study they also looked at the effect on brand or product attitudes but no significant relationships were found.

In the study of Auty and Lewis (2004) and Matthes and Naderer (2015) the effects were independent of children's ages. A study of Uribe and Fuentes-García (2015) showed how brand placement had a positive influence on the extent to which consumers were able to recall the brand that was shown (brand awareness) and the intention to eat fast food (behavioural disposition). Furthermore, this study did show differences between the age's groups. 12-15 year-olds scored higher on brand awareness than 9-year-olds. However, the older groups also had a higher behavioural disposition.

Children have difficulties with recognizing and understanding the commercial intent of advergames. Hence, similar findings are assumed for brand placement. Although no previous studies have investigated children's advertising literacy towards brand placement it is likely that the latter format directly affects children.

4.1.4. ONLINE BANNERS

Online banners are embedded, typically rectangular advertisement images in websites. For children to recognize these images as commercial messages is a first and necessary step in understanding advertising. Wollslager (2009) found that among the children (age 9-12) in his experiment about a third was able to accurately identify banners. Ali, Blades, Oates and Blumberg (2009) also found this exercise not to be effortless for children. Specifically, in their experiment they showed printed copies of fictional webpages to 6 to 12-years-olds. Some of these webpages contained banners. During the exercise children were asked to point out everything they thought to be an advertisement. 6-year-olds identified only 25% of all the advertisements. 8-year olds identified about half of the advertisements. 10 to 12-years-olds recognized about 75% of the banners. Some of the banners also had price tags attached. The latter seemed to benefit advertising recognition in older age groups (aged 10-12), but no effect or a negative effect was found for young children (aged 6-8).

(Young) children (especially) seem to have difficulties with identifying online banners. It should be noted, however, that only a handful of studies have investigated advertising literacy toward this particular format. Moreover, no findings are mentioned on attitudinal and moral advertising literacy.

4.2. GAPS IN THE LITERATURE AND MOTIVATION FOR FURTHER STUDY

The literature review sought to understand how advertising literacy has been conceptualized and studied over the years for children between the age of 6 to 12 with respect to the formats that were labelled as an average or a high risk, i.e., television commercials, advergames, brand placement, online banners, video advertising (see section 3). No studies were found to be devoted to video advertising and brand integration. Several conclusions and gaps in the literature can be noted regarding the other formats. First, especially the TV commercial and advergames have been investigated. Only a handful of studies have looked beyond these formats. Consequently, the study of advertising literacy with respect to TV commercials and advergames are also the most developed with a focus on attitudinal advertising literacy and situational advertising literacy. The other formats tend to be studied exclusively from a cognitive, dispositional point of view (i.e., recognizing and understanding advertisements). Second, although the study of the attitudinal dimension of advertising literacy and situational advertising literacy performance has been explored, no studies have been devoted to the study of the moral dimension of advertising literacy. Hence, it is currently unknown what (moral) reasoning strategies – if any – children apply to evaluate (new) advertising formats and tactics. Third, the accumulated body of research demonstrates inconclusive findings for detecting an exact age to when children have a sufficient and developed level of advertising literacy – certainly because the latter is also depended on practice and cognitive maturation. Fourth, several studies indicated that children have a harder time recognizing and understanding advergames in comparison to the TV commercial. In general, it can be concluded that children struggle more with implicit, integrated forms of advertising (sponsored content, online

banners, etc.). However, a systematic comparison of advergames with other formats besides the TV commercial remains absent.

To fill the gaps in the literature regarding children's advertising literacy towards new advertising formats various studies were set up in the period between 2013 and 2016 in Flanders by members of the AdLit consortium. In the following section our studies will be briefly discussed (research aim, method, results and discussion). Table 6 provides an overview. Often these studies also treat other, related research questions and hypotheses (e.g., the influence of training sessions, the impact of an advertising cue). The extended abstracts as described here, however, only discuss children's advertising literacy and its impact. For a full description of the study we refer to the published or submitted article.

Section	Study	Focus	Format	Method	Respondents	Age
4.3.1.	De Jans et al. 2016	Cognition, critical attitude and moral reasoning	Advergames Online banners TV commercial Sponsored content	Experimental study	N=510	7-12
4.3.2.	De Pauw et al. 2016	Cognition and moral reasoning	Advergames Brand Placement Pre-rolls	Focus groups	N=60	9-11
4.3.3.	Panic et al. 2013	Cognition and critical attitude	Advergames TV commercial	Experimental study	N=254 N=128	7-9
4.3.4.	Hudders et al. 2016a	Cognition and critical attitude	Advergames TV commercial	Experimental study	N=78	8-9
4.3.5.	Hudders et al. 2015	Cognition and critical attitude	Advergames Advertiser funded programs	Experimental study	N=133	7-9
4.3.6.	Hudders et al. 2015	Cognition	Brand placement	Experimental study	N=180	7-12

Table 6. Summary of the studies investigating children's advertising literacy

4.3. ADLIT STUDIES INVESTIGATING CHILDREN'S ADVERTISING LITERACY TOWARDS NEW ADVERTISING FORMATS

4.3.1. STUDY 1: COMPARING CHILDREN'S ADVERTISING LITERACY TOWARDS ADVERGAMES, BRAND PLACEMENT, SPONSORED CONTENT AND TELEVISION COMMERCIALS

Steffi De Jans, Liselot Hudders & Veroline Cauberghe

Highlights of this study

- ❖ "Children have less understanding and recognition of new advertising formats compared to traditional advertising formats, but they do have a good understanding of online banners"
- ❖ "Children have a low level of attitudinal and moral advertising literacy, both for traditional and new advertising formats"
- ❖ "Children's attitudinal and moral advertising literacy has a negative effect on their attitudes and brand recall, while their cognitive advertising literacy has a positive effect on brand recall"

Research aim

This study extends previous research by examining and comparing children's (age 7-12) responses to TV commercials, advergames, online banners and sponsored content via their cognitive, affective and moral advertising literacy. In addition, the current study investigates the moderating role of age.

Method

A 4-level (advertising format: TV commercial vs. advergame vs. sponsored content vs. online banner) between-subjects experimental study was conducted. In total, 510 children between the age of 7 and 12 years ($M_{age} = 9.29$, $SD = 1.64$) participated in the study from which 51,6% boys. Parental consent was asked for each child before they could participate in the study.

Four different advertising formats were selected: TV commercial vs. advergame vs. sponsored content vs. online banner. In order to control for brand effects (cf. existing brand attitudes), four different brands were selected. We chose four brands and products that were highly relevant for all children in the sample: Lego, Paula, Adidas and Nesquik. All products were gender and age neutral. The different brands were merged in the analyses to guarantee a higher level of brand independence. For each of the four brands, an advergame, sponsored article, TV commercial and online banner were selected. Accordingly, in total, 16 different advertisements were selected. The advergames and TV commercials of each brand were existing advertisements from the same advertising campaign (and thus containing similar advertising tactics and visuals). The sponsored articles and online banners were self-constructed, but in line with the other ad formats. For the TV commercial condition, children saw two short fragments from existing children television programs which were interrupted by one TV commercial between two ad breaks. This was projected on a big screen in front of the class. For the advergame condition, children surfed on a self-constructed and controlled website where they played

the advergame. Children in the sponsored content condition read one sponsored article on the same website. Finally, children in the online banner condition also read one (not sponsored) article on that website whereupon the online banner was placed in the left sidebar of the website. This article was similar to the article in the sponsored content condition. Each child was only exposed to one advertising format of one brand. Children were randomly allocated to one of the conditions.

The experiment was conducted on tablets in a classroom setting. Children were first exposed to the advertisement by asking them to watch the television program (TV commercial condition), surf on the website and play the game (advergame condition), surf on the website (online banner condition) or read the article on the website (sponsored content condition). Children were exposed to the advertising format for exactly 2 minutes and 15 seconds (advergame, sponsored content and online banner condition). In the TV commercial condition, children were exposed to a 30-second TV commercial between two television fragments of approximately 2 minutes each. Afterwards, the children had to complete a questionnaire on the tablet in which the dependent and mediating variables were measured.

The questionnaire was adapted to the cognitive abilities of children by adding smiley faces and pictures (Mallinckrodt & Mizerski, 2007). The same questionnaire lay-out was used for all conditions and all children. The order of the questionnaire was as follows: first, children had to answer a few socio-demographic questions after which format attitude was measured. Then the recognition of commercial content was measured, followed by brand recall, attitude toward the ad, understanding of persuasive intent, moral advertising literacy and affective advertising literacy. Finally, brand attitude and pester power were measured. Almost all items were measured with five-point Likert-type scales.

Advertising effects. First, format attitude refers to how much children enjoyed the medium they were exposed to. This construct was measured by one item ($M = 3.95$, $SD = .94$). Brand recall was measured by asking the children to name the brand they saw, if they had seen one. This construct was coded into correct (1) and incorrect (0). Further, brand attitude was measured with three items following Bakir and Palan (2010; $\alpha = .91$, $M = 3.88$, $SD = .99$). Finally, one item was used to measure pester power (Buijzen, 2007; $M = 3.28$, $SD = 1.43$).

Advertising literacy. Advertising literacy is a construct that consists of three dimensions: a cognitive, moral and affective dimension (Hudders, De Pauw, Cauberghe, Panic, Zarouali, & Rozendaal, 2016; see Figure 1). First, cognitive advertising literacy was divided into two sub-dimensions, namely recognition of commercial content (Waiguny, Nelson, & Terlutter, 2014; $M = 3.78$, $SD = 1.16$) and understanding of the persuasive intent of advertising (derived from Rozendaal et al., 2014; $M = 3.89$, $SD = 1.15$). A higher score on these items refers to a better understanding of the advertising format. Affective advertising literacy refers to children's affective evaluation of the advertising format, measured by three semantic differentials ($\alpha = .75$, $M = 2.56$, $SD = .112$). Finally, moral advertising literacy refers to children's reflection on the appropriateness of the advertising format and was also measured by three semantic differentials ($\alpha = .65$, $M = 1.75$, $SD = .70$). These items were adapted from Rozendaal et al. (2014) and Campbell (1999). A higher score on these variables indicates more disliking and a more critical, sceptical attitude toward the advertising format.

Covariates. Since all advertisements differed in a way in their execution style, attitude toward the ad was included as covariate to control for possible brand effects. This was measured by one five-point Likert-type scale item: 'How much do you like this advergame/online banner/sponsored article/TV commercial?' ($M = 3.81$, $SD = 1.01$).

Socio-demographics. The researchers registered children's school and grade. At the beginning of the questionnaire, children were asked to indicate their age and sex.

Results

1. Main effect of advertising format on advertising effectiveness

One-way ANOVA tests and a Chi-Square-test were conducted to examine the main effect of the advertising format on advertising effectiveness. First, the results showed a main effect of advertising format on format attitude ($F(3) = 8.82, p < .001$). Children like the medium more when exposed to an advergaming than when exposed to the other three advertising formats (see figure 2).

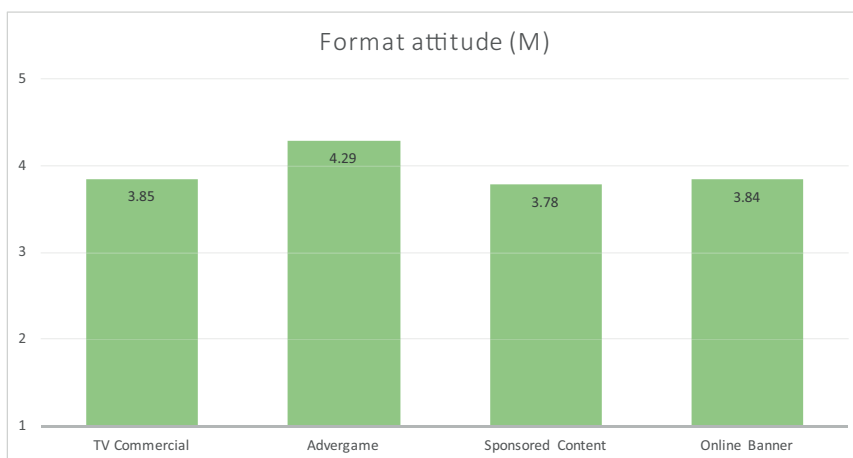


Figure 2. Main effect of advertising format on format attitude

There was also a significant main effect of the advertising format on children's **brand recall** ($\chi^2(3) = 28.75, p < .001$). Brand recall was significantly lower after exposure to an online banner than after exposure to the other three advertising formats (see figure 3).

Further, there was no significant effect of advertising format on **brand attitude** ($F(3) = 1.17, p = .320$), see figure 4.

Finally, a significant effect of advertising format on **pester power** was found ($F(3) = 2.71, p = .045$), see figure 5. In particular, results reveal that children intended to request the product more when exposed to an advergaming and an online banner compared to sponsored content.

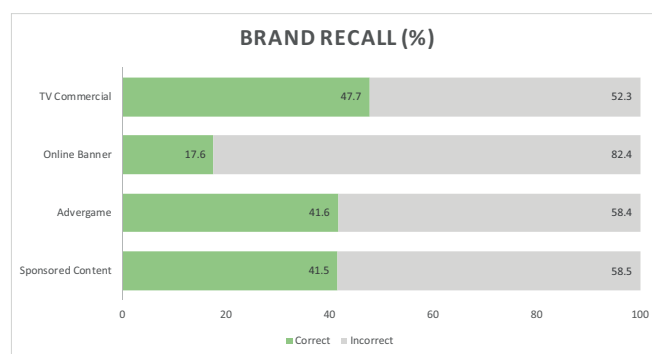


Figure 3. Main effect of advertising format on brand recall

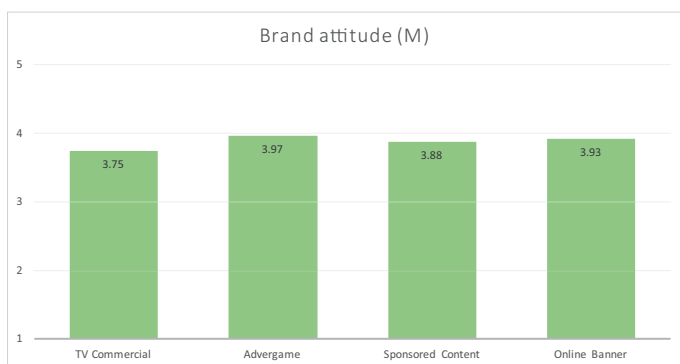


Figure 4. Main effect of advertising format on brand attitude

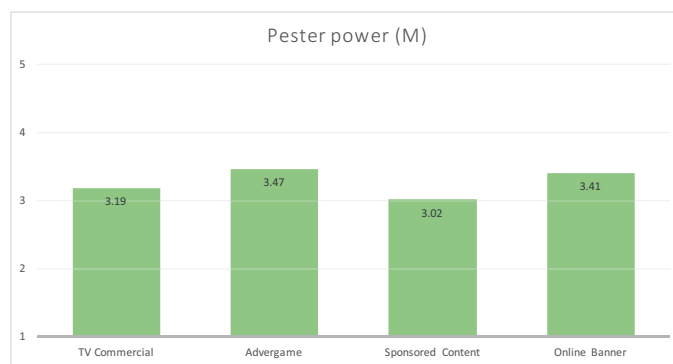


Figure 5. Main effect of advertising format on pester power

2. Main effect of advertising format on advertising literacy

The main effect of advertising format on advertising literacy was examined by conducting several One-way ANOVA tests (see figure 6). First, a significant effect was found of advertising format on **recognition of commercial content** ($F(3) = 23.05, p < .001$). Chil-

dren can better recognize the commercial content when exposed to TV commercials compared to the other three new advertising formats. Further, the results revealed a significant main effect of advertising format on **understanding of persuasive intent** ($F(3) = 27.88, p < .001$). Children have a better understanding of the persuasive intent of advertising for TV commercials and online banners than for advergames and sponsored content. There were no significant effects of advertising format on **affective** ($F(3) = 1.77, p = .152$) and **moral advertising literacy** ($F(3) = 1.50, p = .213$).

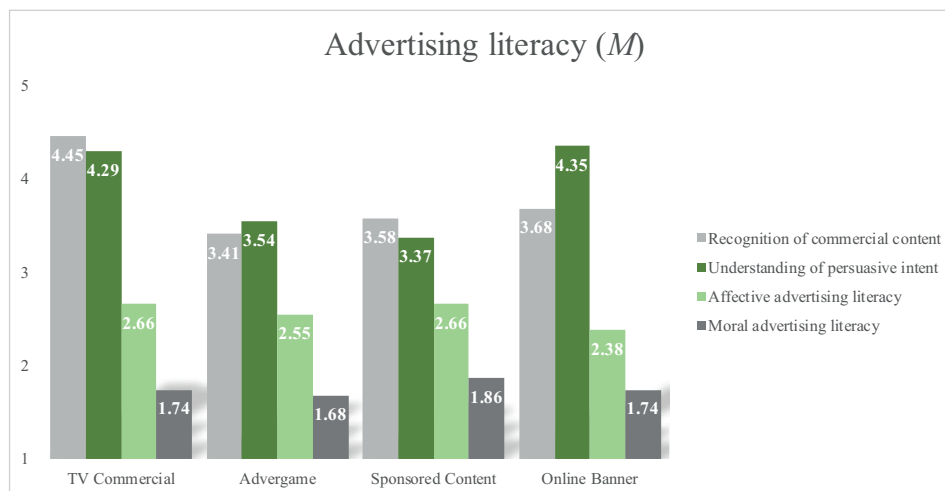


Figure 6. Main effect of advertising format on advertising literacy

3. Mediating role of advertising literacy on advertising effectiveness

It was investigated if and how the effects of advertising format on advertising effectiveness were mediated by children's advertising literacy by conducting multiple mediation analyses (Hayes, 2013; PROCESS, model 4, 5000 bootstrap samples). More specifically, we examined the mediating role of understanding of persuasive intent, recognition of commercial content, attitudinal advertising literacy and moral advertising literacy.

Multiple analyses were conducted to compare the advertising formats (TV commercials, online banners, advergames and sponsored content) with each other. These analyses showed the same trend in the results for TV commercials and online banners on the one hand, and for advergames and sponsored content on the other hand. Therefore, the conditions of TV commercials and online banners, and the conditions of advergames and sponsored content were taken together to simplify the presentation of the results. As regards to the mediating role of moral advertising literacy, especially significant difference were found for sponsored content in comparison to TV commercials and online banners. Further information about the results or more specific analyses can be retrieved from the authors.

First, the effect of advertising format on format attitude was mediated by both understanding of persuasive intent ($ab = .08, SE = .03, 95\%CI = [.0182, .1423]$), attitudinal advertising literacy ($ab = -.03, SE = .02, 95\%CI = [-.0739, -.0078]$) and moral advertising literacy ($ab = -.02, SE = .01, 95\%CI = [-.0643, -.0040]$), see figure 7. Children have less understanding of the persuasive intent of advertising as regards to advergames and sponsored content (compared to TV ads and online banners), which results in higher format attitude. On the other hand, children have a higher level of attitudinal and moral advertising literacy for advergames and sponsored content, which leads to lower format attitude. To conclude, there is both a positive path (via understanding of persuasive intent) and a negative path (via affective and moral advertising literacy) of advertising format on format attitude.

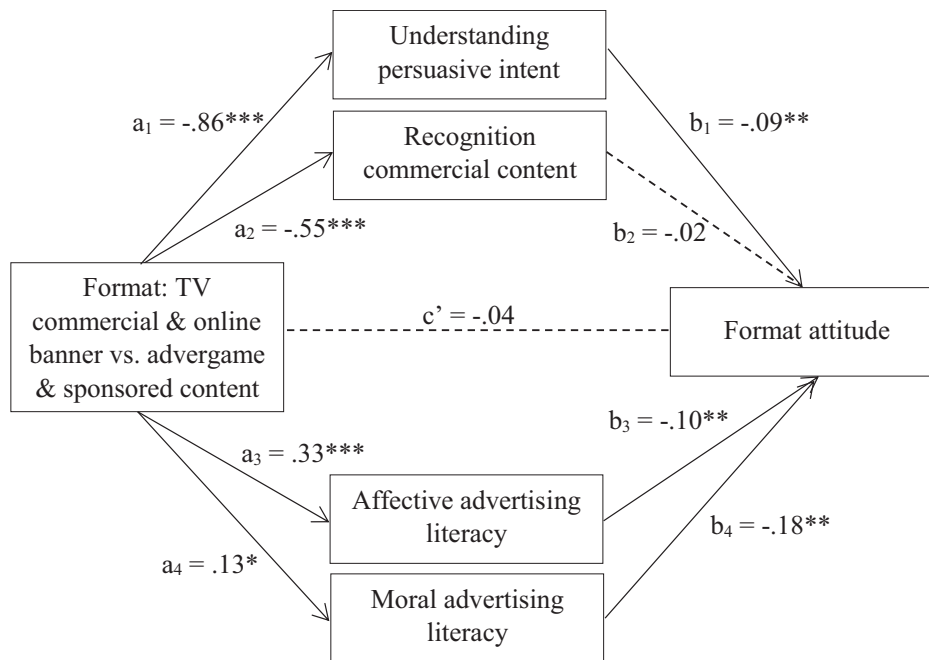


Figure 7. Mediating role of advertising literacy on format attitude
 (---: not sig; —: sig; *** $P < .001$, ** $P < .01$, * $P < .05$)

Further, indirect effects of advertising format on brand recall were found via understanding of persuasive intent ($ab = -.25$, $SE = .09$, $95\%CI = [-.4513, -.0876]$), recognition of commercial content ($ab = -.35$, $SE = .09$, $95\%CI = [-.5570, -.1994]$) and moral advertising literacy ($ab = -.05$, $SE = .03$, $95\%CI = [-.1372, -.0022]$), see figure 8. Children have less understanding of the persuasive intent of advertising and less recognition of commercial content after exposure to advergaming and sponsored content, which leads to less brand recall. Additionally, children have a higher level of moral advertising literacy for advergaming and sponsored content (compared to TV commercials and online banners) which also results in less brand recall. There is a positive direct effect of advertising format on brand recall, which means that brand recall is higher after exposure to advergaming and sponsored content than after being exposed to online banners and TV commercials.

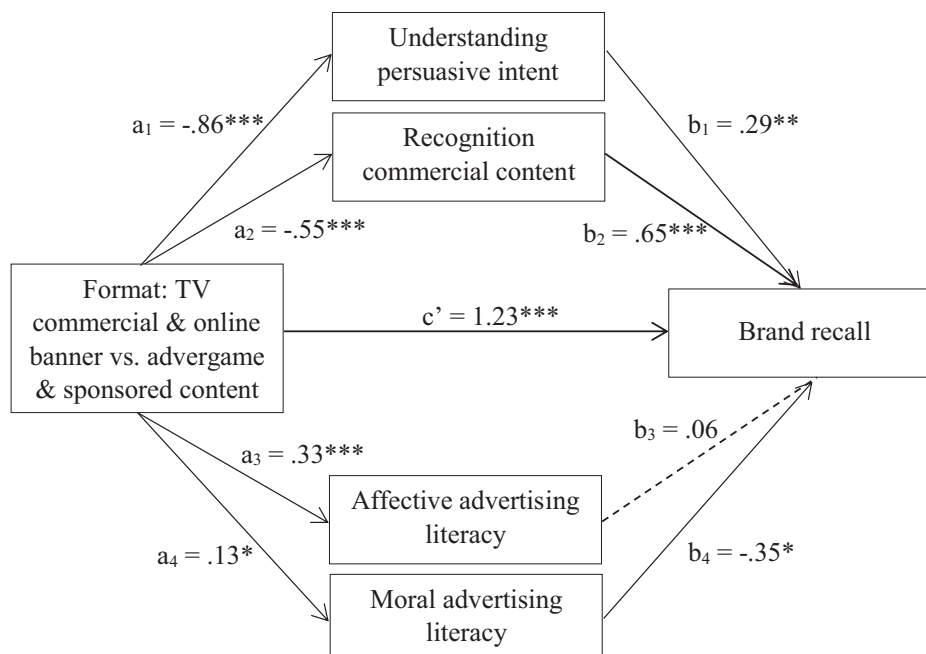


Figure 8. Mediating role of advertising literacy on brand recall. The mediating effect of moral advertising literacy is primarily determined by sponsored content.

The effect of advertising format on brand attitude was positively mediated by understanding of persuasive intent ($ab = .07$, $SE = .03$, $95\%CI = [.0146, .1266]$) and negatively mediated by affective advertising literacy ($ab = -.07$, $SE = .02$, $95\%CI = [-.1220, -.0301]$)

and moral advertising literacy ($ab = -.04$, $SE = .02$, $95\%CI = [-.0832, -.0059]$), see figure 9. Children have less understanding of the persuasive intent of advertising as regards to advergames and sponsored content (compared to TV ads and online banners), which results in higher brand attitude. In addition, children have a higher level of affective and moral advertising literacy for advergames and sponsored content, which leads to lower brand attitude.

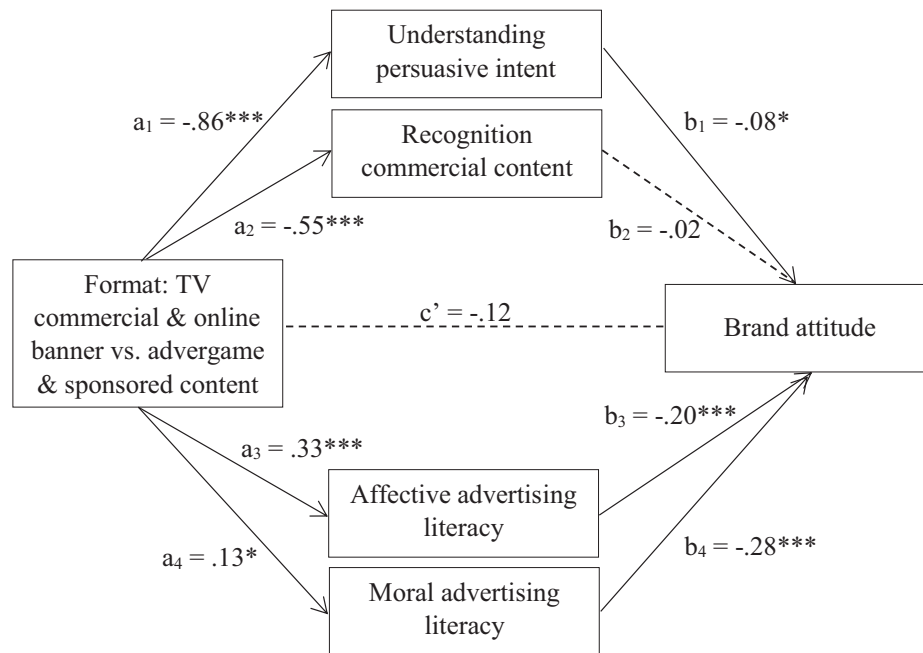


Figure 9. Mediating role of advertising literacy on brand attitude. The mediating effect of moral advertising literacy is primarily determined by sponsored content.

Finally, a significant indirect effect was found of advertising format on pester power via attitudinal advertising literacy ($ab = -.07$, $SE = .03$, $95\%CI = [-.1357, -.0286]$; see figure 10). Children have a higher level of attitudinal advertising literacy after exposure to advergames and sponsored content than after being exposed to TV commercials and online banners, which results in less pester power.

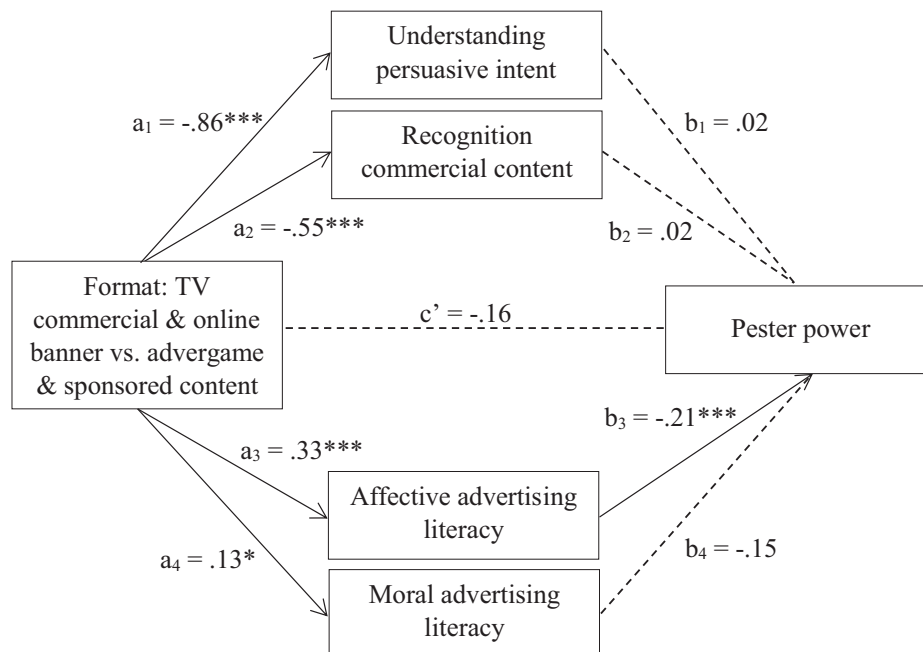


Figure 10. Mediating role of advertising literacy on pester power

To conclude, children’s cognitive advertising literacy has a positive effect on brand recall, yet this has little to no effect on their format attitude, brand attitude and pester power. Further, children’s affective and moral advertising literacy has a negative effect on their attitudes and brand recall.

4. Moderating role of age on the impact of ad format on ad effects

Moderated analyses (Hayes, 2013; PROCESS, model 1, 5000 bootstrap samples) were conducted to examine the moderating role of age on the relationship between advertising format and advertising effectiveness. We found a significant interaction effect of ad format and age on **format attitude** (see figure 11). More specifically, the youngest ($-1SD = 7.65$ year old) and the middle aged children ($M = 9.29$ year old) have a higher format attitude for TV commercials than for sponsored content. The youngest children also have a higher format attitude for online banners than for sponsored content, while the oldest children ($+1SD = 10.93$ year old) have a lower format attitude for online banners than for sponsored content. Further, the middle aged and the oldest children have a higher format attitude for advergames than for online banners. Finally, the youngest and the middle aged children have more format attitude for advergames compared to sponsored content.

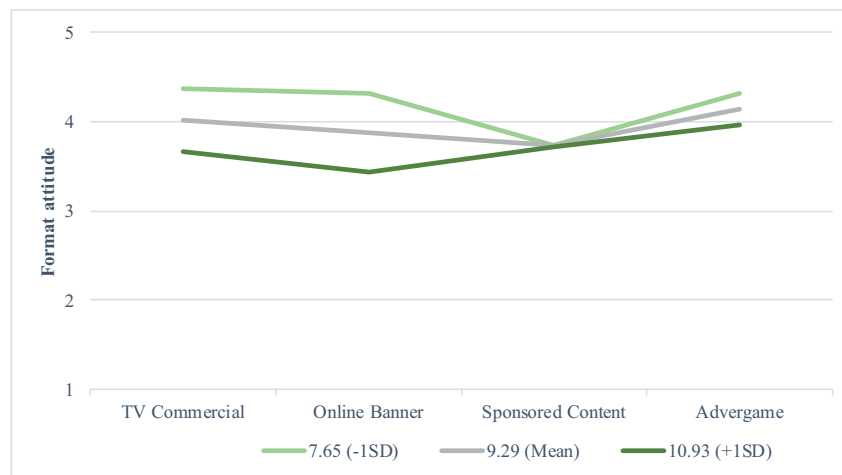


Figure 11. Moderating role of age on the impact of ad format on format attitude

The results also indicated a significant interaction effect of ad format and age on **brand attitude** (see figure 12). More specifically, the middle aged and the oldest children have a higher brand attitude after exposure to online banners than after being exposed to advergames. Further, the youngest children have a higher brand attitude after exposure to advergames than after exposure to sponsored content. In contrast, the oldest children have a higher brand attitude after being exposed to sponsored content compared to advergames.

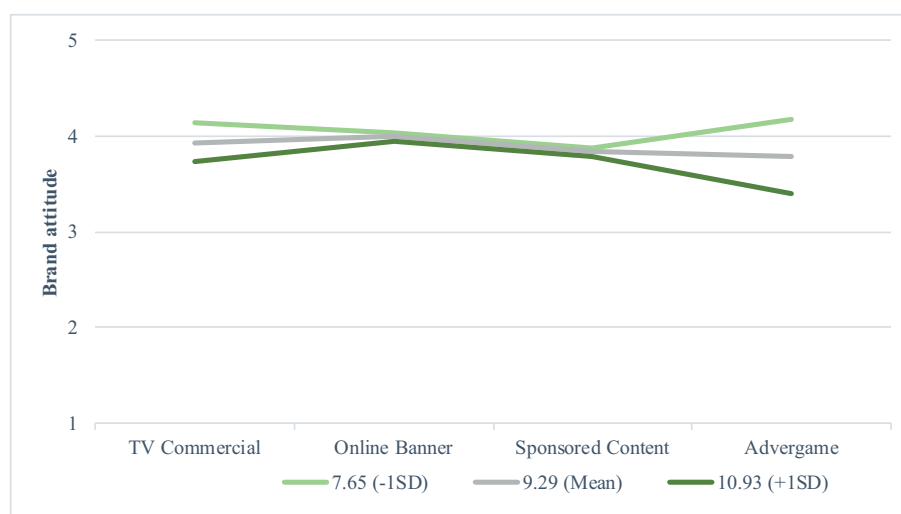


Figure 12. Moderating role of age on the impact of ad format on brand attitude

No significant interaction effects were found of advertising format and age on brand recall and pester power.

5. Moderating role of age on the impact of ad format on advertising literacy

To examine the moderating role of age on the impact of advertising format on children's advertising literacy, we conducted several moderated analyses (Hayes, 2013; PROCESS, model 1, 5000 bootstrap samples). First, the results indicated a significant interaction effect of advertising format and age on the recognition of commercial content (see figure 13). The youngest children can better recognize online banners than advergames as advertising.

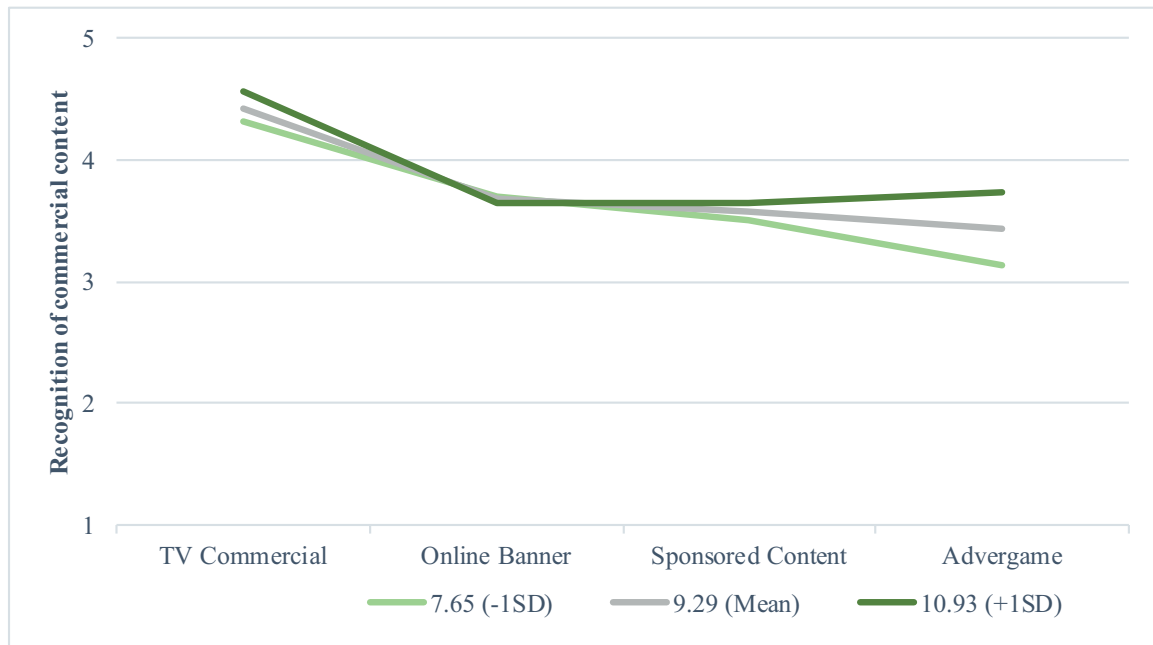


Figure 13. Moderating role of age on the impact of ad format on recognition of commercial content

Further, we found a significant interaction effect of advertising format and age on children's affective advertising literacy (see figure 14). The youngest children have a higher level of affective advertising literacy for sponsored content than for TV commercials. In addition, the youngest and the middle aged children have more affective advertising literacy for sponsored content compared to online banners.



Figure 14. Moderating role of age on the impact of ad format on affective advertising literacy

Then, the results also demonstrated a significant interaction effect of advertising format and age on children’s moral advertising literacy (see figure 15). More specifically, the youngest and the middle aged children have a higher level of moral advertising literacy for sponsored content than for TV commercials and online banners. In addition, the youngest children also have a higher level of moral advertising literacy for sponsored content compared to advergames.

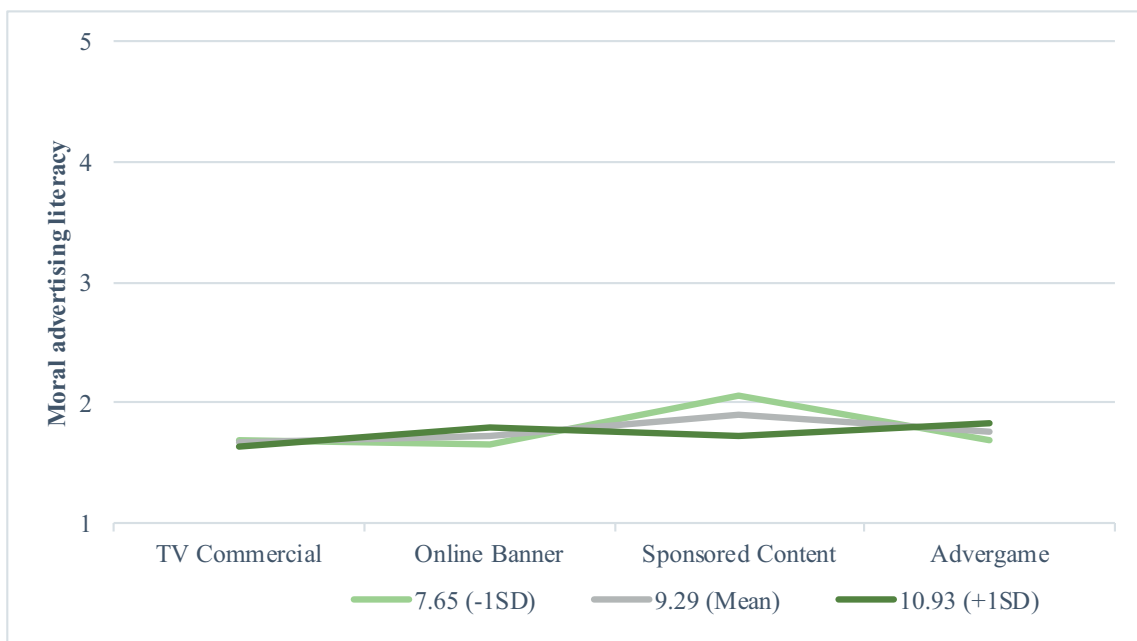


Figure 15. Moderating role of age on the impact of ad format on moral advertising literacy

Finally, no significant interaction effect was found of advertising format and age on the understanding of the persuasive intent of advertising.

Discussion

The results of this study demonstrated that children intend to request the advertised product more after exposure to an advergame and online banner compared to sponsored content. Further, it was found that format attitude was significantly higher when children played an advergame than when they were exposed to one of the other three formats. This is not surprising as advergames are highly enjoyable and provide the players with elements of challenge, competition and rewards (van Reijmersdal, Rozendaal, & Buijzen, 2012; Rifon et al., 2014). The results also indicated that children’s brand recall was significantly lower when they were exposed to an online banner compared to the other advertising formats. This is in line with the study of Ali et al. (2009) which indicates that it is very difficult for children (6-12 years) to recognize banners as advertising. Apparently, banner blindness also occurs at this very young age.

The analyses revealed that children can better recognize traditional advertising formats as advertising and have a higher understanding of the persuasive intent of traditional advertising formats compared to the new advertising formats. This is in line with previous studies that have shown that children’s level of cognitive advertising literacy is lower for new, embedded advertising formats than for traditional advertising formats (An et al., 2014; Verhellen et al., 2014; Hudders et al., 2016a). However, it was found that children also have a good understanding of online banners. In addition, children have a very low level of affective and moral advertising literacy which does not differ between the four advertising formats.

Further, we investigated the mediating role of children’s advertising literacy on the relationship between advertising format and advertising effectiveness. We combined the TV commercial with the online banner condition, and the advergame with the sponsored content condition as these formats provided the same trend in the results. The results indicated that children had less understanding of the persuasive intent of advertising after being exposed to an advergame or sponsored article than after exposure to an online banner or traditional TV commercial, which resulted in higher brand attitude, higher format attitude and less brand recall. Children also experienced more difficulties recognizing sponsored content and advergames as advertising (compared to TV

commercials and online banners), which leads to less brand recall. In contrast, children had a higher level of affective advertising literacy for an advergame and sponsored article than for the other two formats, which resulted in more negative advertising effects (lower brand attitude, lower pester power and lower format attitude). Further, children's level of moral advertising literacy was higher for sponsored content compared to TV commercials and online banners. This higher level of moral advertising literacy ensures lower format attitude, lower brand attitude and less brand recall. However, we can conclude that these indirect effects via advertising literacy cancel each other out as there are no significant direct effects of advertising format on brand attitude, pester power and format attitude. This implicates that advertising literacy training programs should not only focus on the cognitive dimension of advertising literacy, but also should address the affective and moral dimension. We did find a positive direct effect of advertising format on brand recall, which means that this effect can be explained by another variable (besides advertising literacy).

Then, the role of age was investigated. Children's understanding of the persuasive intent of advertising and their affective advertising literacy increases with their age, while their recognition of commercial content and moral advertising literacy does not differ with age. Format attitude, brand attitude and pester power decrease as children grow older, while brand recall increases with their age. The results also indicated a moderating role of age on the impact of advertising format on format attitude, brand attitude, recognition of commercial content, affective and moral advertising literacy.

To conclude, children (7-12 years) like the medium most when they are exposed to advergames and can hardly recall the brand when exposed to online banners. They have less knowledge and understanding of new advertising formats compared to traditional TV commercials. However, children do have a good understanding of online banners. In general, children's level of affective and moral advertising literacy is very low, both for the traditional and new advertising formats. Further, children's cognitive advertising literacy has a clear positive effect on brand recall, while the negative effect on attitudes is little to non-existent. On the other hand, children's affective and moral advertising literacy has a negative effect on their attitudes and brand recall.

4.3.2. STUDY 2: CHILDREN'S KNOWLEDGE AND JUDGMENT OF NEW ADVERTISING TACTICS

Pieter De Pauw, Ralf De Wolf, Liselot Hudders & Veroline Cauberghe⁴

Highlights of this study

- ❖ "Children (9-to-11-year old) have a basic understanding and knowledge about advertising in general, including persuasive and selling intent"
- ❖ "Children don't know much about new advertising tactics (integration, interaction, personalization) but once explained they are able to understand and provide examples they have experienced"
- ❖ "Children have difficulties with comprehending the implicit mechanism of unconscious persuasion and question its effectiveness (e.g., 'why should they pay for appearing in the movie, as nobody notices it anyway?')."
- ❖ "Children were able to make a judgment about new advertising tactics, while taking into account multiple perspectives and stakeholders."

⁴ This extended abstract is based on De Pauw, P. De Wolf, R. Hudders, L. and Cauberghe, V. (2016). Children's knowledge and judgment of contemporary advertising formats and tactics. Submitted for publication in *New Media & Society*.

Research aim

The goal of this study is to investigate the cognitive and moral advertising literacy of children towards advergames, brand placement and pre-roll video advertising. Following research questions are studied: (1) what do children know about new advertising tactics (integration, personalization and interaction) and are they able to understand these tactics? (2) How do children judge new advertising tactics? And (3) what are the underlying reasoning strategies of children to judge new advertising tactics?

Methods

As the research questions addressed in the present study are mainly focused on exploring children's subjective viewpoints of (and experiences with) the new advertising formats and tactics, qualitative methods seemed most appropriate. In particular, small focus groups were organized, in order to most adequately stimulate participants both to voice their own perspective, as to take the perspectives of others. The following results are based on 12 single gender class-based group discussions, each consisting of five 5th and 6th grade (9-to-11-year old) pupils, from 4 different schools in Flanders, Belgium (N = 60). Six discussion group were held with girls, while the other six groups included only boys. In the first part of the discussion, children's knowledge and abilities regarding the new advertising formats and tactics were probed by showing three video's that illustrate three advertising formats which respectively involve advertising integration (product placement for M&M's in the 2011 Smurfs movie) and interaction (advergame for Kellogg's Froot Loops), and personalization (YouTube video with retargeted pre-roll ad for Lego Dimensions). In the second part, evaluations of the new advertising formats and tactics were stimulated by presenting the children with three different scenarios in comic format which illustrate the possible dilemma's that children may face when judging integrated, interactive and personalized forms of advertising.

Results

1. *Recognizing and understanding advertising tactics*

As concerns children's knowledge and abilities regarding the new advertising formats and tactics, they did not seem vigilant regarding the identification of advertising in media content (movies and games). When they did notice the commercial elements, they often referred to the fit with the media content (e.g. M&M's are in the film because they are blue, just as the Smurfs). With regard to personalized advertising, few children immediately understood that the advertisement was based on personal information (i.e. previous browsing behaviour).

Once we informed them of the presence of advertising, we asked the children how they think the tactics work. In general, most of them showed a basic understanding, i.e. that by exposure to the advertised product (and by presenting it in a positive manner) consumers will be more likely to purchase (or ask their parents for) that product. A small number of children also spontaneously mentioned the mechanism of 'positive affect transfer', which is most salient in the case of brand placement and advergames (e.g. as they appear in a fun movie, children will think M&M's are also nice, and will ask their parent to purchase them). As concerns personalized advertisement, it was clear that most children had not previously reflected on whether and how their personal information is collected and used. However, when we later explained them how the tactics work, nearly all of the children understood and spontaneously mentioned other occasions in which they were confronted with these tactics (e.g. online shopping for celebration clothes, and later encountering advertising for the visited web shop on YouTube). Despite this quick grasp of how the new tactics function, few children were convinced of their effectiveness, as most of them did not immediately acknowledge the implicit mechanism of 'unconscious persuasion' (e.g. why should they pay for appearing in the movie, as nobody notices it anyway?).

2. *Children's initial and elaborated judgement*

Children's general judgment of the new advertising tactics, then, initially seemed largely determined by the way they experience the respective formats. Hence, as brand placement and advergames usually integrate advertising in a fun and immersive context, most of the children evaluated these formats positively, and showed indifference toward the used tactics. Noteworthy, however, is that the online advertising formats (advergames and personalized advertising) easily elicited feelings of insecurity among the children (mostly in terms of being hacked or getting computer viruses).

After carefully explaining the tactics, children's first reaction was often that these techniques are 'cool' or 'special' and 'clever', and remarkably, that it must be a good thing in terms of company profits. They were less positive, however, on the fact that through brand placement and advergames little objective information is given about product quality. In the case of personalized advertising, children liked the idea of getting only personally relevant information, yet some of them remarked that this also prevented them to learn about new products.

Even after this explanation of the tactics, many children seemed to remain indifferent toward brand placement and advergames, as it was hard for them to acknowledge that advertising can be equally persuasive when it remains unnoticed. Consequently, most of the children had few issues with the appropriateness of these formats. However, when we encouraged the children to reflect more intensively on the possibility of being persuaded on an implicit level, and when the children acknowledged this mechanism, many of them eventually did judge this practice as deceptive – especially when it leads to buying things (or pressuring parents to do so) that were not previously desired or that are regretted later.

After elaborating more thoroughly on the specifics of personalized advertising, then, few children remained indifferent when they were made aware of the fact that this advertising format makes use of personal information other than keyword searches alone (e.g. chat or mail history). Quite remarkable in this context is that the majority of the children expressed their concerns with explicit reference to the notion of privacy. There were many occasions in which the children expressed evaluations of the advertising tactics that were very likely to be of a moral and sometimes even of an ethical nature, especially after discussing the dilemmas in the comic scenarios which were presented to the children in part two. That is, children showed to be able to consider the consequences of advertising tactics for (unknown) others and abstract entities (e.g. 'the presence of advertising should be clear, because young children are not yet aware of it', and 'if the computer was alive, he wouldn't like it either if you were spying on him'). Most often, however, children's evaluations were constituted by a trade-off between both the positive considered properties (usually individual, e.g. 'advergames are fun') and the negative considered properties (often moral, e.g. 'not everybody knows it's advertising') of the advertising tactics.

Finally, it is remarkable to note that although children often referred to (abstract) third parties when discussing privacy issues with personalized advertising, they referred even more to the unwanted information flow toward known parties such as parents and friends (known as 'social privacy'; e.g. a lot of children do not like it when parents use the family computer and get to see advertising based on the children's personal preferences).

Discussion

First, this study found that, in general, children do not actively look out for advertising that is embedded in entertaining and/or interactive media content, and that they usually had not reflected before on how the new advertising tactics work (e.g. through positive affect transfer, or by collecting personal data). However, when making them aware of these tactics, and explaining them how they function, virtually all of the children showed that they were *able* to understand. This even applies to the implicit mechanism of persuasion without awareness of the commercial elements, which was initially hard for the children to grasp. This is an important finding, as it is now clear that, although children may not spontaneously reflect on the new advertising tactics when confronted with them, they can be empowered by explaining them where to look for these tactics and how they function. Second, it was demonstrated that children, armed with new tactic awareness and comprehension, were also able to make judgments about these tactics in which the reasoning surpasses the individual consequences alone. For instance, in evaluating these tactics, children took the perspective of other children (e.g. stating that embedded advertising should be disclosed as younger children cannot independently make the distinction with the editorial media content), of undefined others (e.g. they also wouldn't like it when you would check their private information), of companies and economies (who need to make money too, e.g. to pay wages and to stimulate economic growth), and many other (abstract) social actors. This ability for advanced perspective taking is important in the context of contemporary advertising, as it is essential to form well-balanced moral (and even ethical) judgments about advertising, which allow children to make conscious decisions about commercial products and services.

4.3.3. STUDY 3: COMPARING TV ADS AND ADVERGAMES TARGETING CHILDREN

Katarina Panic, Veroline Cauberghe & Patrick De Pelsmacker⁵

Highlights of this study

- ❖ “Children like advergames more than television commercials”
- ❖ “Children have more difficulties in understanding the commercial nature of advergames than that of television commercials”
- ❖ “Advergames persuade children through positive affective reactions and challenge them in using their cognitive advertising literacy”
- ❖ “No differences were found for the effect of persuasion knowledge on persuasive outcomes between a game with social and commercial content”

Research aim

The present study looks into the role of cognitive as well as attitudinal reactions toward advergames while comparing the underlying persuasion mechanism for both traditional and new advertising forms. In addition, it examines the impact of persuasion knowledge evoked by a commercial and a non-commercial advergame on persuasive effects.

STUDY 1

Method

Children are either exposed to a TV commercial or advergame. Both the commercial and the advergame promote Lay's natural potato chips, a product highly popular and well-known among children. To make the stimuli realistic, the Lay's 30-second TV commercial is integrated into a television program, simulating a commercial break. This way, children are sequentially exposed to a fragment from *SpongeBob Square Pants* (a popular television program for children), followed by the Lay's potato chips commercial showing people eating Lay's chips and having a good time at a party. The total exposure time to the program and the commercial break was two minutes. A visual disclaimer is placed at the beginning and at the end of the television commercial, announcing a break (“We'll be back after the commercial break”) and welcoming the viewer back to the program. In the advergame condition, each child gets to play a Lay's advergame on the computer. In this game, the player is challenged to get to a (Lay's) party within the given time, earning bonus points when collecting bags of Lay's chips along the way.

Afterwards, children were asked to fill in a standardized questionnaire with the help of one of the researchers, and asked to choose their answers from a set of picture response options. Children's attitudes toward the game, persuasion knowledge, and behavioural outcome (purchase request) are measured. In total, 254 children participated in the study (44% male, *M* age=8). The respondents are all second- or third grade pupils, randomly recruited from different primary schools in Belgium.

⁵ The extended abstract is based on Panic, K., Cauberghe, V., & De Pelsmacker, P. (2013). Comparing TV Ads and Advergames Targeting Children: The Impact of Persuasion Knowledge on Behavioral Responses. *Journal of Advertising*, 42(2-3), 264-273.

Results

Pearson's chi-square test shows that persuasion knowledge is significantly lower after exposure to the advergame than after seeing the TV ad (chi-square = 38.000, $p < .001$). Next, multiple regression analyses were run with the attitude toward the advertising format and persuasion knowledge as independent variables and the behavioural responses (purchase request) as the dependent variable. In the TV advertisement condition, the results show a significant negative effect of persuasion knowledge on purchase request (Beta = $-.242$, $t = -2.243$, $p = .028$).

However, persuasion knowledge appears to have no significant effect on children's purchase request in the advergame condition (Beta = $.151$, $t = 1.696$, $p = .093$). When looking at the affective measure, results show that in the TV ad condition there is no significant effect of the attitude toward the advertising format on purchase request (Beta = $.028$, $t = .217$, $p = .829$). This is in contrast to the advergame, where results show a positive and significant effect of attitude toward the game on purchase request (Beta = $.239$, $t = 2.679$, $p = .008$).

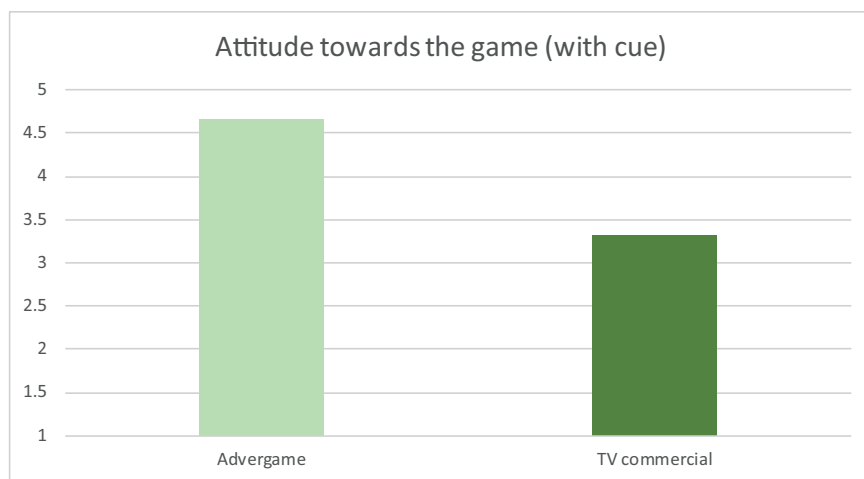


Figure 16. Attitude towards the game (with cue)

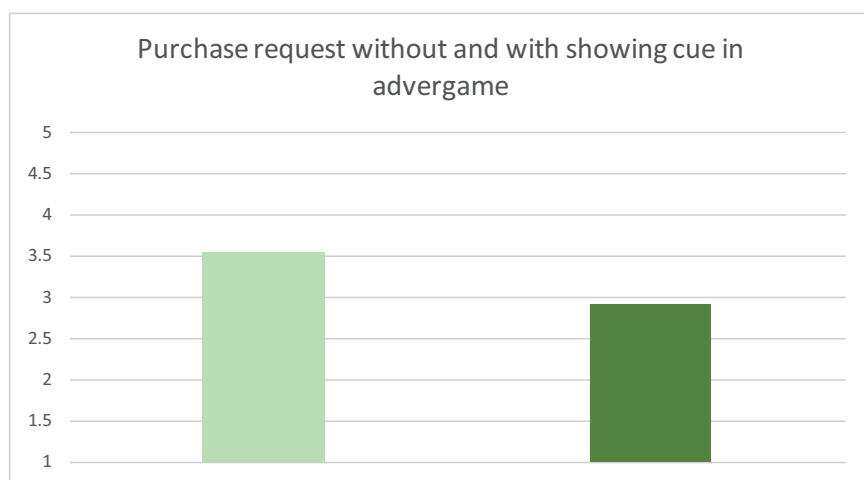


Figure 17. Purchase request without and with showing cue in advergame

Study 2

Method

Using two between-subjects groups, the Lay's commercial advergame from Study 1 is compared to a new, non-commercial game to investigate the effect of message content on the influence of persuasion knowledge on behavioural intention. For the social game, we use a game that is especially developed to teach children the importance of eating healthy food. While playing, children are challenged to collect as many healthy snacks as possible within the given time. This way, children learn to distinguish healthy from unhealthy snacks, as bonus points can be earned only when the avatar eats healthy snacks (fruit, vegetables, cheese, etc.) and leaves the unhealthy ones (donuts, ice cream, etc.) behind.

After playing the games, children were asked to fill in a standardized questionnaire with the help of one of the researchers, and asked to choose their answers from a set of picture response options. Children's attitudes toward the game, persuasion knowledge, and behavioural outcome (purchase request) are measured. In total 128 children participated (47% male; M age=8). The respondents are all second- and third-grade pupils, recruited from different primary schools in Belgium. The respondents are randomly exposed to one of the two experimental conditions.

Results

Two separate multiple regression analyses are run for the commercial and the non-commercial game condition, with the attitude toward the game and persuasion knowledge as independent variables and purchase request as the dependent variable. There

appears to be no significant effect of persuasion knowledge on behavioural intention either in the commercial game condition (Beta=.119, $t = 1.024$, $p = .309$) or in the social game condition (Beta = -.093, $t = -.715$, $p = .478$). Further, the attitude toward the game appears to have a marginally positive effect on behavioural intention in the advergame condition (Beta = .270, $t = 1.880$, $p = .067$) but not in the non-commercial game condition (Beta = .052, $t = .662$, $p = .646$).

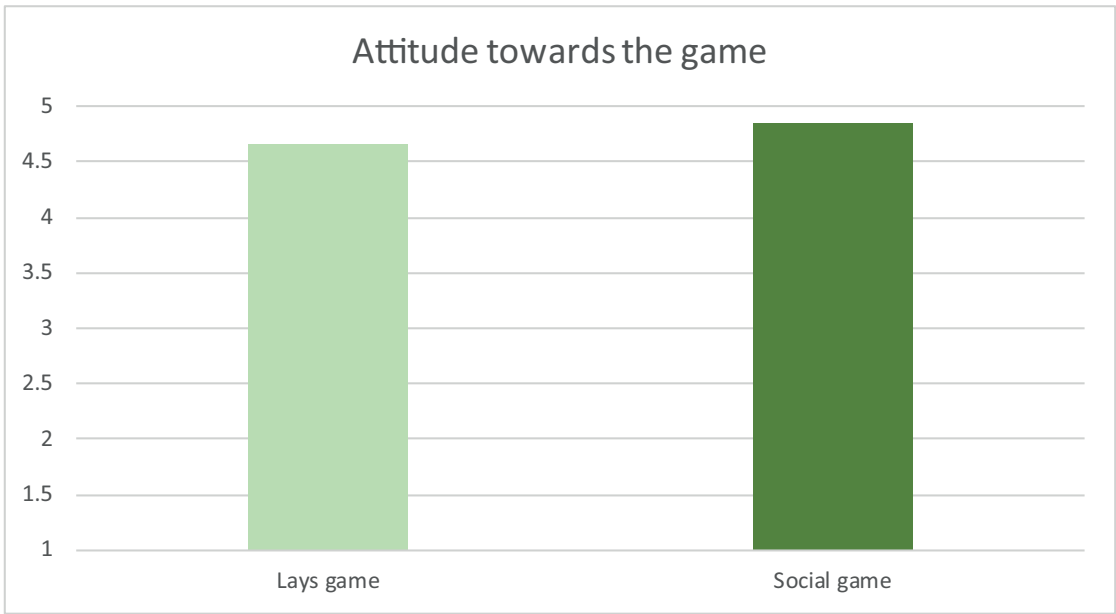


Figure 18. Attitude towards the game

Discussion

Overall, the results suggest that the underlying mechanism of the persuasion process is different for traditional than for new advertising formats. Moreover, the results confirm that children like advergames more than they like TV advertisements but also that they have more difficulty in understanding the commercial nature of these games. This is in line with previous findings by Mallinckrodt and Mizerski (2007) and Owen, Lewis, Auty and Buijzen (2010). The next step in our research was to understand the specific ways in which persuasion knowledge affects the persuasion process. The results show that while children’s defence mechanisms for television commercials seem to be in line with the cognitive defence view, advergames persuade children through positive affective reactions toward the games, without any effect of persuasion knowledge. Contrary to what we expected, the results of the second study show that, in a gaming context, the effect of persuasion knowledge on persuasive outcomes does not differ between a game with commercial and a game with social content. These results may indicate that in a gaming context, children’s persuasion knowledge does not affect behavioural outcome, regardless of the message content.

Today, policymakers all over the world consider children’s cognitive development when determining advertising regulations concerning children. However, the present study argues that this cognitive focus is no longer sufficient. The affect-based nature of contemporary advertising demands a radical revision of our conceptualization of “fair” marketing to children. The current study suggests that the ethical debate should no longer focus solely on the question of until what age we should protect children; policymakers should also take into account children’s (in)ability to resist implicit affect-based persuasion when deciding on regulations.

4.3.4. STUDY 4: CHILDREN'S RESPONSES TO TELEVISION COMMERCIALS VERSUS ADVERGAMES

Liselot Hudders, Veroline Cauberghe & Katarina Panic^{6v}

Highlights of this study

- ❖ "Children are more persuaded by advergimes than by television commercials"
- ❖ "Attitudinal defences (adhering a critical attitude) is more effective in reducing advertising effects than cognitive defences (understanding and recognition) in decreasing advertising effects"
- ❖ "Cognitive advertising only mitigates advertising influence when affective advertising literacy is also high"

Research aim

The study aims to investigate children's advertising literacy and advertising effects for TV commercials and advergimes. In particular, (1) children's cognitive and affective advertising literacy for advergimes vs. TV commercials, (2) the mitigating role of advertising literacy on purchase requests, and 3) the moderating impact of training sessions were investigated.

Method

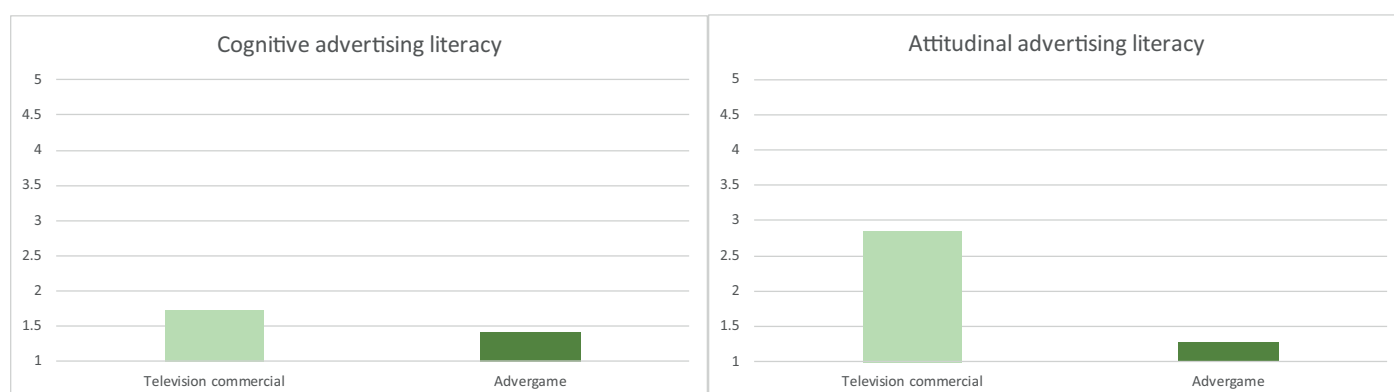
An experimental study was conducted by using a 2 by 2 between subjects experimental design. First, half of the children participated in a 15-minute advertising training (followed by a 10-minute filler task), while the other half followed a 15-minute regular course, which was unrelated to advertising. Next, all children were randomly exposed to either the commercial or the advergime. After watching the commercial or playing the advergime, they were asked to fill in a paper-and-pencil questionnaire to measure the dependent and mediating variables. To manipulate the advertising format, one traditional 30-second TV commercial and one advergime were selected; both promoted the same brand to avoid confounding effects of preceding brand knowledge and attitude. We chose a product and brand that did not target one particular gender and was highly relevant for the children in the sample: Paula the Cow pudding. Children in the sample had a positive attitude toward the brand ($M = 3.95$, $SD = 1.06$). To manipulate the training session, half of the children attended a 15-minute advertising literacy training session, while the other half were presented a 15-minute regular course unrelated to advertising (control condition, similar procedure used). Both were instructional group conversations, a commonly used method in primary schools, and they were given to everyone as a group in the classroom (about 15 children per classroom). In total, 78 children from the third year in primary school (age eight or nine) participated in the study (32 boys and 46 girls). The children were randomly selected out of three different elementary schools in a West European country (Belgium). Before participating in the study, parental consent was provided.

Results

A multiple mediation analysis was performed to test the mediating impact of cognitive and affective advertising literacy on the effect of advertising format (0=TV commercial, 1=advergime) on purchase requests. The analysis showed that the advertising format affected children's cognitive ($a1 = -0.33$, $SE = .18$, $t = -1.82$, $p = .073$) and affective ($a2 = -1.54$, $SE = .22$, $t = -6.87$, $p < .001$) advertising literacy. This result suggests that children had a lower cognitive and affective advertising literacy level for an advergime than for a TV commercial (although it should be noted that the difference in cognitive advertising literacy was only marginally significant). Further, the results showed that affective ($b2 = -0.33$, $SE = .16$, $t = -2.11$, $p = .038$), but not cognitive ($b2 = 0.24$, $SE = .20$, $t = 1.20$, $p = .23$) advertising literacy affected purchase requests. Accordingly, the indirect effect of advertising format on purchase requests via

6 Hudders, L., Cauberghe, V. & Panic, K. (2016a). How Advertising Literacy Training Affect Children's Responses to Television Commercials versus Advergimes. *International Journal of Advertising*, forthcoming (SSCI impact factor 2014: 1.094).

affective advertising literacy was significant ($a2 \times b2 = 0.515$, $SE = .25$, 95% CI = [.0478, 1.0494]), while the indirect effect via cognitive advertising literacy was not ($a2 \times b2 = -0.077$, $SE = .09$, 95% CI = [-.3202, .0335]). To conclude, the direct effect of the advertising format on purchase requests was not significant ($c' = -0.27$, $SE = .40$, $t = -.68$, $p = .50$).



Figures 19 and 20. Cognitive and Attitudinal advertising literacy towards TV commercials and Advergames

In addition, we investigated the moderating impact of affective advertising literacy on the relationship between cognitive advertising literacy and purchase requests with the Hayes macro, model 1 (5000 bootstrap resamples). This analysis revealed a marginally significant interaction effect between cognitive and affective advertising literacy on purchase requests ($a \times b = 0.34$, $SE = .17$, $t = -1.98$, $p = .052$). In particular, the results of the conditional effects indicated a positive effect of cognitive advertising literacy on purchase requests ($B = .60$, $SE = .25$, $t = 2.38$, $p = .02$) when affective advertising literacy is low. This implies that children who like advergames have a higher purchase requests when their cognitive advertising literacy level is high compared to when it is low. When affective advertising literacy is moderate, however, cognitive advertising literacy has no significant impact on purchase requests ($B = .18$, $SE = .19$, $t = .96$, $p = .34$). In contrast, cognitive advertising literacy has a negative but non-significant impact on purchase requests ($B = -.24$, $SE = .32$, $t = -.75$, $p = .46$) when affective advertising literacy is high. Further, our results reveal that a high affective advertising literacy level leads to lower purchase requests than a low affective advertising literacy level when cognitive advertising literacy is moderate ($B = -.31$, $SE = .12$, $t = -2.53$, $p = .01$) or high ($B = -.58$, $SE = .20$, $t = -2.92$, $p = .005$) but not when cognitive advertising literacy is low ($B = -.04$, $SE = .17$, $t = -.24$, $p = .81$).

Discussion

The results showed that children requested the advertised brand more after playing an advergame than after seeing the commercial. From this, it can be concluded that children seem to be more persuaded by an advergame than by a traditional TV commercial, which is in line with previous research (e.g. Panic et al., 2013). In addition, these effects seem to be mediated by affective but not by cognitive advertising literacy. These results suggest that attitudinal defences were more effective in decreasing advertising effects than cognitive defences, especially for advergames, as was suggested by Rozendaal et al. (2011). When exploring the moderating impact of affective advertising literacy on the impact of cognitive advertising literacy on purchase request, the results indicate a trend that cognitive advertising literacy only seems to mitigate advertising influence when the affective advertising literacy is high. When the affective advertising literacy is low, cognitive advertising literacy appears to have a positive influence on children's purchase request. These results suggest that when children possess knowledge regarding persuasive intent, they are inclined to follow these suggestions to buy the product.

In sum, these results underline the importance of (1) making children aware of implicit advertising formats, (2) with a focus on both the cognitive and affective advertising literacy. The latter directly decreases the advertising effects, whereas the former mitigates the advertising influence when having a high affective advertising literacy.

4.3.5. STUDY 5: CHILDREN'S ATTITUDE AND KNOWLEDGE OF ADVERGAMES AND ADVERTISING FUNDED PROGRAMS

Liselot Hudders, Veroline Cauberghe, Katarina Panic & Wendy De Vos⁷

Highlights of this study

- ❖ "Children are more critical towards an advertising funded program than an advergame"
- ❖ "No differences were found in understanding the persuasive intent between advergames and advertising funded programs"
- ❖ "Affective persuasion knowledge mediates the impact on pester power and materialism. No such results were found for cognitive persuasion knowledge"

Research aim

The study aims to compare children's advertising literacy level and the advertising effects for advergames and advertiser funded programs (AFP). In particular, the study investigated 1) the level of cognitive and affective advertising literacy of children; 2) how advertising literacy mediates the effect of advertising format on pester power and materialism.

Method

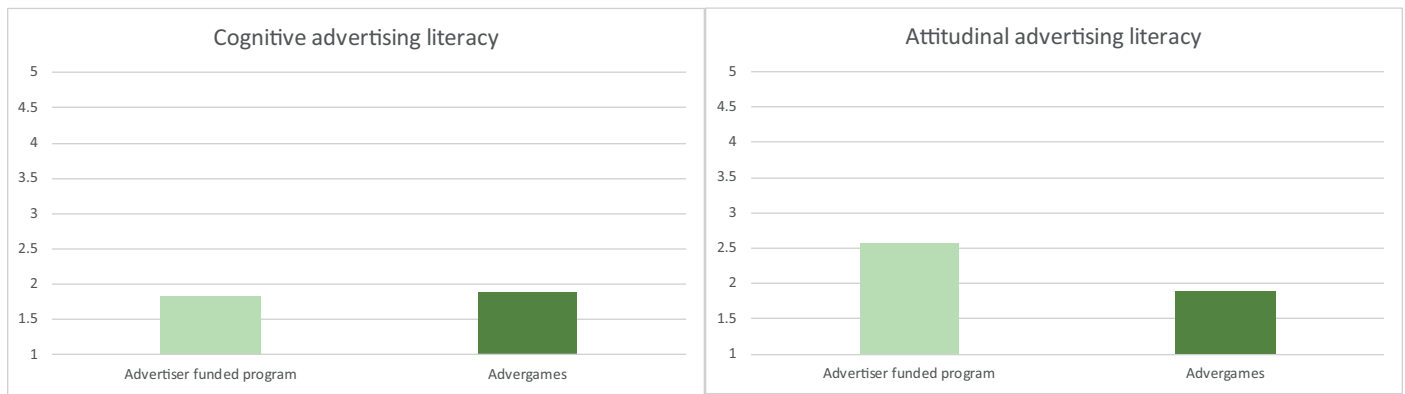
An experimental study using a 2 (Advertising format: AFP versus Advergame) by 2 (Course: Advertising literacy training session versus regular course) between-subjects factorial design is conducted. An advergame and an AFP were selected for the same brand, The Efteling, a famous Dutch theme park.

In total, 133 children (7-9 year olds, 54.9% boys) participated in the study. First, half of the children participated in a twenty minutes advertising literacy training session while the other half participated in a twenty minutes regular course. After the children took part in this training session or course, they were either instructed to play an advergame or watch an AFP, both for three minutes (to obtain uniform exposure time). Afterwards, children were asked to complete a short questionnaire to measure their advertising literacy level, advertising effectiveness and socio-demographics.

Results

The results are not in line with the expectations. Children's cognitive advertising literacy level does not differ for AFP ($M = .62$, $SE = .04$) versus the advergame ($M = .63$, $SE = .04$; ($t(130) = -.31$, $p = .76$)). Children do seem significantly more critical towards advergames ($M = 4.10$, $SE = .14$) than towards advertising funded programs ($M = 3.40$, $SE = .14$, ($t(131) = 3.36$, $p = .001$)).

⁷ This extended abstract is based on Hudders, L., Cauberghe, V., Panic, K. & De Vos (2014) Children's advertising literacy for new advertising formats: the mediating impact of advertising literacy on the (un)intended effects of advergames and advertising funded programs. *In Proceedings of the 13th International ICORIA conference*. Amsterdam, The Netherlands.



Figures 21 and 22. Cognitive and Attitudinal advertising literacy towards Advertiser funded programmes and Advergames

To test the mediating effect of cognitive and affective advertising literacy on pester power and materialism, a multiple mediation analysis was conducted. This study confirmed that affective advertising literacy significantly mediates ($B = .2953$, $SE = .1097$, 95% CI = [.1197, .5562]) the effect of advertising format on purchase request, but cognitive advertising literacy does not ($B = .0178$, $SE = .0596$, 95% CI = [-.0965, .1473]). In a similar fashion affective advertising literacy mediates ($B = .0281$, $SE = .0164$, 95% CI = [.0038, .0704]) the impact of advertising format on materialism, but cognitive advertising literacy does not ($B = -.0003$, $SE = .0052$, 95% CI = [-.0140, .0087]).

Discussion

The results indicate that children are more critical towards an advertising funded program than an advergame. No differences in understanding the persuasive intent was found between the two formats was found. The latter can be explained by a ceiling effect concerning the difficulty of understanding the persuasive intent of the integrated formats. The results also show that the impact of advertising format on pester power and materialism is mediated by affective persuasion knowledge, but not by cognitive persuasion knowledge. This is in line with previous research and highlights the importance of the attitudinal dimension of advertising literacy.

4.3.6. STUDY 6: CHILDREN'S ATTITUDE AND KNOWLEDGE OF BRAND PLACEMENT

Liselot Hudders, Veroline Cauberghe & Katarina Panic

Highlights of the study

- ❖ "Older children (fifth grade) have a higher cognitive advertising literacy for brand placement than younger children (second grade)."
- ❖ "A higher cognitive advertising literacy level did not decrease brand attitudes"

Research aim

Recent studies suggest that children have difficulties with detecting the commercial nature of such integrated formats (Evans, Carlson & Hoy, 2013) and have trouble applying their knowledge (Brucks et al., 1988). Therefore, this study investigates whether and how advertising literacy mediates the relation between age and attitude toward a brand placed in a movie context by comparing seven- to eight-year-old children's (hereafter referred to as second grade) attitudes towards a brand placed in a movie context with those of ten- to eleven-year-old children (hereafter referred to as fifth grade). Following research questions and hypotheses are proposed:

RQ1: Is there an age difference in the identification of brand placements and the advertising literacy for brand placements and does this advertising literacy lead to lower brand attitudes?

RQ2: Does movie attitude moderate the mediating effect of advertising literacy on the relation between age and brand attitude?

Method

A cross-sectional study was set up with two different age groups of children (second vs. fifth grade). Age of the child is treated as an independent variable. Children's attitude toward the brand placed in the movie fragment is measured as a dependent variable. The mediating variable is advertising literacy, and attitude toward the movie is considered as the moderating variable on the effect between advertising literacy and brand attitude.

Children from different schools in Belgium were selected. In each school, two different age groups were selected: children from the second grade and children from the fifth grade. The mean age of the children from the second grade was 7.26 ($SD = 1.54$, min = 7, max = 9; 45 boys and 53 girls). The mean age of the children from the fifth grade was 10.40 ($SD = 1.55$, min = 10, max = 12; 37 boys and 45 girls). In total, 180 children (98 girls, $M_{age} = 8.69$, $SD = 1.65$) children participated in this study.

The parents of the children each received a letter with information about the study and the request to grant permission to let their child participate in a study. Their children were asked to watch a short brand placement fragment from the film *Alvin and the Chipmunks: The Squeakquel*. This film was selected because this movie targets children from two to twelve years of age. Children saw a short fragment of this movie (four minutes) in which only one brand, the game console Wii, was placed prominently for about one minute and thirty seconds. After watching the fragment, the children had to complete a short questionnaire measuring their movie attitude, identification of commercial content, advertising literacy and brand attitude.

Results

First, we examined whether age had an impact on children's ability to identify commercial content to answer RQ1. However, in general, only eleven children of the total sample (6%, $N = 180$) were able to identify the commercial content in the movie. A χ^2 analysis revealed that age significantly affected this identification of commercial content ($\chi^2(1) = 9.72$, $p = .002$). The results suggested that significantly more children from the fifth grade ($n = 10$, 12.2%) recognized the commercial content compared to children from the second grade ($n = 1$, 1.0%, $z = 3.1$, $p = .002$). However, since the number of children who were able to identify the commercial content was so low, this variable was not further included as a mediator in the analyses.

Second, we conducted a mediation analysis using the PROCESS model of Hayes (2013; model 14, 5000 bootstrap samples) to investigate whether the relation between age and brand attitude is mediated by advertising literacy (RQ2). In addition, we included the moderating role of movie attitude on the relation between advertising literacy on brand attitude to examine whether the impact of advertising literacy on brand attitude is different when movie attitude is high versus low. The results of this analysis first revealed that age has a significant impact on advertising literacy ($B = .16$, $SE = .05$, $t = 3.34$, $p = .001$). The children from the fifth grade ($M = .46$, $SE = .04$) had a higher advertising literacy level compared to the children from the second grade ($M = .30$, $SE = .03$). However, advertising literacy was not significantly related to brand attitude ($B = -1.32$, $SE = 1.41$, $t = -.94$, $p = .35$). Further, movie attitude

does not moderate the relation between advertising literacy and brand attitude ($B = .35$, $SE = .30$, $t = 1.15$, $p = .25$). Related to research questions one and two, these results suggest that although children from the fifth grade have a higher advertising literacy level compared to children from the second grade, advertising literacy does not mediate the relationship between age and brand attitude, and movie attitude does not function as a moderator in the relation between advertising literacy and brand attitude. Therefore, for brand placements, older children cannot benefit from a higher advertising literacy level, even when they did not like the movie in which the brand was placed and more critical attitudes could be expected.

Discussion

The findings show that although children from the fifth grade have a higher advertising literacy level and were slightly more able to identify commercial content than children from the second grade, their increased advertising literacy level did not decrease brand attitudes. This is in line with past research showing that advertising literacy does not attenuate advertising effects when advertisements are cognitively engaging and highly affect-driven (An & Stern, 2011; Rozendaal, Lapierre, et al., 2011; Waiguny et al., 2014). For brand placements, this may be especially the case, as children need their cognitive capacities to follow and understand the media content and there are no resources left to elaborate on the advertising content and critically evaluate it. In addition, highly affective media content does not motivate children to process the content critically. Hence, although they might possess a certain level of advertising literacy, it will not be activated or triggered when they are exposed to brand placements in a movie. This may suggest that other mechanisms are at play here. As such, it is possible that attitudinal advertising literacy drives these effects among the older children (Rozendaal et al., 2011). Attitudinal advertising literacy refers to the affective set of attitudes consumers hold towards advertising and specific advertising formats.

This study aimed at unravelling the effects of attitudinal mechanisms by investigating the moderating impact of movie attitude, which may be related to attitudinal advertising literacy but is different from it. While attitudinal advertising literacy refers to children's learned attitudes towards the advertising format, movie attitude refers to children's affective reaction to the media content in which the brand was placed. However, we expected that a low movie attitude might help children in applying their advertising literacy, which might in turn lead to lower brand attitudes. However, contrary to expectations, the effect of advertising literacy on brand attitude was not moderated by children's attitude towards the movie.

In sum, this study further emphasizes the need for strategies to enable children to critically reflect on brand placement. As the study also showed that only a few children were able to correctly identify the commercial content, children need to be helped to be able to identify the placements. This identification may be the first and necessary precondition for advertising literacy to have an effect. Therefore, a warning cue may be very helpful in identifying commercial content. Once this commercial content is identified, coping tactics may be activated. However, even when children are able to identify the commercial content, it may be difficult for them to apply the right coping strategy. Therefore, children need to be taught how to reflect on the advertised content. As Friestad and Wright (1994) suggest, advertising literacy develops and is further refined when consumers become experienced. That is, they learn from each persuasion attempt. When consumers have limited experience with persuasion attempts, they do not know how to cope with them and they use simple rules. These rules become more sophisticated over time. They learn from trial and error which coping strategy is most effective. Especially for children, it may be difficult to know how to cope with advertised content. Therefore, it is important to teach them simple strategies to help them cope with integrated advertising content. Future research should investigate how and which coping strategies are effective in attenuating advertising effects for children of different ages.

5

TEENAGERS' ADVERTISING LITERACY

B. ZAROUALI, K. PONNET, M. WALRAVE & K.

POELS

5.1. INTRODUCTION

As discussed in the previous part, a large body of research focused on how children cope with new advertising formats. In these studies, some important societal issues have been investigated, such as children's advertising literacy about these commercial messages, their susceptibility to unintended advertising effects, and their coping strategies (Rozendaal et al., 2011). Surprisingly, most of the studies have focused on children aged 5 to 12. Teenagers (roughly 12-18 years old) have received less scholarly attention, because they are considered as less vulnerable and thus no priority group for academic exploration (Sandberg, Gidlöf & Holmberg, 2011; Livingstone & Helsper, 2006). However, we believe that this holds for traditional television advertising, which is fairly easy and straightforward to recognize and understand, but that this is not necessarily applicable to newer (online) advertising practices. In this part, we address how teenagers cope with advertising in a new media environment. To date, little is known about how teenagers deal with new, hybrid and interactive advertising formats, leaving us with various unanswered questions: what is their advertising literacy towards these new ad formats? What are the underlying psychological processes (cognitive, affective, conative)? How do teens respond to these advertising tactics? Are they susceptible to advertising effects? These questions will be addressed in the current chapter by presenting an overview of the available literature, followed by a series of experimental studies on online advertising to fill the gaps in the literature.

5.1.1. TELEVISION COMMERCIALS

In a survey study, Mangleburg, Grewal and Bristol (1998) investigated the antecedents of a critical and sceptical attitude of teenagers (average age 16 years) towards television commercials. They revealed that cognitive dispositional advertising literacy (i.e. marketplace knowledge) among teenagers was positively associated with the recognition of advertising techniques. Also, teens with a higher marketplace knowledge were found to be better in identifying ads that are truthful or misleading. This indicates that advertising literacy is important to critically interpret, evaluate, and respond to persuasion attempts in order to identify how, when, and why marketers try to influence people. An early study conducted by Boush et al. (1994) found that although teens have sophisticated dispositional knowledge about specific tactics in television advertising (e.g. humour, endorsement, etc.), it is still considerably lower than that of adults. It is important to note, however, that, as teenagers grow older, they do display a higher cognitive awareness and understanding of tactics that advertisers use.

This last study particularly demonstrates that teenagers' dispositional advertising literacy regarding television commercials is not yet entirely 'on point'. This is worrisome considering how new advertising formats are more difficult to recognize and understand. Verhellen et al. (2014) found that teenagers (11-14 year) who were exposed to new advertising (advergames and product placement) needed significantly more help recalling the brand in the commercial message than teens who saw a traditional television ad. The results also suggest that teens could have lower levels of situational advertising literacy toward hybrid advertising formats due to their inexperience and unfamiliarity, but also because of the nature of these novel persuasion tactics (i.e. entertaining, interactive, embedded, etc.). In the next paragraphs, we will address these issues.

5.1.2. ADVERGAMES

As mentioned earlier, advergames are characterized by their interactive, involving and immersive nature, and are usually very enjoyable to play. The lines between advertising and entertainment, however, are unclear (Van Reijmersdal et al., 2012). Therefore, teenagers could be less able to recognize and understand advergames as 'commercial content' (i.e. advertising literacy). Verhellen et al. (2014) demonstrated that teenagers (11-14 year) playing an advergame have more difficulty recalling the advertised brand compared to those who see a traditional television advertising. The authors argued that this might be due to the engaging nature of advergames that resulted in a limited amount of cognitive capacity left in the working memory that could have been used to activate advertising literacy. In another study, Hernandez and Chapa (2010) examined the factors influencing teens' (age 10-15) brand recognition in advergames. The authors revealed that not all teens performed well in terms of advertising recognition in advergames. Those who exhibited lower or no affect toward the advergame and advertised product obtained significant lower advertising recognition scores. Furthermore, Hernandez and Chapa (2009) found that teenagers aged 10-15 year have lower brand

recognition levels when they are exposed to a moderate arousal advergame compared to a high arousal advergame. This indicates that an advergame should be highly arousing in order to generate brand awareness among teenagers.

Overall, these results show that teenagers, just like children, have difficulties in 'recognizing' the commercial intent of advergames.

5.1.3. BRAND INTEGRATION

Brand placement is a popular example of embedded advertising and is a format in which branded products are included within media content (e.g. film, television program, etc.) (Karrh, 1998). Because of the integration of marketing stimuli in mass media programming, the format makes it more difficult for teens to activate their advertising literacy and identify the persuasive intent. Vanwesenbeeck et al. (2016a) demonstrated that teens scored low in terms of situational cognitive advertising literacy (selling and persuasive intent) for product placement in games due to its 'hidden' nature. In another study, conducted by Matthes and Naderer 2015, the results followed the same trend. Young teenagers (until the age of 14) were exposed to an excerpt of the movie *Alvin and the Chipmunks*, including placements for the product *Cheese Balls*. The results showed that teenagers were as likely as younger children to consume the snack after being exposed to the product placement (see section 4). Based on the latter, they concluded that age does not protect children against such 'hidden' persuasion attempts (i.e. product placement) (Matthes & Naderer 2015). Nelson and McLeod (2005) confirmed these findings by showing that teens aged 11 and 15 did not differ significantly from each other with regard to product placement awareness. Moreover, the study also revealed that high brand-conscious teenagers were also those who were the most aware of this persuasion tactics, compared to lower brand-conscious teens. In sum, these studies all portray teenagers as not fully matured consumers whom are capable of recognizing product placement, nor understanding its persuasive intent.

Contrary to these previous studies, Uribe & Fuentes-García (2015) showed how teens aged 12-15 year-old were significantly better in terms of cognitive brand awareness toward product placement than 9-year-olds. However, the older groups also had a higher behavioural disposition. Van Reijmersdal et al. (2015) recently conducted a study on the effects of brand placement disclosures on teenagers' (13-17 year) situational cognitive advertising literacy. They showed that teens performed better in recognizing brand placement in a television program than adults.

To conclude, the accumulated body of research shows inclusive findings for advertising literacy toward brand placement. Therefore, we would like to encourage future research efforts investigating this topic to guarantee empirical clarity regarding this embedded and hidden advertising tactic.

5.1.4. SOCIAL NETWORK GAMES

Nowadays, teenagers are spending an increasing amount of time playing social network games (SNGs), which can be defined as online communities where teens can meet and interact with new and existing friends and play games (Rozendaal et al., 2013). Some popular examples of SNGs are *Neopets*, *Club Penguin* and *Habbo*. As with advergames, SNGs also integrate advertising into highly entertaining content, and consequently, disguise their persuasive nature for inexperienced consumers. Vanwesenbeeck and colleagues conducted a series of three studies to investigate this issue. In a first study, Vanwesenbeeck et al. (2016a) revealed that more than half of the teens (10 -14 year) in their study did not understand the commercial nature of SNGs. The results further confirm that teenagers have difficulties recognizing the commercial nature of a subtle and implicit advertising formats such as SNGs. Two other studies of Vanwesenbeeck et al. (2015, 2016b) focused on influential antecedents of advertising literacy towards SNGs among the same age group. The studies demonstrated that parental mediation styles which emphasize a child's autonomy is positively associated with understanding selling and persuasive intent of advertising in SNGs. In other words, parental media guidance increases teens' cognitive advertising literacy.

In sum, we can conclude that teenagers' advertising literacy toward advertising in SNGs is poor, with parental mediation probably being a key factor in stimulating this knowledge.

5.2. GAPS IN THE LITERATURE

The past sections show that prior literature has empirically addressed the topic of advertising literacy among teenagers (roughly 12-18 years). However, not all advertising formats have received an equal amount of academic attention. In particular, teenagers' advertising literacy regarding targeted advertising on social networking sites (SNSs) has rarely been covered in past research efforts. SNSs have witnessed a dramatic increase in popularity over the past few years with teenagers being the most avid users. They spend much time on SNSs to develop their identities and interact with their social network by posting videos, pictures, comments, etc. (Lenhart, 2015). Because teenagers willingly post much information on these sites it is an ideal environment for advertisers. Specifically, it allows for targeted advertising. The latter technique tries to reach only those consumers that are most likely to be interested in a particular product or service through message adaptation based on personal information, demographic characteristics and disclosed data. Targeted advertising is a frequently occurring practice in the environment of social media sites (Tucker, 2014). Because of this fast-growing popularity of targeting on SNS, it is of great importance to gain a thorough understanding of how teens cope with these persuasion strategies. Unfortunately, scant knowledge is available on this topic. As Knoll (2015) argued in his review, the field of persuasive communication on SNSs is relatively new and currently underdeveloped. Therefore, this could prove to be a particular fruitful and relevant area, particularly when focusing on the advertising literacy of teenagers. In the next part of this chapter, we will present two experimental studies investigating how teenagers deal with targeted advertising on SNSs. Another study studies teenagers' dispositional advertising literacy in general.

Section	Study	Focus	Format	Method	Respondents	Age
5.3.1.	De Jans et al. 2016b	Cognition, critical attitude and moral reasoning	NA	Survey study	N=2663	12-18
5.3.2.	Zarouali et al. 2016a	Cognition and critical attitude	Retargeted advertising in SNS	Experimental study	N=365	16-18
5.3.3.	Zarouali et al. 2016b	Cognition and critical attitude	Social advertising in SNS	Experimental study	N=140 N=136	14-16

Table 7. Summary of the studies investigating teenagers' advertising literacy

5.3. ADLIT STUDIES INVESTIGATING TEENAGERS' ADVERTISING LITERACY TOWARDS NEW ADVERTISING FORMATS

5.3.1. STUDY 1: TEENAGERS' COGNITION, ATTITUDE AND JUDGMENT TOWARDS NEW ADVERTISING

Steffi De Jans, Liselot Hudders & Veroline Cauberghe⁸

Highlights of the study

- ❖ "Teenagers' level of dispositional advertising literacy is relatively high"
- ❖ "Teenagers claim to largely resist advertising in the current commercial environment by avoiding it, by contesting it and by empowering themselves against it"
- ❖ "Mainly the affective mechanisms ensure teenagers to resist advertising and its persuasion"
- ❖ "The more media teenagers possess, the more cognitive advertising literacy they have. Their level of cognitive and moral advertising literacy also increases with their age"

Research aim

This study makes a distinction between the three potential resistance strategies as conceptualized by Fransen, Verlegh, Kirmani and Smit (2015), namely *avoidance*, *contesting* and *empowering*, to examine how teenagers claim to cope with advertising. The current study expands previous research by investigating teenagers' level of cognitive, moral and affective dispositional advertising literacy and how this advertising literacy influences how they claim to cope with advertising.

In addition, this study examines the impact of media ownership on how teenagers cope with advertising. In line with the socialization theory (John, 1999), which indicates that advertising literacy develops according to trial-and-error, we expect that the more media teenagers possess, the more experience they will have with advertising which will consequently make them more advertising literate. Finally, the current research also investigates the impact of age on how teenagers cope with advertising. Based on the theory of cognitive development (Piaget, 1929), the theory of moral development (Kohlberg, 1971) and the theory of emotion regulation (Calkins & Hill, 2007), we expect teenagers' cognitive, moral and affective advertising literacy to increase with their age. In addition, we examine if a higher level of advertising literacy ensures more resistance to advertising.

Method

A large-scale study with 2.663 participants was conducted. This study is part of a larger research of *Apestaartjaren*, a biennially survey by LINC, Mediaraven and UGent in which the media use of Flemish teenagers is investigated. The participants were asked to fill in the survey individually in a classroom setting. A researcher and a teacher were always present to supervise and answer questions. A representative sample of 2.663 Flemish teenagers participated in the study from which 50,8% boys. 11 Flemish schools participated in the study. The average age of the participants was 14.81 years ($M = 14.81$, $SD = 1.94$). The socio-demographic rep-

⁸ The extended abstract is based on a study which will be submitted in an international peer-review journal

representativeness of Flemish youth was pursued for the total sample by weighting on the variables gender and grade.

Cognitive advertising literacy was measured by three items on a five-point Likert-type scale ranging from 1 '*strongly disagree*' to 5 '*strongly agree*' ($\alpha = .73$, $M = 3.36$, $SD = .81$). Further, affective advertising literacy was also measured by three items on the same five-point Likert-type scale ($\alpha = .65$, $M = 3.67$, $SD = .80$). To measure moral advertising literacy, two items were measured on the same five-point Likert-type scale ($\alpha = .76$, $M = 4.49$, $SD = .71$). Avoidance was measured by one five-point Likert-type scale item ranging from 1 '*never*' to 5 '*very often*' ($M = 3.87$, $SD = 1.10$). Contesting was measured by two items on the same five-point Likert-type scale ($r = .12$, $p < .001$, $M = 3.68$, $SD = .76$). Further, empowerment was measured with one item on the same scale ($M = 4.19$, $SD = .87$). These items are derived from Rozendaal, Oprea and Buijzen (2014), Hudders, Cauberghe and Panic (2015) and Fransen et al. (2015). Finally, media ownership was measured by 15 items based on which media devices teenagers have at home. The score on this construct varies from 0 to 15 ($M = 9.19$, $SD = 2.04$).

Results

First, teenagers' general level of cognitive, moral and affective advertising literacy was examined. Teenagers claim to possess more moral advertising literacy ($M = 4.49$, $SD = .71$) than affective ($M = 3.67$, $SD = .80$; $t(1979) = 39.12$, $p < .001$) and cognitive advertising literacy ($M = 3.36$, $SD = .81$; $t(1979) = 47.84$, $p < .001$). The levels of cognitive and affective advertising literacy also differ significantly ($t(2585) = 13.60$, $p < .001$). Further, it was investigated how teenagers claim to cope with advertising. Teenagers claim to resist advertising more by empowering themselves against it ($M = 4.19$, $SD = .87$) than by contesting it ($M = 3.68$, $SD = .76$; $t(2576) = 28.60$, $p < .001$) or by avoiding it ($M = 3.87$, $SD = 1.10$; $t(2584) = 12.92$, $p < .001$). In addition, the levels of contesting and avoiding also differ significantly ($t(2576) = 7.37$, $p < .001$).

Further, the impact of teenagers' advertising literacy on how they cope with advertising was investigated by conducting several regression analyses. First, a positive impact of cognitive ($\beta_1 = .18$, $t = 9.12$, $p < .001$), affective ($\beta_2 = .42$, $t = 23.26$, $p < .001$) and moral advertising literacy ($\beta_3 = .07$, $t = 3.58$, $p < .001$) was found on the avoidance of advertising. A second regression analysis showed a negative impact of cognitive advertising literacy on the contestation of advertising ($\beta_1 = -.15$, $t = -6.81$, $p < .001$), while affective ($\beta_2 = .21$, $t = 10.63$, $p < .001$) and moral advertising literacy ($\beta_3 = .21$, $t = 9.36$, $p < .001$) had a positive impact on this coping strategy. Likewise, a negative influence of cognitive advertising literacy ($\beta_1 = -.06$, $t = -3.08$, $p = .002$) on the empowerment against advertising was found, while affective ($\beta_2 = .33$, $t = 17.89$, $p < .001$) and moral advertising literacy ($\beta_3 = .28$, $t = 12.71$, $p < .001$) had a positive impact on this resistance strategy.

Multiple mediation analyses were conducted to examine the impact of media ownership on how teenagers cope with advertising via their level of advertising literacy. The more media teenagers possess, the more cognitive advertising literate they are ($a_1 = .03$, $SE = .01$, $t = 3.08$, $p = .002$). First, an indirect effect was found of media ownership on the avoidance of advertising via teenagers' cognitive advertising literacy ($B_1 = .01$, $SE = .00$, 95% $CI = [.0024, .0121]$). Then, there was also a significant indirect effect of media ownership on the contestation of advertising via cognitive advertising literacy ($B_1 = -.00$, $SE = .00$, 95% $CI = [-.0071, -.0013]$). Lastly, an indirect effect of media ownership was found on the empowerment against advertising via cognitive advertising literacy ($B_1 = -.00$, $SE = .00$, 95% $CI = [-.0043, -.0006]$).

Finally, the impact of age on the coping strategies via teenagers' advertising literacy was examined. Teenagers' cognitive ($a_1 = .04$, $SE = .01$, $t = 3.83$, $p < .001$) and moral advertising literacy ($a_3 = .02$, $SE = .01$, $t = 2.19$, $p = .029$) increases with their age. First, there were two significant indirect effects of age on the avoidance of advertising via cognitive ($B_1 = .01$, $SE = .00$, 95% $CI = [.0045, .0161]$) and moral advertising literacy ($B_3 = .00$, $SE = .00$, 95% $CI = [.0004, .0058]$). Further, also two indirect effects were found of age on the contestation of advertising via cognitive ($B_1 = -.01$, $SE = .00$, 95% $CI = [-.0094, -.0025]$) and moral advertising literacy ($B_3 = .00$, $SE = .00$, 95% $CI = [.0008, .0089]$). Finally, the effect of age on the empowerment against advertising was mediated by both cognitive ($B_1 = -.00$, $SE = .00$, 95% $CI = [-.0056, -.0009]$) and moral advertising literacy ($B_3 = .01$, $SE = .00$, 95% $CI = [.0008, .0133]$).

Discussion

This study extends current research on advertising literacy among minors by examining the level of cognitive, moral and affective advertising literacy among teenagers (above 12 years) and by not only focusing on the cognitive dimension. The current study is also innovative as teenagers' dispositional advertising literacy was measured without exposure to a specific advertising format. Moreover, this study expands previous research by measuring teenagers' perceptions.

Teenagers claim to be mostly moral advertising literate, followed by respectively affective and cognitive advertising literacy. Teenagers' level of dispositional advertising literacy is nevertheless relatively high for the three dimensions. Further, teenagers claim to largely resist advertising in the current commercial environment by avoiding it, by contesting it and by empowering themselves against it as conceptualized by Fransen et al. (2015).

In addition, it was examined if advertising literacy influences the way in which teenagers cope with advertising, in terms of the three resistance strategies. It was found that both a higher level of cognitive, affective and moral advertising literacy ensure more advertising avoidance. Further, the results indicated that both moral and affective advertising literacy have a positive impact on advertising contesting, while cognitive advertising literacy contradictory has a negative influence on the contestation of advertising. Similar results were found as regards to the empowerment against advertising. Cognitive advertising literacy again ensures more persuasion by advertising, while more affective and moral advertising literacy ensure less persuasion. These results confirm that mainly the affective mechanisms ensure teenagers to resist advertising and its persuasion. This is in line with Rozendaal, Lapierre, van Reijmersdal and Buijzen (2011) and the study of Hudders et al. (2015) that also affective mechanisms are needed for minors to resist the persuasion of advertising.

Further, the more media teenagers possess, the more cognitive advertising literacy they have which is in line with the socialization theory (John, 1999). Finally, teenagers' cognitive and moral advertising literacy increases with their age. This confirms that the development of teenagers' cognitive and moral advertising literacy is linked to respectively the theory of cognitive development (Piaget, 1929) and the theory of moral development (Kohlberg, 1971). While a higher level of cognitive advertising literacy ensures more persuasion, a higher level of moral advertising literacy assures more resistance to advertising.

5.3.2. STUDY 2: TEENAGERS' SCEPTICAL PROCESSING OF RETARGETED FACEBOOK ADS

Brahim Zarouali, Koen Ponnet, Michel Walrave & Karolien Poels⁹

Highlights of this study

- ❖ "Targeted advertising leads to a higher ad scepticism than the non-targeting, which in turn leads to a lower purchase intention of the product."
- ❖ "A (debriefing) cue is necessary for adolescents to consciously notify that they are exposed to retargeting, which consequently elicits sceptical and critical evaluation advertising. "
- ❖ "Online privacy concern among adolescents elicits a privacy protecting behaviour, in this case the sceptical evaluation of advertising. "

⁹ This extended abstract is based on Zarouali, B., Ponnet, K., Walrave, M., & Poels, K. (2016). "Do you like cookies?" Adolescents' skeptical processing of retargeted Facebook-ads and the role of privacy concern and a debriefing cue.

Research aim

Advertisers are increasingly searching for new ways to adapt their messages to the characteristics or behaviour of consumers. In that regard, *retargeting* can be addressed as one of those recent innovative internet-based marketing practices. Retargeting refers to exposing a user to an ad including a particular kind of content that (s)he searched for online or saw on a previously visited website (Goldfarb, 2013). This practice is frequently used in the data-rich environment of social network sites (SNS), and certainly on Facebook, where advertisers have rapidly adopted the technique over the past few years (Hamman & Plomion, 2013; Tucker, 2014). The purpose of this study is to investigate how adolescents aged 16-18 years process (i.e. advertising scepticism) retargeted ads on Facebook, compared to non-retargeted ads, and how this influences their behavioural response (i.e. purchase intention). Furthermore, this study investigates the moderating role of privacy concern and a debriefing cue. This study proposes theoretical model, representing a moderated mediation relationship (see Figure 23), by drawing on different theoretical frameworks (see next section).

The first research question (RQ1) aims to test the direct relationship between retargeting and purchase intention, as retargeting can potentially lead to either positive (people perceiving the content of a targeted ad as more appealing, relevant and aligned with their personal interest) or negative behavioural outcomes (people perceiving targeted advertising as both creepy and unpleasant as they may experience greater feelings of privacy invasion). Next, adolescents' scepticism is taken into account, and by doing that, it is expected that retargeting, more so than non-retargeted advertising, will lead to a higher advertising scepticism (due to the use of a user's personal surfing behaviour), which will in turn lead to a lower purchase intention (H1). Further, this study expects that adolescents high in privacy concern will evaluate retargeted ads more sceptically than adolescents low in privacy concern (H2), due to personalization reactance (i.e. a psychological resistance in response to inappropriate personalization of messages) (White et al., 2008). Furthermore, it is predicted that adolescents will appraise retargeting more sceptically when they are debriefed with a little cue (i.e. a text that reveals the underlying persuasion tactic) (H3). This debriefing cue will make them consciously aware of retargeting and trigger their critical and sceptical advertising knowledge. Finally, this study ends with an overarching hypothesis which allows us to test the theoretical model as a whole (H4).

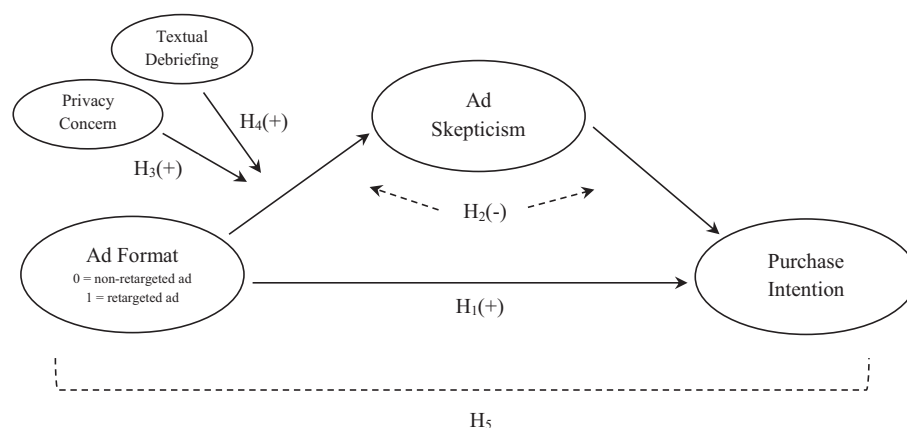


Figure 23. Conceptual model of adolescents processing of retargeted advertising

Method

The study used a 2 (non-retargeted ad – retargeted ad) x 2 (debriefing cue – no debriefing cue) between subject experimental design. In total, 365 adolescents aged 16-18 years ($M_{\text{age}} = 17.27$, $SD = 0.80$) participated in the study (61% female). These adolescents were all eleventh- and twelfth-graders recruited from several secondary schools situated in the Dutch-speaking part of Belgium (i.e., Flanders). A whole cover story was set up for the experiment (see full paper for details), in which participants were exposed to either a retargeted or a non-retargeted ad on Facebook, with or without a debriefing cue. In the *retargeting condition*, participants were asked to open their browser and surf to a website to check out a pair of sunglasses. Participants in the *non-retargeted*

condition were asked to conduct a control task (on Google maps). After having performed this search task, they were directed to Facebook. Once on Facebook, the participants were exposed to an ad depicting the same sunglasses. As the participants in the first condition have searched for this product in advance, they are exposed to retargeting. For the other condition, the ad represents a regular, non-retargeted persuasive message.

Results and Discussion

First, the analysis revealed that the direct effect of retargeted advertising on purchase intention is positive and higher than for non-retargeted advertising ($\beta = 0.59, p < .001$). This demonstrates that, *in general*, adolescents prefer to purchase the product depicted in a retargeted ad compared to the same product in a general, non-retargeted ad.

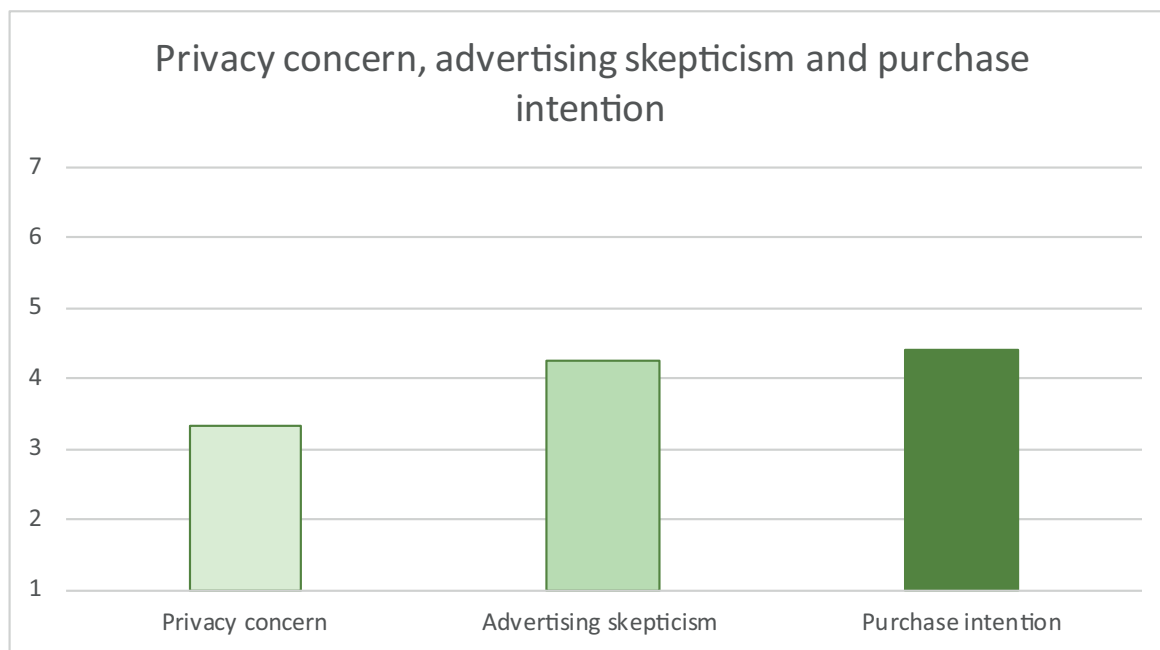


Figure 24. Teenagers' privacy concerns, advertising scepticism and purchase intention on retargeted ads

However, this is '*in general*', as the direct effect looks at the effect of retargeting on purchase intention while controlling for all the other variables in the model. When advertising scepticism is taken into account as a mediator, a negative indirect relationship between retargeting and purchase intention was found (compared to non-retargeting), via advertising scepticism (Indirect effect = -0.266 , 95% CI = -0.425 to -0.150). This means that the retargeted ad leads to a higher ad scepticism than the non-retargeted ad, which in turn leads to a lower purchase intention of the product. Next, it was found that as adolescents' privacy concern increased, they were significantly more sceptical toward the retargeted ad ($\beta = 0.294, p < 0.05$), a pattern that did not occur for non-retargeted ads. This demonstrates that adolescents show clear signs of increased advertising scepticism for retargeting when they are more worried about the way advertisers handle their online personal information for commercial purposes. Furthermore, when the debriefing cue (a little text informing adolescents they are exposed to either a retargeted ad or a non-retargeted ad) was not provided, adolescents were as sceptical toward a retargeted ad as to a non-retargeted ad. However, when the cue was provided, adolescents were more critical in their reflection and evaluated the retargeted ad with far more scepticism than the other ad ($\beta = 0.754, p < 0.001$). This confirms that the debriefing cue discloses the nature and of the persuasive message, and therefore making the motives more accessible in the minds of adolescents, reminding them to reflect critically on advertising when they are exposed to it (Campbell & Kirmani, 2000). Finally, the study's theoretical model was also tested as a whole (moderated mediation analysis), which was significant (see full paper for conditional indirect effects).

5.3.3. STUDY 3: TEENAGERS' KNOWLEDGE AND ATTITUDE TOWARDS SOCIAL ADVERTISING

Brahim Zarouali, Karolien Poels, Koen Ponnet & Michel Walrave¹⁰

Highlights of the study

- ❖ "Chatting on SNS leads to higher attitudes toward social advertising, and lower advertising literacy regarding this format."
- ❖ "Chatting on SNS with a strong tie (compared to a weak tie) leads to even higher attitudes and lower levels of advertising literacy toward social advertising."
- ❖ "In short, this shows that peer influence plays an important explanatory role in adolescents' advertising literacy and attitudes towards social advertising."

Research aim

Peers are important agents of consumer socialization, especially during adolescence, influencing many consumer behaviours and beliefs (John, 1999). However, only a limited body of research focused on how peer influence affects advertising processing and evaluation mechanisms (e.g. Mangleburg, Grewal, & Bristol, 1997). This issue can be situated within a larger concern that prior advertising research has largely ignored the influence of social context on cognitive and affective advertising responses in favour of an emphasis on the individual subject (Ritson & Elliot, 1999). However, when adolescents are exposed to advertising, this does usually not occur in a social vacuum, but in the presence of others, most of the time peers. The latter is certainly the case for advertising on social network sites (SNS). A SNS can be considered a socially rich environment and an important public arena for adolescents in which peer influence is omnipresent. Therefore, it is imperative to take these peer influence dynamics into account when investigating adolescents advertising processing on SNS. This study explores in a series of two experiments how engaging in online peer communication on SNS (i.e. chatting) among adolescents can alter attitudes and advertising literacy toward social advertising.

In Experiment 1, the first hypothesis (H1) states that social advertising on SNS should lead to better attitudes toward the ad compared to non-social advertising. This claim is based on the principle of social proof: social advertising includes other people liking an ad, and because 'others are doing that, it must be good and right' (Cialdini, 2006; Griskevicius, Goldstein, Mortensen, Sundie, Cialdini & Kenrick (2009). Furthermore, it is assumed that social advertising should also lead to better attitudes toward the ad among adolescents that engage in online peer communication, compared to those not engaging in it (H2). Adolescents engaging in peer communication on SNS should feel more connected to their peers, reinforcing group salience and a shared social identity. Consequently, if adolescents are exposed to social advertising under this condition, it should perform better in terms of attitudes (as compared to non-social advertising) because it includes social features or elements that immediately refer to the shared social identity that users experience when chatting with peers. Furthermore, with regards to advertising literacy, it is expected that social advertising on SNS should trigger less advertising literacy compared to non-social advertising (H3). The reason for this lies in the fact that, for advertising literacy to be used, adolescents must recognize the persuasive motive of a particular situation. If they do not think about the possibility of persuasion, they are less likely to use their advertising literacy (Wright & Friestad, 1994). In case of social advertising, it can be argued that the true persuasive intent is disguised as the ad is 'liked and 'recommended' by friends, which detaches the message from the idea that it originates from a commercial source with underlying persuasive motives. Finally, the last hypothesis of Experiment 1 asserts that social advertising should also trigger less advertising literacy when adolescents engage in online peer communication, compared to those not engaging in it (H4). By analogy with H2, it is assumed that adolescents engaging in peer interaction should feel more closely related to their peers, which then decreases the perceived persuasive intent of social advertising (and therefore the likelihood to use advertising literacy).

¹⁰ This extended abstract is based on Zarouali, B., Poels, K., Ponnet, K., & Walrave, M. (2016). "You talking to me?" How peer communication affect adolescents' persuasion knowledge and attitudes toward social advertising.

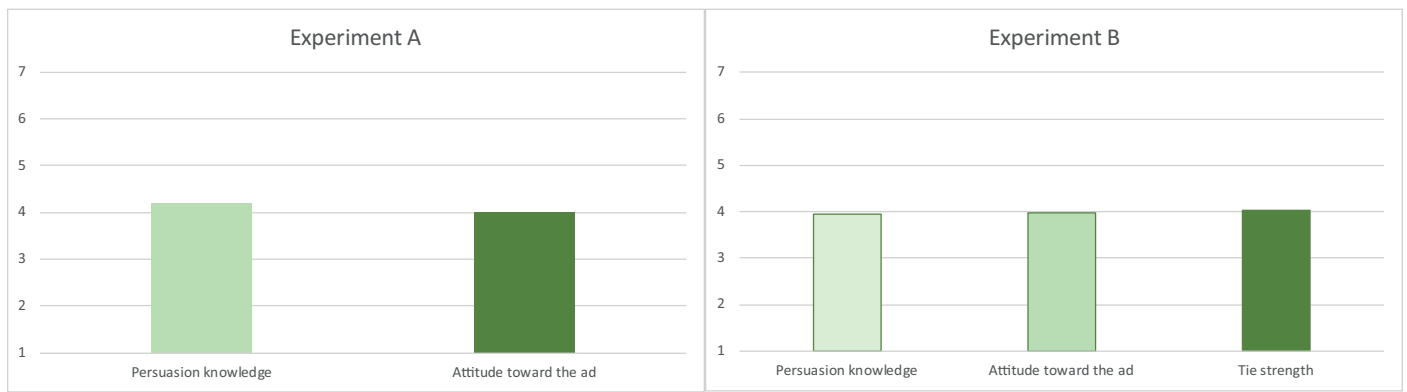
In Experiment 2, the aim was to replicate the first study by examining under which conditions online peer communication could exert a greater impact. In this regard, this study sheds some light on an important explanatory factor: tie strength. H5 posits that social advertising on SNS should lead to better attitudes toward the ad when adolescents engage in online peer communication with a strong tie, compared to a weak tie. Strong ties are perceived more important to one's self-concept, making them more relevant for determining one's own (consumer) behaviour (Berger, 2014; Brown, Broderick & Lee, 2007). If adolescents chat on SNS with a strong tie, and are subsequently exposed to an ad referring to this strong tie having liked it (i.e. social advertising), they will be more easily inclined to imitate this behaviour by liking it as well (i.e. a higher attitude). The final hypothesis (H6) also claims that social advertising triggers less advertising literacy when adolescents chat with a strong tie, compared to a weak tie. As a strong ties convey more trust and are considered more credible (Brown, Broderick & Lee, 2007), it can be argued that messages endorsed by these strong ties will less likely be perceived as having an underlying commercial intent, compared to when they are endorsed by a weak tie (Pornpitakpan, 2004).

Method

Experiment 1 used a 2 (non-social ad – social ad) x 2 (no peer communication – peer communication) between-subject design. In total, 140 adolescents aged 14-16 years participated ($M_{\text{age}} = 14.73$; $SD = 0.70$; 58 % female). Experiment 2 employed a 2-level (no peer communication – peer communication) between-subject groups design). In total, 136 adolescents aged 14-16 years participated in the study ($M_{\text{age}} = 15.21$, $SD = 0.75$; 63 % female). A mock SNS has been created for the experiment to have full control of all content on it, including the chat conversations. It contained the 'look and feel' all the main functionalities and services of Facebook, the most popular SNS. Earphones were chosen as a suitable product to use in our test-ads (social and non-social ad). As a brand, we opted for the popular earphones by Dr. Dre. A pre-test ($N = 40$) was conducted in advance to test all our materials and stimuli, and the results indicated that Social Engine was found to be very credible and realistic, the product (earphones) highly liked and the brand (Dr. Dre) very popular. In Experiment 1, all adolescents began with filling out socio-demographic questions. Then, each class was randomly divided in two parts, allowing half of the participants to engage in online peer communication (chatting) with each other through the SNS, while disabling this chat function for the other half. This group conducted a control task. After having completed the chat or control task, they were exposed to either the social or non-social ad on their personal newsfeed on the SNS. Finally, participants completed the last part of the questionnaire, which included our dependent variables. In Experiment 2, the experimental procedure followed the same course as Experiment 1, with the only difference that this time, every adolescent received the assignment to chat with a peer. Moreover, everyone was randomly paired to one, and only one, other peer within their classroom in order to assess tie strength toward that peer.

Results

In line with H1, the main effect showed that the social ad performed better in terms of attitude toward the ad than the non-social ad ($F(1,134) = 5.71$, $p < .05$). Furthermore, the interaction in H2 was also found to be significant, as adolescents engaged in peer communication had a higher attitude toward social advertising than those not ($F(1,134) = 3.97$, $p < .05$). The main effect of H3 was not present, meaning that advertising format (social advertising vs. non-social advertising) was not a significant predictor of advertising literacy ($F(1, 134) = 0.16$, $p = .69$). However, the interaction of H4 was significant, indicating that adolescents in the chat condition had a lower advertising literacy toward social advertising than those in the non-chat condition ($F(1,134) = 5.16$, $p < .05$). In Experiment 2, the analyses revealed that H5 was significant: as the strength of the tie with whom an adolescents chats increases, attitude toward social advertising increases as well ($F(1, 130) = 7.39$, $p < .01$). In addition, we also identified that the increase of tie strength among interacting peers leads to a significant decrease in advertising literacy toward social advertising (H6) ($F(1, 130) = 4.14$, $p < .05$).



Figures 25 and 26. Peer communication on SNS in general (A) and conditions online peer communication could exert a greater impact (B)

Discussion

In Experiment 1, this study demonstrated that peer communication on SNS in general has an influence on adolescents' in that it leads to higher attitudes and lower advertising literacy regarding social advertising on these social platforms. In the second experiment, the study found that knowledge on who they chat with is crucial to understand the psychological mechanisms driving advertising processing and responses. In this regard, the study established that when adolescents engage in online peer communication on SNS with a strong tie (compared to a weak tie), they have higher attitudes and lower levels of advertising literacy toward social advertising appearing on their newsfeed. These findings reveal some important insights regarding the social influences on SNS that affects adolescents advertising literacy. Specifically, this study concludes that adolescents are not always aware of the commercial intent of social advertising (i.e. lower advertising literacy) when they engage in online peer communication, and certainly with a strong tie.

6

ADVERTISING LITERACY AND VULNERABLE YOUNG AUDIENCES

S. LISSENS & J. BAUWENS

6.1. INTRODUCTION

Research on children and youngsters' advertising literacy blossomed since the mid 1970's "as a result from increasing public policy concerns about marketing and advertising to children" (John, 1999 p. 183). Targeting minors has been considered unethical, even marketers and advertisers often seem to agree that ethical issues arise (see for example Grimm, 2004; Krueger, 1998; Nwachukwu et al., 1997; Preston, 2005) as youngsters, and particularly children, do not yet attain the "adult norm" of advertising literacy (Young, 1990 p. 299). That being said, research shows that parents are not necessarily more immune to advertising, especially when it relates to online advertising (see for example Pettigrew et al. 2013). The bulk of the research focusing on the topic, then, tends to highlight the children's and teenagers' vulnerability because of their un(der)developed understanding of advertising. As a result, cognitive developmental theories most frequently provide the framework for the research on advertising literacy whereby the variable age is taken as a proxy for developmental stage. The conclusion is confirmed that, the younger one is, the more vulnerable and less aware as well as resistant one is to the used advertising strategies and techniques (see section 4 and 5).

Sections 4 and 5 of this report have already indicated that research attention within the field of advertising literacy does go to the altering media environment of children and teenagers. This in order to keep up with the new media technologies that continue to allow for more interactive and immersive advertising strategies and formats that hinder the detection and understanding of advertising and challenge the development of advertising literacy. This media environment, though, is mainly interpreted on a macro-level. This suggests that, within their age category, these children and teenagers compose of homogenous groups, individually all possessing and using similar media in a similar way and to a similar extent and processing the concurring advertising instances alike.

Information on other contextual factors that increase or decrease one's vulnerability to advertising effects is rather limited. John (1999, p. 188), in her influential review of 25 years of consumer socialization, acknowledges that this latter process does "not emerge in a vacuum" but in a social environment, inhabited by socializing agents such as parents, peers and the media. Though still not sufficiently studied (Ham et al., 2015), on several occasions research goes out to the role of parents and their general parenting and particular media mediation/monitoring style in children's processing of primarily television advertising (see for example Buijzen, 2009; Newman & Oates, 2014; Rozendaal, Oprea & Buijzen, 2016; Vanwesenbeeck, Walrave & Ponnet, 2016b; Vanwesenbeeck, Walrave & Ponnet, 2015). Next, the role of the peers is investigated often with regards to forms of online advertising (see for example Shen et al., 2016; Slot, Rozendaal, van Reijmersdal & Buijzen, 2013; Rozendaal, Slot, Van Reijmersdal & Buijzen, 2013).

Although the cognitive developmental theories central to advertising literacy research have generated fundamental insights into children's and teenagers' cognitive capacities according to age, little if any research attention and analysis has gone to the micro-climates that potentially affect their media possession and use, consumer socialization and, consecutively, advertising exposure and literacy. Since cognitive developmental theories build on the accumulation of life experiences, in this case advertising and consumer experiences, it is surprising to notice that the conditions impacting on these actual consumer experiences are not integrated as complementary and contextualizing information on how children and teenagers pick up, process and evaluate instances of advertising. The following quote of Ward (1974) is relevant in that sense:

"One could argue from a learning theory point of view that since children from low-income homes have less experience with money, and may be less aware of the range of consumer goods, their learning of some aspects of consumer skills should be less adequate than that of children from upper-income homes, who have more opportunities for consumption. On the other hand, one could argue that children from low-income homes are more likely to become highly skilled consumers, because they have had to learn disciplined uses of scarce resources."

Ward (1974, p. 3)

Actual consumption opportunities and behaviours can influence the exposure and attitudes towards advertising and the knowledge and perception thereof. It cannot be ignored, for example, that one's family budget impacts on purchases of items in general and brands in particular. It can be suggested that the amount of product/brand consumption and ownership increases product/brand attitudes. Consecutively, positive or negative attitudes towards advertising might be more related to the (un)desired advertised product/brand and the expected consumption successes and failures than to the advertising strategy used. On the same account, different levels of advertising literacy can be linked to the access to and use of different media, rather than the cognitive abilities one has. Studies on the content as well as the effectiveness of advertising campaigns have shown that low(er) SES areas are characterized by more and different sorts of public advertising (this refers to geographical information, *infra*) (Barbeau, Wollin, Naumova & Balbach, 2005; Settle, Cameron & Thornton, 2014) and that different styles of messaging should and are used when targeting different socio-economic status audiences (Bansal, John & Ling, 2005; Durkin, Biener & Wakefield, 2009; Murray et al., 2004; Niederdeppe et al., 2011). Depending on where one lives and carries out everyday activities thus also quantitatively and qualitatively affects the advertising one is exposed to.

As such, research questions should not only cover parental media mediation, but also parental consumption and advertising mediation. Building on Young's concept of viewing ecology (Young, 1990), consumption ecology would provide complementary and contextualizing insights and advertising literacy could have as much to do with economic literacy as it does with media literacy.

Accordingly, whereas disadvantage and vulnerability within the context of advertising literacy relates to the demographic age in first instance, research attention then should include other factors that further influence children's and teenagers' disadvantage and vulnerability within their respective age categories.

A useful construct to measure one's general disadvantage is the so-called socio-economic status (SES). Whereas the construct initially suggests an economic determinist point of view that is rather valid in the light of consumption, its multi-dimensional conceptualization and operationalization illustrates that life opportunities, qualities and expectations are facilitated or hampered by a number of interacting factors that move beyond mere economics and finances and relate to social and cultural capital as well (see Bourdieu, 1986).

In the next paragraphs a state-of-the-art is presented of SES incorporation into the studies on children and teenagers' advertising literacy. These studies are discussed in the light of their argumentation to do so, the conclusions and suggestions that follow from it and the contributions they bring to the field, i.e. how SES might affect children and teenagers' vulnerability in the light of advertising literacy. Noteworthy and in line with the reasoning of Ward (see quote *supra*), SES disadvantage is not automatically equalized to advertising literacy disadvantage. It is up to empirical research, whether existent or future is up to the following literature study, to shed more light on that matter.

SES as a construct - The conceptualization of SES generally is threefold. A first factor that can be taken into consideration is the respondents' families' household incomes. A second factor is determined by the respondents' (parental) levels of education. The third and last factor relates to the respondents' (parental) levels of occupation. This conceptualization represents its ideal construct, though. In reality, the measurement of SES often depends on two or even only one of these variables. Particularly the household income is dropped, as it easily results in missing values. This is even more so the case when the respondent sample composes of minor subjects. It is reasoned that children and teenagers are not aware of their families' finances, whereas they are considered to hold clearer views on what their parents' professional activities involve, albeit often operationalized via indirect questions and taken as indicative for the educational level at the same time.

Alternative measurements of SES are the use of geographical information by means of governmental statistics and mean numbers of regional income, for example, and particularly in the case of the children the SES of the school the attend to and/or the fact that they are up to free or reduced price school meals.

Besides the mentioned conceptual ambiguity, SES' operationalization is diverse as well. For example, educational levels are sometimes questioned by highest achieved degree and sometimes by numbers of years studied. Occupational levels can be determined by open ended questions such as 'what do your parents do for work' or by predetermined occupational categories. Household incomes are equally asked for by means of open ended questions, by taking a certain income as the norm and classifying the respondents over or under that norm or, anew, by offering fixed answering categories. Further, the number of response options differs extensively.

Thus, any comparison on the matter of SES should be dealt with precaution.

* See for example Alwitt & Donley, 1996; Eurobarometer 78, 2012; Flash Eurobarometer, 2008; Hargittai & Hinant, 2008; Mertens & D'Haenens, 2010; Niederdeppe et al., 2011; Van Coillie & Raedts, 2014.

6.2. ADVERTISING LITERACY, MINOR AUDIENCES AND THE ROLE OF SES

Parallel to the previous chapters, it would have been viable to structure the research findings on the link between SES and advertising literacy according to the differing formats, strategies and techniques of advertising. However, scanning the literature it soon became clear that information on SES is scarce in general, independent of the medium in which advertising appears or the nature it is characterized by. In this case, it turned out more feasible to start from the extent in which SES-related data were incorporated.

6.2.1. SES AS A NON-ISSUE

A first and large group of **empirical studies** does not mention SES-related data in any way (Ali et al., 2009; An & Stern, 2011; Andronikidis & Lambrianidou, 2010; Cowley et al., 2008; Lawlor & Prothero, 2008; Newman & Oates, 2016; Panic et al., 2013; Rozendaal et al., 2013; Rozendaal et al., 2016; Shen et al., 2016; Slot et al., 2013; Soontae & An, 2014; Spielvogel & Terlutter, 2013; Terlutter et al., 2016; Vanwesenbeeck et al., 2016a; Vanwesenbeeck et al., 2016b; Verhellen et al., 2016; Waiguny et al., 2010). Oates and colleagues (2003) do mention the role of children's understanding of economics, i.e. performing purchase behaviour and knowing about the economics involved in advertising, yet they link this understanding to age and not to SES-backgrounds.

A second group of articles overlooking the potential role of SES is defined by **review articles** (Buijzen & Valkenburg, 2003; John, 1999; Kunkel, 2010; Livingstone & Helsper, 2006; Martin, 1997; Terlutter & Capella, 2013; Wright et al., 2005). Although this is to be expected since the bulk of studies they discuss, like those mentioned above, does not incorporate such data, the segments on suggestions for future research do not seem to compensate for this either. There is no explicit, theoretical arguing for the integration of SES data.

These review articles, though, to a certain extent contain research directions that move beyond the demographic age and open up space to touch upon SES or disadvantage in a general sense. Terlutter and Capella (2013), for example, argue for cross-cultural analyses in the research on advertising in digital games. Wright, Friestad and Boush (2005) advocate a focus on children's influence contexts of their everyday lives, albeit they target the influence of parents or peers far and foremost. Buijzen and Valkenburg (2003, p. 453) conclude their review with a number of working hypotheses and the identification of moderating variables such as such as age, gender, socioeconomic status, and parent-child communication, these latter to *"serve as a basis or guideline for future research"*. In her analysis John (1999, p. 184) consciously excludes *"research by economists and psychologists pertaining to children's economic concepts (e.g., money values, saving, resource scarcity)"*. However, in context of the family environment she does list a number of studies where ethnicity and educational level affect children's advertising literacy (infra) and there is a paragraph on *"economic consumption motives"* and the link with family communication orientation, exposure to television and social utility reasons for watching television advertising. All of the studies addressing this aspect listed by John (1999) were done by Moschis and Churchill. Lastly, despite the focus on age, Martin's (1997) final research guidelines integrate demographic factors like race, the educational level of the parents and the presence of siblings.

A third group of articles are **theoretical writings**. As was the case with the review articles, most of them do not explicitly argue for the incorporation of SES data, yet even in that case their reasoning often allows for such an interpretation as well. For matters of clarity and overview, the targeted articles are presented in a table.

Year	Authors	Topic	SES	Room for interpretation
2005	Moses & Baldwin	theory of mind & executive functioning skills	semi/suggested	<ul style="list-style-type: none"> — recommendation for thorough exploration of ‘children’s advertising knowledge in a broader lay theory of economics’ — ‘research on children’s naive economics might prove similarly fruitful’ <p>> economic literacy might affect advertising literacy</p>
1998	O’Donohoe & Tynan	qualitative, active advertising reception	no	<ul style="list-style-type: none"> — advertising literacy is socially and culturally situated — ‘to learn about the contexts and perspectives which may shape the encounters of particular consumers with particular ads’ <p>> consumers are situated by SES</p>
1998	Obermiller & Spangenberg	consumer scepticism scale	no	<ul style="list-style-type: none"> — the quality of accumulated consumer experiences is the primary source of influence on scepticism <p>> consumer experiences are affected by SES</p>
1994	Friestad & Wright	persuasion knowledge model	no	<ul style="list-style-type: none"> — the development and use of PK differs by cultural factors: ‘folk wisdom’ about advertising — the development and use of PK differs by individual factors: learning via social interaction — ‘issues of comparability between groups’ <p>> groups of people differ by SES</p>

Table 8. Theoretical writings that are related to SES and advertising literacy

6.2.2. SES AS AN ISSUE OF INSTRUMENTALITY: DESCRIBING THE SAMPLE

A number of studies bring SES to the front, yet only at the level of sampling and in the light of the possible strengths and limitations of the research on the matter of representativeness. On occasions authors claim to have recruited a representative sample: it considers, for example, 6 till 10 year olds *“of mixed ability and mixed socioeconomic class”* (Owen, Auty, Lewis & Buijzen, 2013, p. 199), 4 till 12 year olds *“from ten primary schools within the Perth metropolitan area, stratified by socio-economic status (SES) deciles as suggested by the Australian Bureau of Statistics SEIFA index of disadvantage”* (Carter et al., 2011, p. 963), 8 till 12 year olds *“with various socio-economic and cultural backgrounds”* (Rozendaal, Buijzen & Valkenburg, 2009 p. 291), *“parent-child dyads from various economic backgrounds”* (Buijzen, Rozendaal, Moorman & Tanis, 2008 p. 513), a sample *“diverse in terms of the socio-economic status of participants, which we operationalized by asking facilitators to inquire about parental occupation and neighbourhood residence within the geographic context of their communities”* (Hobbs, Broder, Pope & Rowe, 2006, p. 721-722), varied *“in terms of socioeconomic and cultural backgrounds”* (Rozendaal, Buijzen & Valkenburg, 2012 p. 204), or spanning *“a socioeconomic status (SES) range from disadvantaged to upper-middle class”* (Robertson, Rossiter & Gleason, 1979, p. 249). It is not always clear how exactly the SES-data collection is operationalized and no further analyses are made on the possible role of SES.

Still limited to the level of the sample, research has been based on less than representative samples, mainly prioritizing children, youngsters and parents from middle and upper classes (see for example Bijmolt, Claassen & Brus, 1998; Bulmer, 2001; McAllister & Cornwell, 2009; Mehta et al., 2010; Robertson & Rossiter, 1985; Rose, Bush & Kahle, 1998). Whereas these authors acknowledge

the limitations of their research as a consequence of the characteristics of their samples, suggestions to incorporate low(er) SES respondents into the research are seldom the result of theoretical reasoning.

6.2.3. SES IDENTIFIED AS A FACTOR OF INFLUENCE

A first group within this category is composed of studies that integrated low(er) SES- respondents for reasons of representativeness and variation in their sampling procedures, yet also as an influence factor in their analysis and conclusions, albeit with differing conclusiveness and clarity. They are listed in **a table at the end of this heading** (see table 9 on page 82) and are elaborated upon more extensively here:

Pettigrew et al. (2013) studied the effects of television and internet food advertising, for example their evaluation of the advertised products and their desires to consume them, on 8 to 14 year olds and their parents. SES was queried by parental educational level and household income. The role of the former was unclear. *“Across all education levels there was a stronger desire to consume the product in the exposure conditions, but the differences were statistically significant only for parents with undergraduate degrees, secondary schools and postgraduate (Pettigrew et al., 2013, p. 2208)”*. The latter, household income did not appear in the analysis.

Shin, Huh and Faber (2012, p. 730) questioned 4th to 6th graders and their parents on their attitudes toward online advertising, incorporating parental communication, perceived online competencies and ad scepticism. Among the demographics, including SES measured by parental education level and household income, only children’s age turns out to be *“significantly associated with online advertising attitudes, with older children having more positive attitudes”*.

Morgenstern, Isensee, Sargent and Hanewinkel (2011, p. 612) carried out a longitudinal study on the mediating role of attitudes in the association between alcohol advertising and youth drinking among 11 to 17 year olds. SES as a covariate was measured by indirect questioning. It was *“approximated with a combination of student and teacher ratings; students answered 3 items of the Program for International Student Assessment cultural and social capital assessment, 22 which asked for the number of books in the household (5-point scale from 0, none to 4, more than 100) and parenting characteristics (“My parents always know where I am” and “My parents know other parents from my school”). Teachers filled out an 11-item school evaluation sheet related to the socioeconomic status of their students (e.g., “Most students of the school live in families with financial problems,” “Most students of the school come from underprivileged families,” and “Our school has a good reputation”; the scale ranged from 0, not true at all to 3, totally true”*. SES, although measured, is absent in the part of analysis.

D’Alessio, Laghi and Baiocco (2009, p. 415-417) designed and tested a scale on children’s, i.e. 8 to 10 year olds’, attitudes towards television advertising, whereby attitude was operationalized through the concepts of enjoyment, credence and behavioural-intention. SES in its turn was measured by parental responses on household income and educational level. Their findings on SES were the following: *“the enjoyment of TV advertising (54% of the variance) is only predicted by environmental factors: the influence of peers, a great number of used or consumed brand-name products and a low family’s socioeconomic status”* and *“behavioural-intention of advertising (71% of the variance) can be predicted by the number of brand-name products which are used or consumed, children’s TV viewing time and a high socioeconomic status of the family”*. The authors conclude with the analysis that *“data seem to suggest that on the one hand parents with a high SES can help to reduce their children’s enjoyment of TV advertising, but on the other hand they can provide children with more opportunities to ask for the advertised products to buy them”*. This is backed up by references on the relationship between high(er) SES and better parental guiding in media use, and by extension parental media literacy. Parental economic literacy and socialization according to SES, however, is not mentioned.

In their experiment with 5 to 8 year olds Mallinckrodt and Mizerski (2007) investigated the effects of playing an advergame on the children’s perceptions of and preferences and requests for the branded cereals. Children attending higher SES schools identi-

fied the source of the advergame, by means of choosing the brand logo, significantly more than others. Further, gender and SES appeared to be significant covariates for the identification of the commercial intent of the game, i.e. the advergame trying to get children to ask for the branded cereals. Despite these findings, they interpret the preliminary effects of the latter demographics as mere suggestions for other operating factors, rather than worthy of thorough examination in their own right.

The work of Primack, Gold, Land and Fine (2006) touches upon advertising literacy in an indirect way. They studied the association of cigarette smoking and media literacy about smoking, including, for example, the understanding that media messages are for profit/influence, among 14 till 18 year olds. SES was operationalized by parental educational level and perceived community income levels. In their analysis, smoking media literacy was positively associated with socioeconomic status, responsive parenting, demanding parenting, and self-report of grades.

Bartholomew and O'Donohoe (2003, p. 453) approached things from a different angle. They studied 10 to 12 year olds' advertising experiences from qualitative, meaning-based, reader-response and literacy approaches, opening up space for the youngsters' agency in everyday life contexts of advertising. In general, all of the youngsters, whether attending the school in the high, middle or less affluent populated area, SES indications based upon geographical information, *"were united in their quest for power, their use of advertising to that end, and their versatility in adopting a range of roles with respect to advertising"*. Taking a closer look, though, the less well of students appeared *"less inclined to adopt the role of reality questioners"*. Whether this has to do with advertising literacy per se, with different educational opportunities in the sense of *"expressive style and the articulation of ideas"* and/or with research effects, remains open for further investigation, according to the authors.

Donohue, Meyer and Henke (1987) focus on 6 to 8 year old black and white children's perceptions of food-related television commercials. Whereas they strive to correct the fact that until then academic research had been done mainly among white, middle class -or higher SES- children, their association of a black ethnic background and a lower class context as well as assumed lower nutritional situations is assumed rather than demonstrated. Consecutively, their work is appreciated here because of their acknowledging that children with different backgrounds do not necessarily interpret advertising in similar ways.

Nelson (2016, p. 173) studies the effectiveness of educational programs designed to increase children's development of persuasion knowledge, particularly in the context of food advertising and the links with obesity. Her sampling of low(er) 8 and 9 year old SES respondents at first sight seems indirect as she selects schools that are located within a district where is *"a need for health and wellness content and the district was receptive to the idea of integrating health content into media literacy curriculum"*. On a further notice, though, the number of pupils counting for reduced school meals appeared so high, that free lunches for all were provided. The results from these literacy interventions at *"high poverty schools"* showed significant increases in the children's *"understanding of the message creator, the selling intent, persuasive strategy, and target audience"*. What is identified as problematic here, is the fact that low advertising literacy levels occurred at baseline. Low SES pupils benefit from advertising literacy interventions, yet they still lag behind compared to better off peers. Nelson suggests that this is probably due to the majority of the sample having immigrated recently and not having had the same consumer socialization as other yet.

Building on the importance of parents in the socialization process of children and the lack of research on parental mediation when it concerns online advertising, Cornish (2014, p. 457) evaluated 5 to 12 year olds' parents' perception, knowledge and evaluation of online advertising practices. The sampling of respondents proceeded via contacting personal and professional networks, which signifies that the SES profile of the respondents, exceptional to the other studies mentioned in these paragraphs, is not of lower order. The research is discussed here, nevertheless, because Cornish points out that digital gaps might be at play and therefore recommends that *"future researchers investigate whether socio economic status impacts advertising literacy in parents and their attitudes and responses towards children's access to online advertising"*.

Batada and Borzekowski (2008) answered the call from Bumler (2001) and Bijmolt, Classen and Brus (1998) to include more

ethnically and racially diverse populations in the research on children's understanding of the persuasive or commercial intent of television food advertising. Consecutively, their qualitative study focuses on children from grades three till five, coming from a low-income urban area. Furthermore, all except one from the 58 participating children were eligible for and received free or reduced price lunch at their school because of the SES background of their families. The researchers found that the children had a limited understanding of the persuasive intent of advertising and problematized this for a twofold reason. One, lower SES children are at a higher risk of overweight and obesity. Two, the higher numbers of television use among low SES children imply that they are exposed to higher numbers of advertising for low nutritional foods.

Gorn and Goldberg (1977, p. 188) wanted to measure the attitudinal and behavioural effects of television commercials on children from lower income families in case of child-related products. They wondered whether seeing a television commercial would increase the 8 to 10 year old lower SES children's liking for the toy and their motivation to try and obtain it. Along the way and within the experimental set-up, considerate attention was paid to everyday life circumstances. For one, the researchers expected a mediating role for the children's perceived success, or *"real world"* expectancy levels of their request for the toy. And two, they calculated that at particular moments, e.g. Christmas time, the children's expectancy levels of obtaining the toy could be influenced. They found that even a minimal, single time exposure to a toy developed favourable attitudes toward the product. Only on the matter of behavioural effects, additional exposure was necessary in order for lower SES children to make more efforts to try and obtain the toy, in comparison with the control group. What Gorn and Goldberg conclude, then, is that *"the general life circumstances of the sample of lower income children used in this study would appear to have been more salient than the situationally induced expectancies in this experiment"*. Valuing this path of research, they invite researchers to consider their work *"as the first stage in a program of research to demonstrate direct cause-effect relationships between TV advertising and the attitudes and behaviour of low income children."*

Rossiter and Robertson (1976, 1980 and Robertson & Rossiter, 1974) were among the first academics to extensively study children and teenagers' understanding of advertising literacy. Although a full account of SES cannot be found in their work, they only measured parental education levels, some important findings are worth mentioning. In an early study on first, third and fifth' grade boys understanding of television commercials and the associated effects upon attitudes and purchase request tendencies (Robertson & Rossiter, 1974 p. 17), they found that the attribution of persuasive intent, besides primarily being age-dependent, also relates to parental education. *"That is, those children who see commercials as designed to induce purchases are older and have parents of higher educational levels than those children who do not perceive persuasive intent."* *"Enriched environments"* can thus contribute to a better understanding of advertising's persuasive intent. A similar finding resulted from their study on the developmental, social, and experiential factors in children's comprehension of television advertising (Rossiter & Robertson, 1976 p. 325). Apart from age and grade, the educational level of the parents seems to be *"the main social accelerator of cognitive understanding"* of television advertising. Lastly here, studying 8 to 13 year old children's dispositions toward proprietary drugs and the role of television drug advertising (Rossiter & Robertson, 1980 p. 326), it became clear that *"children from educationally "disadvantaged" families are exposed to a considerably higher level of TV drug advertising than children from other families"*. Furthermore, their correlational results suggest *"that disadvantaged children are somewhat more strongly affected by TV drug advertising than other children; exposure seems to have a rather sizable influence on their behavioural tendencies in the form of intentions and requests for these products"*. The lack of mean differences, though, forces them to *"reject the vulnerability hypothesis for the educationally disadvantaged subgroup"*.

Year	Authors	Topic	SES via	SES-related results
2016	Nelson	effectiveness of educational programs to increase persuasion knowledge in the context of food advertising	- school SES - free/reduced price lunches	- low(er) advertising literacy levels occur at baseline in comparison with high(er) SES schools - high poverty schools show significant increases in children's understanding of the message creator, the selling intent, persuasive strategy, and target audience
2014	Cornish	parental perception, knowledge and evaluation of online advertising practices	/ (contacting personal & professional networks)	- none - however: Cornish points out that digital gaps might be at play here and therefore recommends that 'future researchers investigate whether SES impacts advertising literacy in parents and their attitudes and responses towards children's access to online advertising'.
2013	Pettigrew, Tarabashkina, Roberts, Quester, Chapman & Miller	effects TV and internet food advertising > evaluation of advertised products, consumption desire	- parental education - household income	- no integration of household income in the analysis section - a stronger desire to consume the products among all educational level, yet only significant for undergraduate degrees, secondary schools and postgraduates
2012	Shin, Huh & Faber	attitudes toward online advertising	- parental education - household income	- no significant effects based upon SES
2011	Morgenstern, Isensee, Sargent & Hanewinkel	longitudinal study on the mediating role between alcohol advertising and youth drinking	- indirect questioning (e.g. number of books in the house) - questioning via teachers (11 item evaluation sheet)	- SES not integrated in the analysis section
2009	D'Alessio, Laghi & Baiocco	scale for attitudes towards TV advertising, operationalized by enjoyment, credence and behavioural-intention	- parental education - household income	- enjoyment is predicted by (a.o.) a low SES - behavioural-intention is predicted by (a.o.) a high SES
2008	Batada & Borzekowski	understanding of the persuasive intent of TV food advertising	- geographical information - free/reduced price meals - ethnicity	- the children have a limited understanding of the persuasive intent of advertising, supposedly because of: . higher risks for obesity . higher numbers of TV use and thus exposure to advertising
2007	Mallinckrodt & Mizerski	effects advergame > perceptions, preferences & requests for the branded cereals	- school SES	- higher SES students identified the source of the advergame significantly more - SES as a significant covariate for the identification of the commercial intent of the game
2006	Primack, Gold, Land & Fine	association between cigarette smoking and media literacy, including message intents of profit and influence	- parental education - geographical information (perceived community income)	- smoking media literacy is positively related with socio-economic status (and responsive parenting, demanding parenting, and self-report of grades)
2003	Bartholomew & O'Donoghue	agency in everyday life contexts of advertising	- geographical information	- students from the less well off areas appeared less inclined to be reality questioners
1987	Donohue, Meyer & Henke	perceptions of food-related TV commercials	- ethnicity (black/white)	- white children show significantly higher levels of awareness of commercial motives

1980	Rossiter & Robertson	dispositions toward proprietary drugs and the role of TV drug advertising	- parental education	<ul style="list-style-type: none"> - children with lower educated parents are exposed to considerably higher levels of TV drug advertising - correlational results suggest that 'disadvantaged children are somewhat more strongly affected by TV drug advertising' & 'exposure seems to have a rather sizable influence on their behavioural tendencies in the form of intentions and requests for these products' - the lack of mean differences, though, forces them to reject the vulnerability hypothesis
1977	Gorn & Goldberg	effects TV commercials > attitudes and behaviour	- geographical information (governmental data on household income)	<ul style="list-style-type: none"> - only on the matter of behavioural effects, additional exposure was necessary in order for lower SES children to make more efforts to try and obtain the toy, in comparison with the control group - general life circumstances seem more salient than situationally induced expectancies in the experiment
1976	Rossiter & Robertson	developmental, social, and experiential factors in the comprehension of TV advertising	- parental education	- (besides age and grade) parental education level is the main social accelerator of cognitive understanding of TV advertising
1974	Robertson & Rossiter	effects TV commercials > attitudes & purchase requests	- parental education	- the attribution of persuasive intent also relates to parental education: children identifying the intent of purchase induction have parents of higher educational levels

Table 9. SES identified as a factor of influence

6.3. GAPS IN THE LITERATURE AND MOTIVATION FOR FURTHER STUDY

The gaps in the literature with respect to the potential roles of SES in advertising literacy are summarized in this chapter. In general, there is very little consideration of SES-related data. When SES does appear, it tends to be from an instrumental point of view, as in describing the demographics of the respondent sample in survey, experimental or, least of all, qualitative studies. Rather than being the basis of analysis, whether any SES-influence can be detected or not, SES is integrated and discussed only in relation to the representativeness and generalization potential of the study results.

This is remarkable since the bulk of the research is based upon developmental theories in which the accumulation of consumer experiences is central. Except for one instance found so far, i.e. the research of Gorn and Goldberg (1977), no study has acknowledged the fact that one's SES affects his or her consumption needs and desires and how or to what extent this in turn influences the knowledge of and attitudes held towards advertising. Some steps have been taken considering the link between SES and media literacy, media use and exposure and parental mediation styles. Contrary to research in the field of media literacy where SES is identified as a major factor influencing the possession of and access to media technologies as well as the proper skills and parental guidance children and youngsters can rely on, thus construing and widening the digital gaps (for a discussion, see Lissens & Bauwens, 2015), this does not yet proceed in a systematic way. Furthermore, the problematizing context of these studies often relates to health issues, i.e. fast/sugar rich food and the problem of child and teen obesity

Overall, it can be said that research on advertising literacy tries to handle and adapt to the altering technological and juridical environments. A more permanent factor that has always affected consumption experiences, though, i.e. the SES of the respondents, is barely elaborated upon. The limited availability of SES-data, the diversity of SES-operationalization whenever SES is integrated

and the suggestive nature of effects and conclusions clearly call for a structured and contextualized incorporation and analysis of SES in future research activities. Only then will it become discernible what the effects of SES are on advertising literacy, as these were already singled out with regards to media use and exposure, geographical information or the presence of advertising in public surroundings (see for example Bansal, John & Ling, 2005; Barbeau, Wollin, Naumova & Balbach, 2005; Settle, Cameron & Thornton, 2014 who focus on the content of advertising targeting SES communities), economic socialization and consumption attitudes and behaviour. Doing so would not only help to design effective advertising literacy interventions and policies. As important, it would equally counter the straightforward and stigmatizing misconception that low SES automatically causes low literacy and life opportunity levels and speaks for individual capacities and skills, whereas objective external factors might be important mediators.

6.4. INVESTIGATING DISADVANTAGED PRE-ADOLESCENTS: EXPLORING THEIR EXPERIENCES AND OPINIONS

Highlights of the study

This qualitative, explorative study focused on the thoughts, feelings and opinions of pre-adolescents, all recruited from disadvantaged schools populations. Although throughout the interviews it became clear that these children have to deal with less privileged life conditions, the study was not able to map out the actual degree of vulnerability of these children. That being said, the exploratory study enables the identification of potential issues affecting disadvantaged minors' advertising literacy, which are under-explored in research among general child and teen populations. Hence, the results might also be transferred to less vulnerable children.

- ❖ “The disadvantaged pre-adolescents were found to be enthusiastic, savvy and elaborate when discussing (new) advertising formats”
- ❖ “Although the pre-adolescents showed their potential to critically think about, evaluate and process different advertising strategies, it was noticeable how most of them had never done such an exercise before”
- ❖ “The pre-adolescents primarily identified very explicit, delineated and overt configurations of advertising”
- ❖ “The pre-adolescents ascribed a strong informational function to advertising, which in the literature is considered as an indication of lower levels of advertising literacy. This, however, might have more to do with their everyday consumption practices in which advertising seems to serve notions of instrumentality”
- ❖ “Although the pre-adolescents consider advertising to be effective most when it is easily noticeable and characterized by repetitiveness, they are able to reason about the intentions and workings of more immersive advertising strategies and formats that are difficult to detect as such”
- ❖ “The pre-adolescents, who often had different cultural backgrounds, indicated that they also consume television shows on foreign channels. This affects the amount and nature of advertising they are exposed to and the extent to which they benefit from national/regional regulatory frameworks on advertising”
- ❖ “The different cultural backgrounds of most of the pre-adolescents made clear that, in teaching or talking about advertising, consideration should go to issues of language and cultural norms and values that might affect the perception, understanding and appreciation of advertising”

Research aim

Even though some studies have focused on low(er) SES particularly and/or found SES to be a factor of influence, there is no systematic observation and contextualization of what exactly the role of SES might be. Due to the combination of the limited amount of research on the role of SES, the diversity in SES operationalization and advertising literacy in general, and the barely elaborated upon SES-effects when they are observed, it is far too soon to present relations between SES in any direction.

In a first attempt to meet the shortcomings identified above, a qualitative, explorative study was carried out among pre-adolescents with disadvantaged backgrounds, to investigate their proper experiences with and perceptions and evaluations of advertising instances. Whereas this approach does not allow to make claims in comparison with better off child and teen populations, it enables the identification of potential issues, facilitating as well as impeding ones, affecting disadvantaged children and teens' advertising literacy and, from a more methodological point of view, the way researchers (have to) deal with it.

Method

Sample Information on the disadvantaged backgrounds of the respondents was based upon their schools' SES, which in the Flemish educational system is taken as indicators for the attribution of extra staff and financial means to offer equal opportunities to disadvantaged school populations. This information on the schools' SES is communicated on the public website of the Flemish Department of Education and is conceptualized by the notion of four 'student characteristics'. These are 1) the home language not being Dutch, 2) the educational level of the mother being less than high school, 3) the student being awarded a school grant and 4) the percentage of local grade retention (i.e. children who have to repeat their grade due to low scores). It is clear that this conceptualization refers to disadvantage in a general sense, as it appears that no actual economic information is incorporated. The latter is the case, albeit in an indirect sense. For pupils whose family receives institutional financial support, automatically tick the box of 'local grade retention'.

In the current research 6 elementary schools were sampled based on their high(er) scores on the most recent data (school year 2014-2015) on 'student characteristics'. The 4 metropolitan schools selected are considered highly disadvantaged regarding all four of the student characteristics. Particularly the scores on 'grade retention/indirect incorporation of SES' were 90% and more. The 2 suburban schools are defined averagely disadvantaged, since their population in general is better off than those of the metropolitan schools. In comparison with surrounding suburban schools, though, their populations can be considered more disadvantaged.

In every school both a male and female focus group was held. The pupils were sampled in the last year, which implies they were 11, 12 or 13 years of age (the latter age in case of grade retention). As a group composed of 5 either male or female pupils each time, except from two occasions in which 3 girls and 6 boys participated respectively, a total of 59 pupils composed the final sample.

Based upon statements made and examples given by the respondents during the data collection, i.e. the most dominant language(s) spoken at home (not being Dutch) as well as explicit references to foreign home countries, numbers of ethnic backgrounds can be provided on an individual level. 4 out of the 39 pupils or 10,3% of the pupils attending the metropolitan schools were Dutch-speaking natives. Conversely, 89,7% was non-native. Relating the 20 pupils from the suburban schools, 14 out of them were Dutch-speaking natives (70%), or 30% was not. Taking the overall sample, the number of Dutch natives lies at 30,5% ($n = 18$) and that of non-natives at 69,5% ($n = 41$).

Method Small focus groups were held in order to create a co-constructive environment in which the participants could help each other to form arguments and opinions. This is an aspect to be taken cautiously when dealing with different ethnic backgrounds, particularly between the respondents on the one hand and the researcher on the other and when language issues can create participation barriers. Every focus group was held at a quiet location at the respondents' school, audio-recorded and transcribed verbatim.

The proceedings of the focus groups were based on a semi-structured topic list. This implies that the researcher has pre-determined topics or questions to be dealt with, yet the extent to or order in which they appear might differ according to the respondents' interests, examples and knowledge. In this case both dispositional as well as situational literacy was explored (Ham et al., 2015) as were the different dimensions of advertising literacy, i.e. the cognitive, attitudinal and moral dimension.

In order to direct the responses as little as possible the focus group started with questions on dispositional advertising literacy or what the pre-adolescents generally think and know about advertising, based on their accumulated advertising experiences. These questions guided the discussion:

- ❖ What does advertising literacy refer to, according to you? (general)
- ❖ What do you think advertising is for, what purposes does it serve? (cognitive)
- ❖ Where do you encounter advertising instances? (cognitive)
- ❖ How can you identify something as advertising? (cognitive)
- ❖ What do you do when you encounter advertising? (general)
- ❖ What do you like about or when do you like advertising? (attitudinal)
- ❖ What do you dislike about or when do you dislike advertising? (attitudinal)
- ❖ What kind of advertising would you like to encounter more? (attitudinal)
- ❖ What kind of advertising would you like to encounter less? (attitudinal)
- ❖ What is good or bad about advertising? (attitudinal & moral)

The second part of the discussions probed the pre-adolescents situational literacy. To do so, three advertising strategies (i.e. premiums, celebrity endorsement and brand/product placement) and two advertising formats (i.e. in-game advertising and advergames) were presented by means of a power point presentation incorporating print screens of the mentioned strategies and formats. The questions asked are:

- ❖ What are the advertisers doing so people will like (to buy) the product/brand? What technique are they using? (cognitive)
- ❖ For what consumers does this technique work best, you think? Who likes this technique/kind of advertising? (cognitive & attitudinal)
- ❖ Do you think this is a fair technique/strategy? Why (not)? (moral)

Results

As this was not a comparative study between high and low(er) SES tween populations, yet an explorative one targeting disadvantaged pre-adolescents solely, no statements can be made in the sense of 'more' or 'less' advertising literacy. The findings are to be interpreted in their own right and could in later instances be taken as reference points why to set up and when carrying out similar research on high(er) SES and better off populations. Listed below are some of the main findings.

1. *Disadvantaged pre-adolescents views on advertising's whereabouts*

These results shed light on the pre-adolescents' cognitive dimension of dispositional advertising literacy. Put differently, the findings give information on how pre-adolescents generally and without any intervention think about where and how advertising can be detected or recognized.

Places where advertising was noted easily were mainly composed of advertising instances with clear boundaries between advertorial and editorial content, either by the delineated space it was confined to and/or the particular format in which it was communicated. Advertising for them is found in public surroundings, appearing on busses, subways, shop windows and at the side of the streets. It also gets to the people in the form of folders and magazines, and to a lesser extent via the newspapers.

As concerns 'new' media advertising' receptiveness, two major findings were made. One, TV advertising was mentioned frequent-

ly and no suggestions were made in the direction of taking advantage of non-linear watching behaviours as a means to easily skip advertising. This possibly relates to disadvantaged backgrounds and the possession, knowledge and skills of media technologies. At first sight, advertising online is ascribed to the website YouTube nearly exclusively. Although they had developed several techniques to not pay attention to the advertising on YouTube or to skip it, which can be considered part of advertising literacy, their spontaneous interpretation of advertising remained on a clear-cut level.

When probed for advertising on Facebook, a social network website known by all the respondents and used by some of them, similar findings hold true. Visual cues lead to the identification of advertising: it is located at the side of the website or appears on your general news feed where it is recognizable by the presence of prices, slogans, offers, etc. Mentioning 'cookies' triggered the recital of 'cookie-warnings', yet without any notion of what it entailed. Personalized advertising in the best cases was explained by explicitly providing Facebook with personal interests such as hobbies, which allows the website to target you with 'on-topic' advertising. Advertising by means of data-tracking was only hinted at by respondents who called themselves 'YouTubers' (they produced short movies and one of them was already requested to allow advertising at the beginning of his videos) or who demonstrated more advanced internet and computer skills.

2. *Disadvantaged pre-adolescents' attitudes towards advertising*

Concerning the attitudinal dimension of dispositional advertising literacy, negative attitudes towards advertising are based on issues such as timing and repetition. Advertising is the most disturbing when it appears at unwelcome times, e.g. at a cliff-hanger moment in a movie or popping up during a game, undoubtedly so when this implies that the game is halted abruptly and then resumes spontaneously, leading the character to crash into a wall and nullifying the player's accomplishments. It is annoying when it is about commonplace items such as water, toothbrushes, toothpaste and cola because *'everybody knows those things exist'* and advertising it is *'a waste of time'*. The same accounts for cleaning and kitchen products, since they are just not interesting and funny or when the same commercials appear and reappear *'all the time'*.

The pre-adolescents are also highly sceptical towards advertising claims. Numerous examples were given why advertising should not be believed. Arguments range from exaggerated product features over falsely promising representations till incorrect price listings, out of date offers and misleading marketing techniques. These examples often referred to disappointing consumption experiences and are also linked to the clear informative function the respondents ascribe to advertising.

Nevertheless, advertising in general is not dismissed. If it were up to them, the interviewees would definitely like more advertising about things they like, being candies, clothes and cell phones. This again confirms the strong informational function. Even if about other items, the fact that full advertising texts can vividly be recited and slogans or jingles can be sung altogether, show that attention is being paid and advertising is not always skipped.

3. *Disadvantaged pre-adolescents and their quick understanding and rich evaluation of advertising strategies*

The three presented strategies, i.e. the use of premiums, celebrity endorsement and product/brand placement as well as the two advertising formats discussed next engender results on the pre-adolescents situational advertising literacy, thereby touching upon its cognitive, attitudinal and -whenever possible- moral dimension. When shown every strategy, respondents showed rather instant recognition and started an elaborate discussion.

Premiums were clearly linked to young children, or older ones in case of them being particularly fan of the toy offered. 'For free' does not exist because *'it's in the price'*, but on the question whether this is a fair technique, the reactions were diverse. There was a group that said *'yes of course, because you pay for it'*. Most of the others, though, argued that it was not fair for the parents because the collecting challenge makes them go back repeatedly and because the children just want the toy but not the food. The unfairness, in fact, was related mostly to this latter, nutritional argument and less to the former, economic one.

Celebrity endorsement was considered for *'people our age or a bit older'* and definitely effective, e.g. making you want or buy the brand, for fans of the celebrity *'because they want to be like them'* or *'they want to have the same'*. This was explicated by most of the participants, yet the few occasions in which nobody in the group recognized any of the three celebrities also proved the point. Not recognizing who the celebrities were, the attention shifted to the *'kinderbueno'*/chocolate and how it was presented so *'tasty'* to *'make you want to eat it'*. Less the case than with premiums, this strategy occasionally was also judged unfair because of the pester power it creates between children as *'parents have to spend money because their son wants to have that one per se and not another and if they don't want, he starts to cry, to nag'*. Finally, despite some respondents' belief that these celebrities genuinely advocate the particular brand/product, more critical understanding also arose, e.g. *'It is photoshopped'*, *'He doesn't do that because he likes it, but actually he does it for the money'*, *'But no, they get money. It is their sponsor. It is somebody who gives you money, for example for all your matches and stuff'*.

Because of the familiarity with the F.C. De Kampioenen (FCDK) sitcom, the product/brand placement appearing in it was anticipated by all the groups. Before even starting the video fragment the participants were able to name even more brands than the one that was focused upon, after being stimulated to think about what it meant when talking about advertising and the FCDK sitcom. Although no agreement was reached on this strategy's effectiveness, it inspired mentioning of getting to know and wanting, particularly, potato chip brands by watching shows and movies on several accounts. After having heartened the debate with the question whether it was a coincidence that these particular brands appeared in the show, all the pre-adolescents understood that money was involved. In two instances further critical remarks were made. Shifting the discussion to branded clothing, one boy simply stated that *'they should pay us for showing their brands'*. In another group they came up with the example of YouTubers/vloggers whose logos were barred/blacked out for the precise reason of not wanting to advertise (those brands at least).

Brand placement was the only strategy mentioned spontaneously in response to the question *'where do you notice advertising'*, posed earlier on in the conversation. It considers all of the groups from the suburban area, who apparently had had a guest lecture on brand placement in *'The Smurfs'* movie the year before. It equally appeared impromptu in one group from the metropolitan population where a boy referenced to the French term *'placement produit'*, a term he had picked up from a vlogger/'YouTuber' of whom he was a fan.

4. Disadvantaged pre-adolescents and their quick understanding and rich evaluation of advertising formats

Both the advergame and the in-game advertising were presented on the same slide, yet were introduced by the statement that either side defined another advertising format. Verbalizing what they saw, the pre-adolescents arrived at distinguishing *'a brand in a game'* versus *'a game on a brand'*. The effectiveness of the advergames was based on the absence of competing brands, the fact that *'you see the same brand all the time'*, *'it is advertising all the time'*, *'you are focused on the brand'* and it is *'prominent'*, *'only about that'*, although *'these games are boring'*. Relating to in-game advertising, the reasoning was manifold. The trick is effective because *'more people are playing it'*, *'the game is more fun'*, *'the driving activity distracts you so the brand stays in your head without realizing it'* and because the trial and error of the game makes you pass the same environment and thus advertising over and over again, *'you drive a little and the advertising, a little more and again, you watch more. And then, for example, you go to a friend and you say 'go there, you will see the new publicity'. So you want it, it's more in your head.'* Adversely, it is also considered ineffective precisely because of the required repetitive character of the game in order to be exposed to the same brand, *'only when you pass ten times the same advertising in a game'* but *'I don't think you will pass 15 times the same place'*, and because it is harder to notice that advertising is at stake. *'I think some people think 'oh no, it's just for fun, to make it look more real''*.

5. Advertising's cultural dimensions

The particularities of the current respondent group, disadvantaged backgrounds characterized by ethnicity, maternal educational level and socio-economic status, call for cautiousness when their advertising literacy is at stake.

First of all, the high percentages of non-Dutch natives engender vocabulary issues. One, the discussion showed that the notion of 'advertising literacy' should be accompanied by 'advertising smartness', which from the researcher's perspective was related to skills as much as it was to knowledge. For the Dutch 'wijsheid' (literally wisdom) only caused frown eyebrows and was thus explained by the notion 'slimheid' (smartness). Two, as most of the pre-adolescents spoke French at home and amongst their friends, even at school, some specific interpretation of advertising might have arisen. 'Advertising' in Dutch is 'reclame', which at the same time closely connects to the French 'réclame'. As the latter, something being 'en réclame', signals promotions, offers and sales, this might yet again have affected the respondents' interpretation of what is understood as the characteristics of advertising. It turned out they often spontaneously use the term 'pub', which stands for publicité in French (publicity).

A next issue builds on this language aspect. As disadvantage in this case frequently crossed the demographic ethnicity, many of the interviewees reported international media use, particularly watching foreign television channels. Evidently, this has repercussions on the nature and amount of advertising they are exposed to. For example, they estimate that foreign channels broadcast a lot more advertising, which is explained by the fact that *'Belgium is a small country and didn't invent a lot of products'*, whereas *'those countries are bigger and have a lot more products'* on offer.

Lastly, cultural norms and values are at stake. Online 'advertising' for 'girls in your neighbourhood' was disapproved and considered bad by -mainly- boys and girls, regardless of their background. Girls with migrant backgrounds, however, addressed advertising portraying sexiness and nudity, *'that's more in perfume'*, as bad and unwanted for. *'The pub(licity) of perfume or something, always there are not so good pictures and my mother doesn't like them so we cannot continue to watch TV because of the advertising they put', 'For example, Kellogg's. There is a boy, he doesn't want his pants anymore and then he takes the string of a girl', 'The pub of Nivea. So, the deodorant and the woman does like his (smells her arm pit) and then '24/24 it stays' and then she goes on a picnic on her bicycle. And she puts her picnic blanket and then she goes like this (stretches out her back) and the man comes and smells and ...', 'From a woman who is completely.. The women, they attract the boy. So that is bad.'* As a result of this restrictive parental mediation and the consecutive switching to other channels and shutting off the television show they were watching, their attitudes towards these instances of advertising are affected negatively.

Discussion

As an extensive literature study had shown that little, let alone systematic research attention has gone to the SES/level of disadvantage of child and teen respondents and how this affects their advertising literacy, the current research was set up to qualitatively explore disadvantaged pre-adolescents' perceptions, knowledge, interpretations and evaluations of and experiences with advertising. Taking into the consideration the purposive sampling the results do not allow comparative statements with children and teenagers from higher SES. As such, the findings should be evaluated on their own account and could serve to not only inspire future research at a theoretical but also at a methodological and pragmatic level.

Generally speaking, the disadvantaged pre-adolescents' discussion of advertising was characterized by elaborate, exemplified reasoning. Particularly their responses on situational advertising literacy questions showed their potential to critically think about, evaluate and process different advertising strategies and formats, their target audiences, correctness and effectiveness, something which most of them seemed to have never done before. This clearly shows that disadvantage may not be taken as a synonym for the lesser presence of literacy. Working with disadvantaged respondents, as the last paragraph of this section will illustrate more thoroughly, might just challenge the methodological choices researchers have to make. In that sense, it seems less advisable to have disadvantaged respondents' advertising literacy studied by quantitative tools and techniques. That being said, this can account for better off pre-adolescents alike.

Regarding the cognitive dimensions of dispositional advertising literacy (discussed in the section 1 of the results) and their situational literacy on different advertising formats (discussed in section 4 of the results), the pre-adolescents seem to appoint advertising and its effectiveness first and foremost to its explicit, delineated and overt configurations and its repetitiveness. That is,

they consider advertising to be working when people notice it. This initially sounds contradictory to the theoretical reasoning that considers the identification of advertising, i.e. the cognitive dimension, a prerequisite for and contributor to advertising literacy. Advertising does not (necessarily) work precisely because people notice it. At the same time, however, this finding strengthens the argumentation that continued research on advertising literacy focusing on more interactive and immersive strategies and formats is necessary, thereby raising (disadvantaged) children and teenagers' awareness of the workings and effectiveness of more subliminal forms of advertising. Advertising (possibly) works more or better when people don't notice it.

Whether this is explicable by their disadvantaged backgrounds remains to be studied. The participants' identification of clear-cut forms of advertising, as in television commercials, advertising in magazines, window shops and on public transportation might be related to information as exposure to advertising not only relates to the media one owns and uses, yet equally to the environment one passes through to go to school, do the shopping, attend leisure activities, and so forth. Furthermore, there might also be a link with the dominant informative function that was ascribed to advertising (albeit not discussed in the results section). It is to be explored whether disadvantaged backgrounds imply that young teenagers are more engaged in the shopping activities of their parents, mainly mothers, because of language support, for example, and whether they are thus more involved in the explicit processing of advertising instances. Are they paying more attention to special deals and offers and do they consult very visual and clear-cut instances of advertising because they have to work within the limits of their SES? This potentially affects the interpretation and functionality of advertising, the attention paid to particular advertising instances, the perceived effectiveness of the advertising strategy and, in the end, advertising literacy alike. Lastly, the lesser mentioning of immersive, interactive advertising instances (dispositional advertising literacy) could relate to parental media monitoring in general. Again, SES can play a role here.

Some substantial points of attention were identified, particularly when disadvantage crossed with ethnic backgrounds, as was the case with the majority of the respondents. These points relate to notions of language, everyday exposure to advertising affected by geographical information as much as media use and monitoring and to cultural norms and values that influence the exposure to and perception of certain styles of commercial messages. Also the fact that many of these youngsters consume television shows on foreign channels affects the amount and nature of advertising they are exposed to. As juridical frameworks differ, taking measures on a national level does not guarantee that precautions are offered on all accounts as the content offered on these does not abide by the same laws and regulations.

Although the explorative nature of this research does not offer conclusive results on how disadvantaged/low(er) SES backgrounds might affect children and teenagers' advertising literacy, focusing on their proper experiences, interpretations and evaluations can be considered a first step in closing the identified gap in the research literature.

7

PARENTS' VIEW
ON MINORS'
ADVERTISING
LITERACY

K. DAEMS & P. DE PELSMACKER

Parents are perhaps the most important agent of socialization for minors. The role of parents in children's media use in general and advertising literacy more specific are valued for two important reasons. First, parents can offer protection and co-regulate what advertising formats children are exposed to. The latter is no frivolous luxury taking into account how difficult new media is to regulate by governments (see section 10). Second, parents can also empower children by educating them and increasing children's advertising literacy. Therefore, it is important to have a view on **"how parents perceive new advertising formats?"**, the third question in the risk analysis. On the topic, a survey was directed previously to capture the perceptions of parents (see Daems & De Pelsmacker, 2015b). Another study investigates the parental advertising literacy and mediation for contemporary advertising formats (De Pauw et al., 2016b).

7.1. PARENTS' PERCEPTIONS TOWARDS NEW ADVERTISING

Daems, Kristien & De Pelsmacker, Patrick

Research aim

Map the opinion of parents on the usage of new advertising formats to target children and teenagers. More specifically, the study explored which opinions parents hold with regard to the ethical appropriateness of novel, integrated advertising formats if minors are considered as a target group for advertising. Following research question were central in the study.

According to parents, from which age onwards

a) do minors understand the commercial intention behind new advertising formats,

b) is the usage of these novel advertising formats morally and ethically acceptable

c) and should minors be made aware of the commercial character of these marketing communication techniques?

In the extended report attention is also devoted to the perceptions of parents towards an advertising cue, regulation and education. For the purpose of this research report, however, we solely discuss the perceptions towards the appropriateness and usage of new advertising formats.

Method

A marketing agency that works closely with parents and minors helped with reaching out to parents. All parents in their database with children were emailed. The survey was active between 22 April and 4 May, 2015. In total, 179 parents completed the survey. In addition, the same survey was distributed by a professional market research agency. This survey was active between 2 and 13 July, 2015. 257 parents completed this survey. Hence, in total 436 parents were reached of which 296 mothers and 140 fathers. The age of the parents ranged between 29 and 71 years old ($SD = 6.68$). All educational levels of parents were presented in the sample. When asked about the highest level of education completed, 33.0% answered secondary school education, 26.1% have a professional bachelor's degree, 9.2% an academic bachelor's degree and 22.9% an academic master's degree. 8.7% of parents did not have a secondary education degree.

At the beginning of the survey the parents were asked about their overall perception on the topic of advertising aimed at children and teenagers. Subsequently, descriptions of nine different novel advertising formats (e.g. product placement, advergames, online behavioural advertising, merchandising, applications, in-game advertising, video advertising, search engine marketing and location based services) were presented by means of vignettes in randomized sequence. Vignettes are descriptions of concrete situations presented to the respondents to reflect upon or give their opinion about (Mortelmans, 2007). Only the vignette descriptions were presented, without mentioning the names of the specific advertising formats.

The respondents were asked to indicate on a slider ranging from 6 years old to 18 years old, from which age onwards they perceived minors capable of understanding the persuasive nature of the advertising techniques described in the vignettes, from which

age onwards the type of advertising is perceived as ethically and morally acceptable, as well as from which age onwards minors need to be notified about the commercial nature of the advertising format. If respondents held the opinion that minors are not capable of understanding the advertising format, that the usage of an advertising format was not ethically and morally acceptable towards minors or if their opinion was that minors do not have to be warned about the commercial intent of the advertising types presented in the vignettes, they could indicate this answer option and they did not have to indicate an age on the slider.

Results

1. Overall perception

Most parents hold the opinion that children (younger than 12 years) may not be targeted (56,6 %) by advertising. 28,4% answered neutral to this question. Only a minority (14,9%) of children's parents holds the opinion that children may be used as a target group for advertising. If teenagers (13-18 years) are considered as target group for advertising, parents perceptions are mixed. 32,6% of the parents disagrees with the statement that children may be used as a target group, 32,5% agrees and 34,9% was neutral. Figure 27 gives an overview of these results.

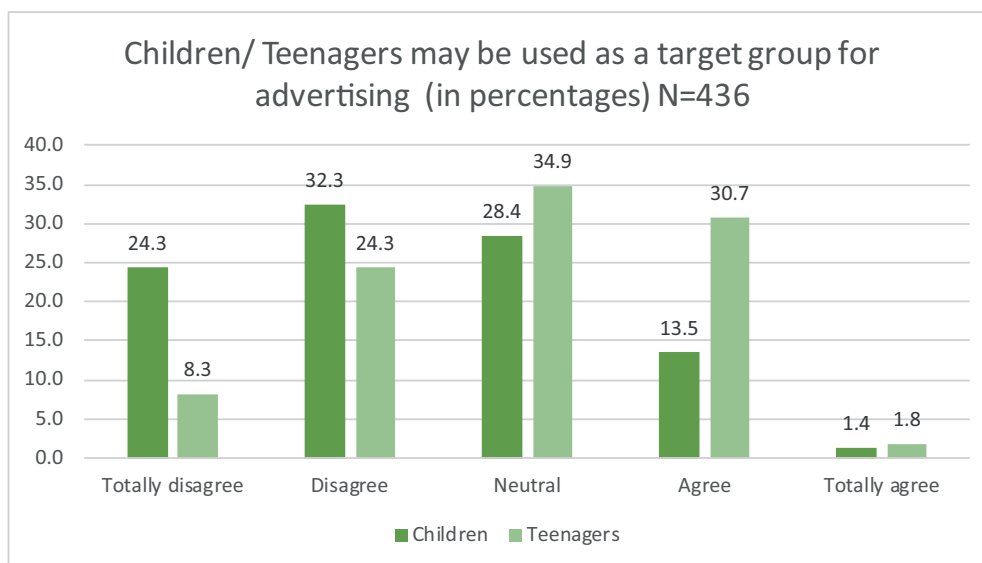


Figure 27. Children and teenagers as a target group for advertising

Parents agree that both children (73,9%) and teenagers (70,9%) are more often used as a target group for advertising than before. The results show that there is no difference regarding the age group (children or teenagers) that is addressed. The results are given in figure 7.

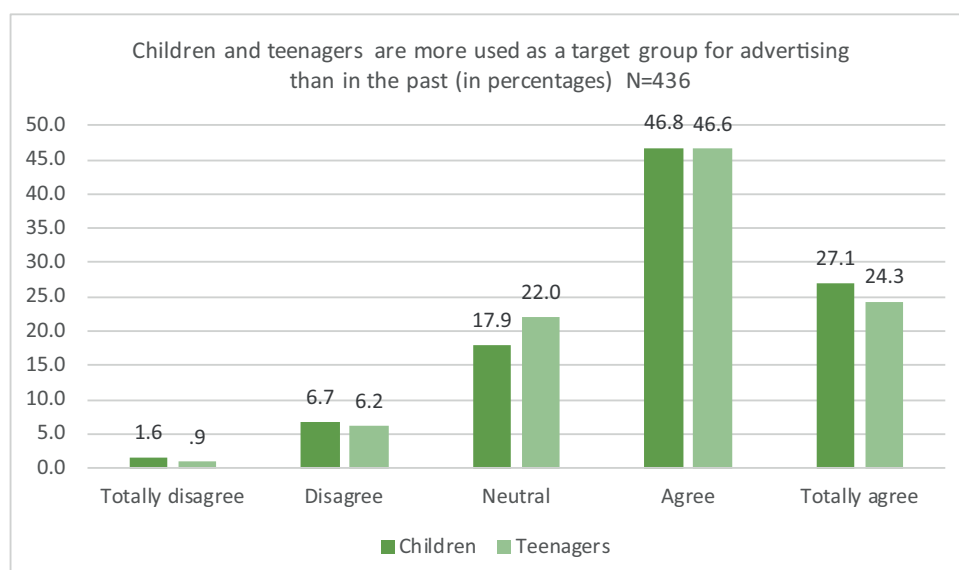


Figure 28. Children and teenagers are more used as a target group for advertising than in the past

2. Understanding advertising formats

The understanding of advertising formats refers to both the identification of the advertising formats as well as the understanding of the commercial intention behind the advertising formats. Parents perceive that the average age whereupon minors can understand advertising formats is situated around 12 years on average. However, parents hold the opinion that minors can understand location based services, online behavioural advertising and video advertising only from an older age onwards (13 years on average). Video advertising appears to be the advertising formats which is the most difficult one to be understood by minors since the number of parents and advertisers who did not indicate an age on the slider is the highest for this advertising format. It has to be noted however, that video advertising refers in this study to video content for which an advertiser has paid without mentioning it instead of pre-rolls which appear before a video.

3. Ethical acceptability of advertising formats

The second component of the research question addressed whether the use of the advertising formats towards minors is considered ethically and morally acceptable by parents. The average age whereupon parents consider advertising formats as ethically and morally acceptable towards minors is situated around the age of 12-13 years on average. Compared to the other advertising formats, online behavioural advertising, location based services and applications are perceived as ethically and morally acceptable to use towards minors from an older age onwards. The average age indicated for these formats is situated around 14 years. Location based services, online behavioural advertising and video advertising are advertising formats which are considered least ethical and least moral to use towards minors since the number of parents who did not indicate an age is the highest for these formats.

4. Informing minors about the commercial intent of advertising formats

The average age indicated by parents to inform minors about the commercial intentions behind advertising formats is situated around 10 years. Video advertising, in-game advertising, product placement and advergames are considered as being advertising formats for which it is least necessary to inform minors about the commercial intentions behind them. This is a surprising results since these are integrated and interactive advertising formats. Therefore these formats can be considered as being difficult to be identified by minors (Blades et al., 2014; Calvert, 2008; Moore, 2004).

Discussion

This study investigated parents' ethical perceptions concerning the usage of advertising formats aimed at minors. The average age whereupon minors are considered capable of understanding different advertising formats according to parents is situated around 12. The advertising formats presented in the vignettes are perceived as being ethically and morally acceptable to use towards minors from 12-13 years of age on average. The appropriate age to inform minors about the commercial intentions behind advertising messages according to parents is 10 years on average. Video advertising, in-game advertising, product placement and advergames are considered as being advertising formats for which it is least necessary to inform minors about the commercial intentions behind them.

7.1.1. PARENTAL ADVERTISING LITERACY AND MEDIATION

De Pauw Pieter, Hudders Liselot & Cauberghe Veroline

Research aim

This study describes the current level of advertising literacy and the advertising mediation styles among parents of young children, in the context of contemporary advertising formats frequently aimed at these children (TV commercials, product placement, online banners, retargeted pre-roll video ads and advergames).

Method

As part of a large-scale, class-based experiment among children between the ages of 7 and 12 years (investigating children's ad-

vertising literacy for various contemporary advertising formats), 510 participating children were asked to take home and hand over a questionnaire to one of their parents. 300 parents ($M_{age} = 40.01$, $SD = 4.85$; 87.9% female) returned their completed questionnaires, in which was probed for their level of advertising literacy and attitudes toward the contemporary advertising formats, parental advertising mediation styles, and various sociodemographic characteristics.

Five advertising formats are examined, and explained in the questionnaire before asking questions pertaining to them: 1) TV commercials (“These are short advertising movies for which TV programs are interrupted, or that are shown in between different TV programs”); 2) product placement (“...whereby advertising is made *in* TV programs and movies, by showing brands and products on the screen. This is for instance the case when an actor consumes a drink of a certain brand.”); 3) online banners (“These are images (in the shape of ‘blocks’, posters or pop-ups) on websites containing advertising, and on which you can click to go to the website of a certain brand or product.”); 4) retargeted pre-roll video ads (“These are advertising videos on the internet that you have to watch before you can see the video you actually looked up. This is for instance the case on YouTube, where you often have to watch an ad video first.”); and 5) advergames (“These are free games on the internet that are actually advertising, and in which you sometimes have to play with the brands or products themselves”).

Cognitive advertising literacy is measured in terms of (self-reported) *awareness of existence* (“Did you already know that advertising format x existed (before we told you this)?”; 1 = I didn’t know this at all, 5 = I did now this for sure), and in terms of the (self-reported) *ability to recognize* (“How easy do you find it to recognize advertising format x?”; 1 = very difficult, 5 = very easy).

Parents’ *attitudes toward/evaluations of the advertising formats* are measured in terms of *perceived credibility* (“Do you think that advertising format x depicts things like they are in reality?”; 1 = certainly not, 5 = certainly), *liking* (“What do you think of advertising format x?”; sum scale containing semantic differentials a) 1 = not nice, 5 = nice; b) 1 = not interesting, 5 = interesting; and c) 1 = not annoying, 5 = annoying (reverse-coded)) and *perceived appropriateness* (“What do you think of advertising format x?”; sum scale containing semantic differentials a) 1 = unfair, 5 = fair; and b) 1 = wrong, 5 = good); all of these scales and items are loosely based on (Rozendaal, Opre, & Buijzen, 2016).

Other measures are described in the tables showing the results below. The measures for (self-reported) *active* and *restrictive parental advertising mediation* are adapted from Buijzen and Valkenburg (2005) we investigated how different styles of advertising mediation (active vs. restrictive; the items for (self-reported) *stimulating awareness of contemporary advertising formats* vaguely based on Vanwesenbeeck, Walrave and Ponnet (2015); and the items for (self-reported) *mediation of children’s exposure to and participation in online advertising formats* loosely based on Livingstone and Helsper (2008).

1. Sociodemographic characteristics of the parent sample

Most parents in the study sample are married (66%) or live together (23%) (Table 10), have two children (58%) or more (31%) (Table 11), have a higher or university education degree (64%) (Table 12) and a full time job (64%) (Table 13).

What is your family situation?	%
Single	4,4
Cohabiting	22,8
Married	66,3
Divorced	6,5
N	294

Table 10. Parents’ family situation

How much children do you have?	%
1	11,5

2	57,6
3	24,4
4 or more	6,4
N	295

Table 11. Number of children in the household

What is your highest educational degree?	%
None	1,0
Primary education	0,7
Lower secondary education	1,4
Secondary education	29,6
Higher/university education: bachelor	39,1
Higher/university education: master/PhD	25,2
Other	3,1
N	294

Table 12. Parents' highest educational degree

What is your job situation? I work...	%
...full time	64,0
...part-time	29,8
...temporarily not	1,0
...not	5,1
N	292

Table 13. Parents' job situation

2. Cognitive advertising literacy for contemporary advertising formats

2.1. Awareness

A one-way within-subjects ANOVA finds significant differences between advertising formats in terms of parents' (self-reported) awareness of the formats' existence ($F(4) = 143.37, p < .001$). Results show that parents are most aware of the existence of TV commercials ($M = 4.98, SD = 0.02$), followed by product placement ($M = 4.51, SD = 0.05$), online banners ($M = 4.46, SD = 0.05$) and pre-rolls ($M = 4.57, SD = 0.05$). They are least aware of the existence of advergames ($M = 3.57, SD = 0.08$) – in general, however, the awareness scores are quite high (Figure 29). Post-hoc analyses show that the differences in awareness between product placement, online banners and pre-rolls are small or not significant.

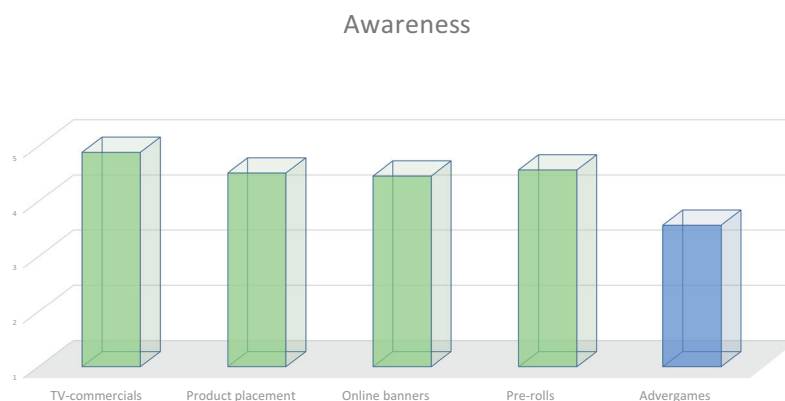


Figure 29. Awareness of the existence of contemporary advertising formats

2.2. Ability to recognize

There are also significant differences between the formats in the extent that parents find it easy to recognize them ($F(4) = 133.58$, $p < .001$). Parents find it most easy to recognize TV commercials ($M = 4.47$, $SD = 0.04$) and pre-rolls ($M = 4.35$, $SD = 0.05$) (with no significant differences between these two formats, $p = 0.15$). They have somewhat more difficulties with recognizing online banners ($M = 4.18$, $SD = 0.06$), followed by product placement ($M = 3.83$, $SD = 0.05$). Most difficult to recognize are advergames ($M = 3.25$, $SD = 0.07$) – though in general, most recognition ability scores are fairly high (min. 3.25 on 5) (Figure 30).

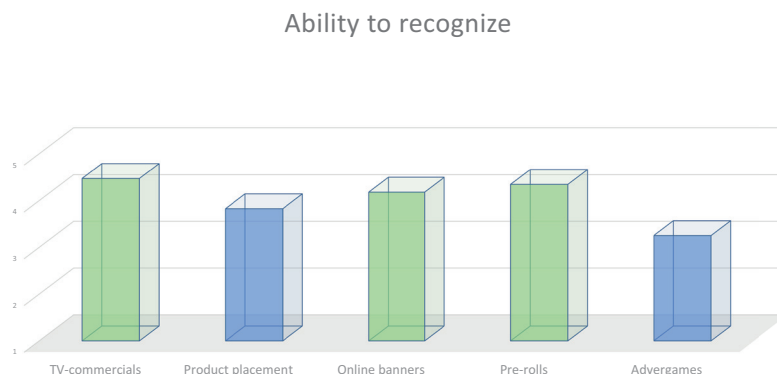


Figure 30. Ability to recognize the contemporary advertising formats

3. Attitudes toward and evaluations of the advertising formats

3.1. Perceived credibility

Parents' perceived credibility does not differ significantly between the advertising formats in general ($F(4) = 2.24$, $p = .06$), though there are significant differences between TV commercials, product placement and online banners ($p < 0.001$). I.e., parents think that product placement is most likely to represent things like they really are ($M = 2.65$, $SD = 0.06$), followed by online banners ($M = 2.20$, $SD = 0.06$). TV commercials have the least credibility among parents ($M = 1.79$, $SD = 0.05$). It has to be noted, though, that all credibility scores are quite low (max. 2.65 on 5) (Figure 31).

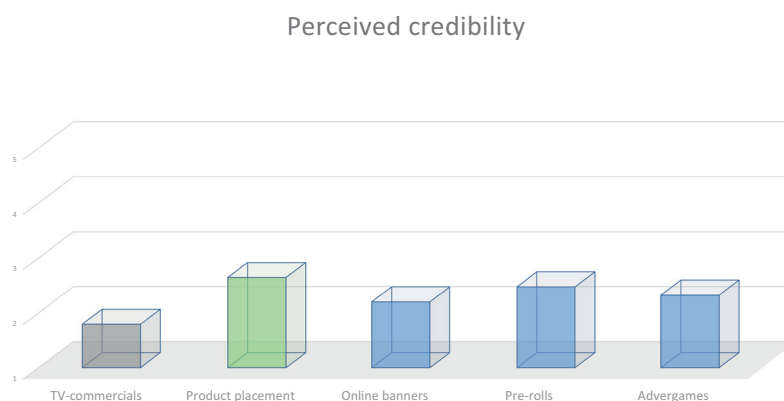


Figure 31. Perceived credibility of the contemporary advertising formats

3.2. Liking

The advertising formats differ significantly in the extent that parents like them (i.e., perceive them as nice, interesting and agreeable) ($F(4) = 129.15$, $p < .001$), though there is no significant difference between TV commercials and advergames ($p = .34$). Parents like product placement the most ($M = 2.77$, $SD = 0.05$), followed by advergames ($M = 2.22$, $SD = 0.06$) and TV commercials ($M = 2.10$, $SD = 0.05$). Online banners ($M = 1.87$, $SD = 0.05$) and pre-rolls ($M = 1.52$, $SD = 0.05$) are most disliked among parents; though it has to be noted again that all likeability scores are pretty low (max. 2.77 on 5) (Figure 32).

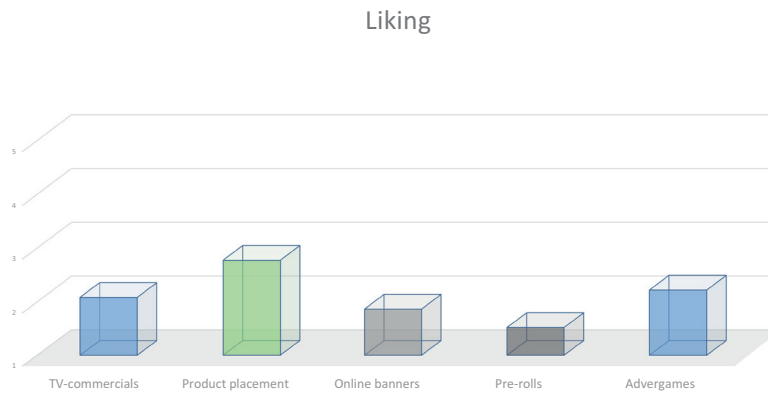


Figure 32. Liking of the contemporary advertising formats

3.3. Perceived appropriateness

There are differences between the advertising formats in terms of how parents judge them as appropriate (i.e. honest and good) ($F(4) = 38.52, p < .001$), though these differences are only significant between product placement and the other formats ($p < .001$), and between TV commercials and pre-rolls ($p < .019$). I.e., parents consider product placement much more appropriate ($M = 2.85, SD = 0.04$) than the other formats, and TV commercials ($M = 2.45, SD = 0.04$) a bit more than pre-rolls ($M = 2.43, SD = 0.05$). Yet again, all the appropriateness scores are quite low (max. 2.85 on 5) (Figure 33).

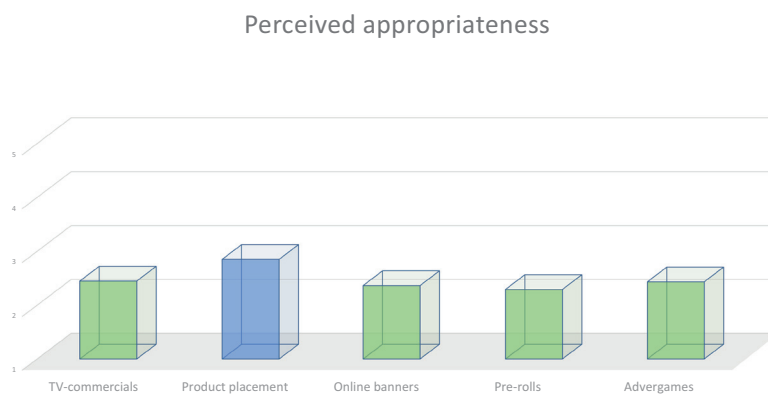


Figure 33. Perceived appropriateness of the contemporary advertising formats

4. Interaction with advertising formats

Most of the parents indicate that they never or rarely play advergaming (91%) or click on banners (82%); the majority also skips pre-rolls when possible (91%) (Table 14).

How often do you...	-	-/+	+	N
...play advergaming?	91,2	7,8	1,0	294
...click on online banners?	82,3	17,0	0,7	294
...skip pre-rolls?	2,7	6,5	90,8	293

Table 14. Percentage of parents that frequently interact with the contemporary advertising formats (1 = never, 5 = very often)

5. Critical thinking disposition toward advertising in general

More than half of the parents find it important to know when they are exposed to advertising (58%); however, about a quarter is indifferent (28%), and a small group states not needing to know (14%) (Table 15).

	-	-/+	+	N
How important to know when exposed to advertising?	14,2	28,0	57,8	296

Table 15. Percentage of parents thinking it's important to know when exposed to advertising (1 = not important at all, 5 = very important)

As can be seen in Table 16, parents vary greatly in the frequency with which they think about whether advertising is appropriate. However, only a minority never or rarely think about whether advertising is fair (39%), misleading (22%) or credible (29%). If these three items are combined to a scale reflecting parents' 'moral radar' (scale $\alpha = .88$), the mean score amounts to 3.01 on 5 (SD = 0.98).

How often do you think about whether advertising...	-	-/+	+	N
...is fair?	38,7	34,7	26,6	297
...is misleading?	22,2	32,0	45,8	297
...represents things like they are in reality?	28,7	35,8	35,5	296

Table 16. Percentage of parents that frequently think about advertising's appropriateness (1 = never, 5 = very often)

As concerns the resistance strategies that may be executed when exposed to advertising, approximately two thirds of the parents indicate that they never or rarely reflect about that advertising (56%), or want to have the advertised product (69%) or get a good feeling about it (65%); a similar percentage just tries to avoid that advertising (65%) (Table 17).

If you see advertising, how often do you...	-	-/+	+	N
...reflect about that advertising?	56,2	35,7	8,1	297
...try to avoid that advertising?	9,8	24,7	65,4	295
...want to have the advertised product?	68,9	27,4	3,7	296
...get a good feeling about the brand or product?	65,3	32,0	2,7	297

Table 17. Percentage of parents frequently performing resistance strategies when exposed to advertising (1 = never, 5 = very often)

6. Parental advertising mediation.

6.1. Active mediation

Only about a quarter of the parents often talk with their child about the fact that advertising may overpraise products (17%), not be truthful (27%), of low quality (29%) and bad for children (29%); though 41% does often talk about the selling intent of advertising with their child (Table 18).

How often do you talk with your child about the fact that...	-	-/+	+	N
...advertising sometimes represents products better than they really are?	34,4	48,5	17,1	291
...advertising does not always tell the truth?	23,4	49,5	27,1	291
...the goal of advertising is to sell products?	17,2	41,6	41,3	291
...not all advertised products are of good quality?	26,1	44,7	29,2	291
...some advertised products aren't good for children?	24,7	46,0	29,3	291

Table 18. Percentage of parents that often engage in active advertising mediation towards their children (1 = never, 5 = very often)

6.2. Restrictive mediation

About two-thirds to three-fourths of the parents do not often restrict their child's exposure to advertising (Table 19). I.e., they never or rarely advise their child to avoid branded media (61%) and use other, less branded media (66%), and even less to shut down the media device when advertising shows up (73%), and least often do they advise them to completely refrain from advertising (76%).

How often do you advise your child to...	-	-/+	+	N
...shut down the media device (e.g. laptop, tablet, smartphone) when advertising is shown?	72,8	15,5	11,8	290
...avoid certain media if it contains too much advertising?	61,2	25,1	13,7	291
...use other media containing less advertising?	66,0	21,6	12,4	291
...completely stop listening to or watching advertising?	75,9	16,5	7,6	291

Table 19. Percentage of parents that often engage in restrictive advertising mediation towards their children (1 = never, 5 = very often)

When creating scales of the active ($\alpha = .90$) and restrictive ($\alpha = .90$) parental mediation styles, it becomes clear that parents engage significantly more in active mediation ($M = 3.01$, $SD = 0.79$) than restrictive mediation ($M = 2.12$, $SD = 0.89$) ($p < 0.001$).

6.3. Stimulating awareness of contemporary advertising formats

Most of the parents do not frequently point their child to the existence of the contemporary advertising formats (Table 20). I.e., they never or rarely talk to them about the presence of product placement (67%), retargeted pre-roll video ads (61%), content marketing (60%), advergames (51%), or online banner ads (50%).

How often do you talk with your child about the fact that...	-	-/+	+	N
...the news messages or blogs they read are sometimes advertising?	59,7	32,1	8,2	290
...sometimes brands and products are hidden in the TV programs, series and films they watch (e.g. product placement)?	67,4	24,7	7,9	291
...the websites they surf to sometimes contain advertising (e.g. banners)?	49,7	30,7	19,6	290
...the online games they play are sometimes advertising (e.g. advergames)?	50,5	27,0	22,5	289
...the advertising they get to see prior to videos on the internet is sometimes based on their personal web browsing behaviour (e.g. YouTube ads)?	61,2	28,0	10,7	289

Table 20. Percentage of parents that often talk to their children about the presence of advertising in the contemporary media formats they engage in (1 = never, 5 = very often)

There are differences between these advertising formats in the extent to which parents communicate about their presence with their child ($F(4) = 25.46$, $p < .001$); though these differences are most pronounced between product placement ($M = 2.12$, $SD = 0.06$), pre-rolls ($M = 2.19$, $SD = 0.06$) and content marketing ($M = 2.29$, $SD = 0.05$) on the one hand (as these are discussed least) and advergames ($M = 2.51$, $SD = 0.07$) and online banner ads ($M = 2.52$, $SD = 0.06$) on the other hand (as these are discussed most) (Figure 34).

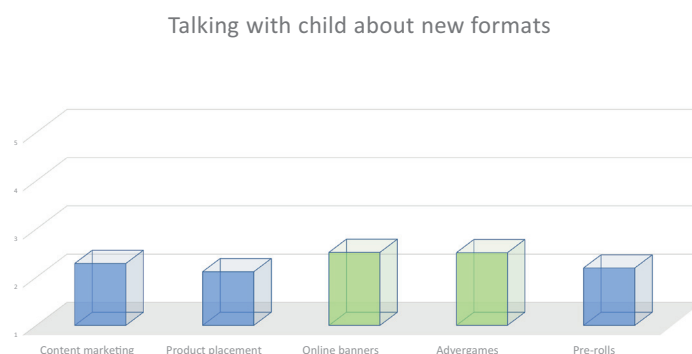


Figure 34. Frequency with which parents talk with their children about the existence of the contemporary advertising formats (1 = never, 5 = very often)

6.4. Mediation of children's exposure to and participation in online advertising formats

Only a small percentage of the parents stay with their child when he or she could be confronted with advertising when surfing the web (10%), or keeps an eye on their screen while doing so (21%). Less than a third talks with their children about online advertising (29%). Most of the parents, however, state that their child is not allowed to fill out commercial forms (83%) or disclose personal information for commercial purposes (86%) (Table 21).

	-	-/+	+	N
I keep an eye on the screen my child is watching to check whether he/she is exposed to advertising.	40,8	38,4	20,9	292
I stay with my child when he/she is online to check whether he/she is exposed to advertising.	55,8	33,9	10,3	292
I talk with my child about advertising on the internet.	31,1	39,9	29,0	293
My child is allowed to fill out online forms of commercial companies (e.g. Kellogg's, Lego).	83,3	11,6	5,1	293
My child is allowed to disclose his/her personal information to commercial companies (e.g. via contests, social network sites, free applications).	86,0	11,6	2,4	293

Table 21. Percentage of parents agreeing with statements on their children's exposure to and participation in online advertising formats (1 = totally disagree, 5 = totally agree)

6.5. Ad blockers

Only 9% of the parents has installed an ad blocker (removing advertising on webpages) on the device their child uses to go online. 19% does not know what an ad blocker is (Table 22).

Did you install an 'ad blocker' on the device your child uses to access the internet?	%
Yes	9,0
No	71,9
I don't know what an 'ad blocker' is	19,1
N	288

Table 22. Percentage of parents having installed an ad blocker on their children's internet device

Of the parents who did not install such an ad blocker, only 16% plans to do so in the future; 55% of them explicitly states not having plans towards installing one. 29% would like to install an ad blocker, but wouldn't know how (Table 23).

If you did not install an 'ad blocker':	%
I also do not plan to install one	54,6
I do plan to install one	16,1
I would like to install one, but I wouldn't know how	29,3
N	205

Table 23. Percentage of parents having plans to install an ad blocker

7. Advertising literacy x parental mediation

There are weak correlations between parents' awareness of the contemporary advertising formats' existence (scale $\alpha = .74$), and active parental mediation ($r = .12$, $p < .05$) and stimulating their child's awareness of these advertising formats (scale $\alpha = .90$) ($r = .17$, $p < .01$).

Parents' ability to recognize the contemporary ad formats (scale $\alpha = .73$) is not associated with any type of parental mediation. The same is true for parents' liking (scale $\alpha = .76$) and perceived appropriateness of these formats (scale $\alpha = .82$). However, parents' 'moral radar' (see section 5, p.2) is weakly to moderately correlated with active parental mediation ($r = .30, p < .001$), restricted parental mediation ($r = .21, p < .001$) and stimulating their child's awareness of the contemporary advertising formats ($r = .23, p < .001$).

Discussion

The (middle and higher class) parents from younger children are quite aware of the existence of the contemporary advertising formats studied here (TV commercials, product placement, online banners, retargeted pre-roll video ads, and advergames), save for advergames. Their self-reported ability to recognize these formats is also fairly high, though lowest for product placement and advergames.

In general, parents' attitudes toward these advertising formats are rather negative: they tend not to believe them, like them, nor judge them as fair. They perceive TV commercials as least credible, yet product placement as most realistic. Similarly, they dislike TV commercials the most, and like product placement (and advergames) the most. They also consider product placement as significantly more appropriate than the other advertising formats.

Likewise, parents also seem to adopt a critical stance toward advertising in general. Most of them think it's important to know when they are exposed to advertising, and at least sometimes they reflect on advertising's appropriateness. When being exposed to advertising, however, the majority barely reflects on it and rather tries to avoid it completely, not giving in on advertising's intended effects (i.e. wanting to have the advertised product, and getting a good feeling about it).

In communicating with their children about advertising, parents seem to adopt a neutral position. Specifically, they more often talk with them about the selling intent of advertising, rather than that they tell them that advertising can be 'bad' (e.g. untruthful, of bad quality), or order them to avoid advertising. Only a small percentage of parents have installed an ad blocker to prevent their children of being exposed to webpage advertising (though a much bigger proportion of the remaining parents would like to install one, but just don't know how to do it). Furthermore, they rarely talk to their children about the existence of the contemporary advertising formats (especially when it comes to product placement, pre-rolls and content marketing). The vast majority of parents, however, are strongly opposed to letting their child give his or her personal information to commercial instances.

Not surprisingly, the extent to which parents mediate their child's relation with advertising is positively associated with their awareness of the contemporary ad formats' existence. Parental advertising mediation also occurs more frequently among parents with a sensitive 'moral radar', i.e. the frequency with which they think about the appropriateness of advertising in general.

8

ADVERTISING PROFESSIONALS' VIEW ON MINORS' ADVERTISING LITERACY

K. DAEMS & P. DE PELSMACKER

Advertising professionals cannot be seen as an agent of socialization like family and schools. However, they get to decide what advertising formats are used to target children and teenagers. **“How do advertising professionals perceive new advertising formats?”** is thus a key question in formalizing the risk analysis. A survey ($N = 90$) and interview ($N = 10$) study was previously conducted to map the perceptions of advertising professionals about the use of new advertising formats aimed at minors (Daems & De Pelsmacker, 2015b). In this section the most important conclusions of that report are summarized.

Research aim

The purpose was to map the perceptions of advertising professionals on the usage of new advertising formats to target children and teenagers. More specifically, the report explored which opinions advertisers hold with regard to the ethical appropriateness of novel, integrated advertising formats when minors are targeted. Furthermore, advertising professionals' usage of these formats – when used to target minors – were investigated.

By means of a quantitative and qualitative study new advertising formats and their ethical appropriateness according to the age of the target group at whom they are targeted were explored. Following research questions were central:

According to advertising professionals, from which age onwards

a) do minors understand the commercial intention behind new advertising formats,

b) is the usage of these novel advertising formats morally and ethically acceptable

c) and should minors be made aware of the commercial character of these marketing communication techniques?

In the extended report attention is also devoted to the perceptions of advertising professionals towards an advertising cue, regulation and education. For the purpose of this research report, however, we solely discuss the perceptions towards the appropriateness and usage of new advertising formats.

Method

2614 members of the UBA (Union of Belgian Advertisers) and 160 employees working in 79 advertising agencies were sent an online questionnaire, that was active for about 2 weeks, namely the last week of April, 2015 and the first week of May, 2015. After one week a reminder was sent. 90 professionals completed the full survey. The overall majority (85 respondents) were advertising professionals and 5 respondents were professionals working for an advertising agency. 54 respondents who completed the survey were females and 36 respondents were males. The average age of the respondents was 41,53 years ($SD = 8,023$). The youngest respondent was 21 years old, the oldest 62.

At the beginning of the survey, questions were asked concerning the respondents' overall opinion on the topic of advertising aimed at children and teenagers (5-point Likert scale). Subsequently, descriptions of nine different novel advertising formats (e.g. product placement, advergames, online behavioural advertising, merchandising, applications, in-game advertising, video advertising, search engine marketing and location based services) were presented by means of vignettes in randomized sequence. Vignettes are descriptions of concrete situations presented to the respondents to reflect upon or give their opinion about (Mortelmans, 2007). Only the vignette descriptions were presented, without mentioning the names of the specific advertising formats. The respondents were asked to indicate on a slider ranging from 6 years old to 18 years old, from which age onwards they perceived minors capable of understanding the persuasive nature of the advertising techniques described in the vignettes, from which age onwards the type of advertising is perceived as ethically and morally acceptable, as well as from which age onwards minors need to be notified about the commercial nature of the advertising format. If respondents held the opinion that minors are not capable of understanding the advertising format, that the usage of an advertising format was not ethically and morally acceptable towards minors or if their opinion was that minors do not have to be warned about the commercial intent of the advertising types presented in the vignettes, they could indicate this answer option and they did not have to indicate an age on the slider. The survey ended with demographic questions: the market in which the company the respondent works in is active, which department the

respondent works in, function, level of education, age and gender.

In addition to the survey, 10 semi-structured in-depth interviews with advertising professionals were held in January and June 2015. The selection of these interviewees was based on email addresses that were registered at the end of the survey and on a list obtained from the Union of Belgian Advertisers (UBA) providing an overview of individuals in companies that target minors. In total eight face-to-face interviews with one interviewee were held (four males and four females), one interview with two interviewees working for the same company (both females) and one group interview with six participants (three males and three females). The interviewees hold the positions of marketing manager, country manager, public affairs director, communications advisor, head of digital child safety and manager of ethical standards.

Results

Study 1 - Survey study

Overall perception

Concerning advertising in general, there are differences in advertising professionals' perceptions according to the specific target group (children or teenagers) that is considered. A majority of the professionals (68,3%) holds the opinion that teenagers (13-18 years old) may be used as a target group for advertising. The opinion about children (younger than 12 years) is more contested. Half of the professionals (50,3%) do not agree with the statement that children may be used as a target group for advertising. The results are visualized in figure 35.

The majority of advertising professionals agrees with the statement that children (69,6%) and teenagers (72,7%) are used more often as a target group for advertising than in the past. The results are provided in Figure 36.

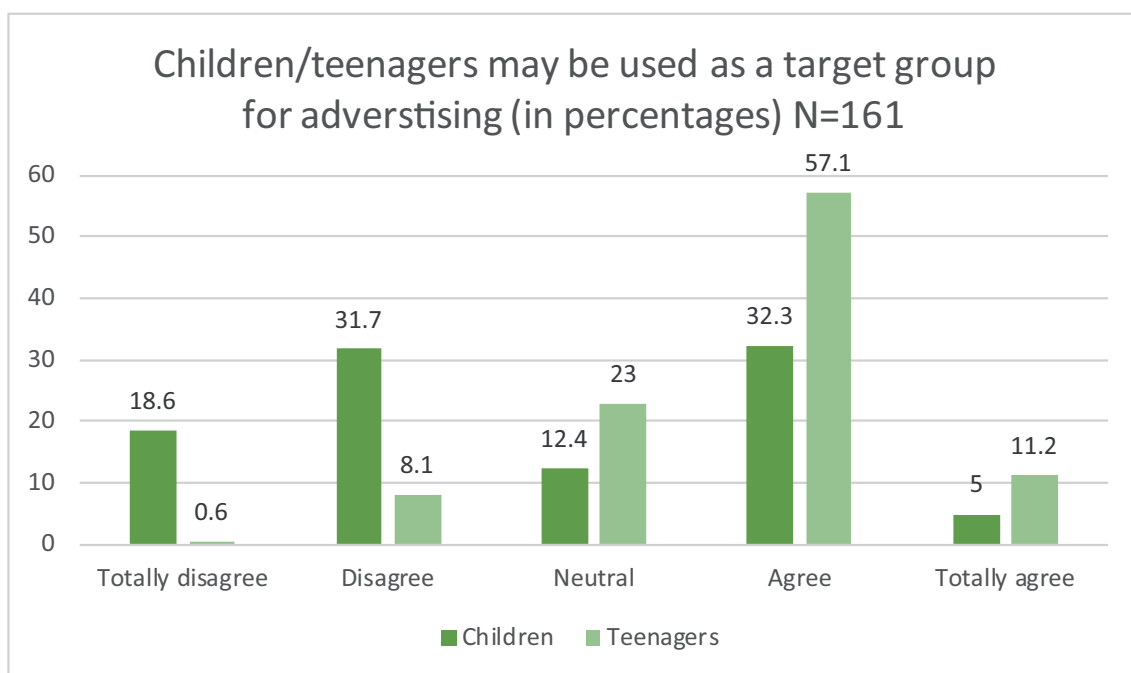


Figure 35. Children and teenagers as a target group for advertising

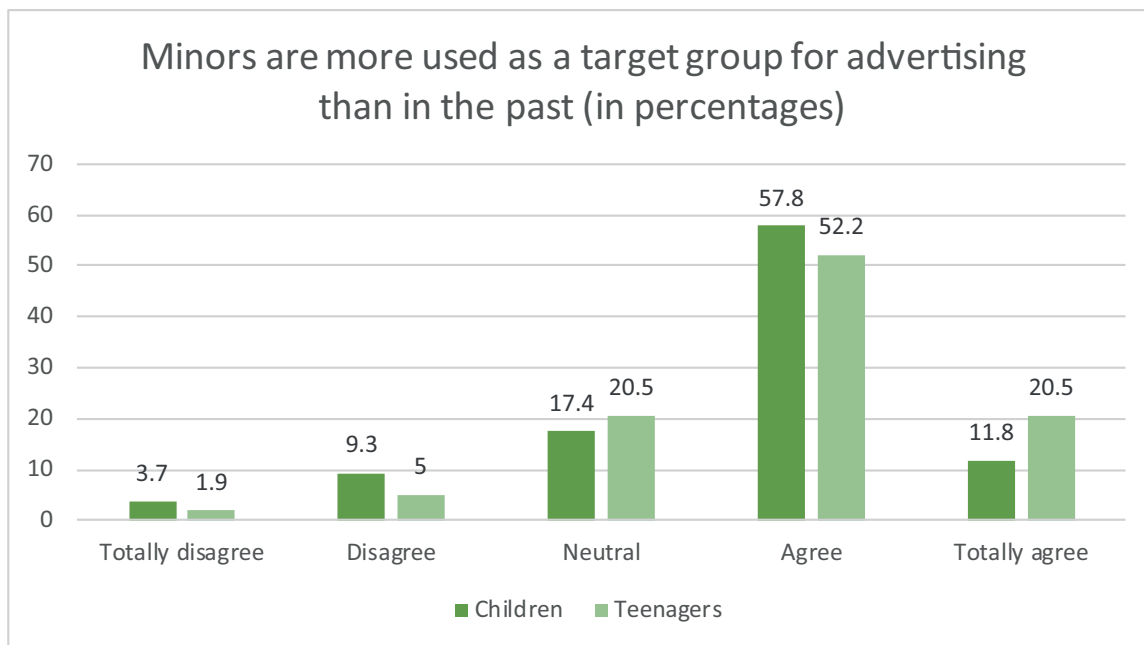


Figure 36. Children and teenagers are more used as a target group for advertising than in the past.

Advertising formats used towards minors

The majority (61,7%) of the advertisers mentioned to only target adults (older than 18 years). 38,8% or 36 professionals indicate that the company they work for advertises towards minors. 16,7% of these advertising professionals indicate that they only target children. 33,3% of them only advertise towards teenagers. Half of the advertisers who target towards minors focus on both children and teenagers

Advertisers who target minors were asked to indicate which advertising formats they use towards which specific age group (children or teenagers). The most often used new advertising formats toward children are contests, branded websites, premium offers and advergames. Contests, banners and branded websites are the most often used new advertising formats towards teenagers. Location based services and online behavioural advertising are two advertising formats that are not or the least used by the advertising professionals to target respectively children and teenagers. An overview of advertising formats used towards children and teenagers is given in figure 37. The results are given in absolute numbers since they are based on only 36 advertising professionals, 24 of which target children, and 30 of which target teenagers.

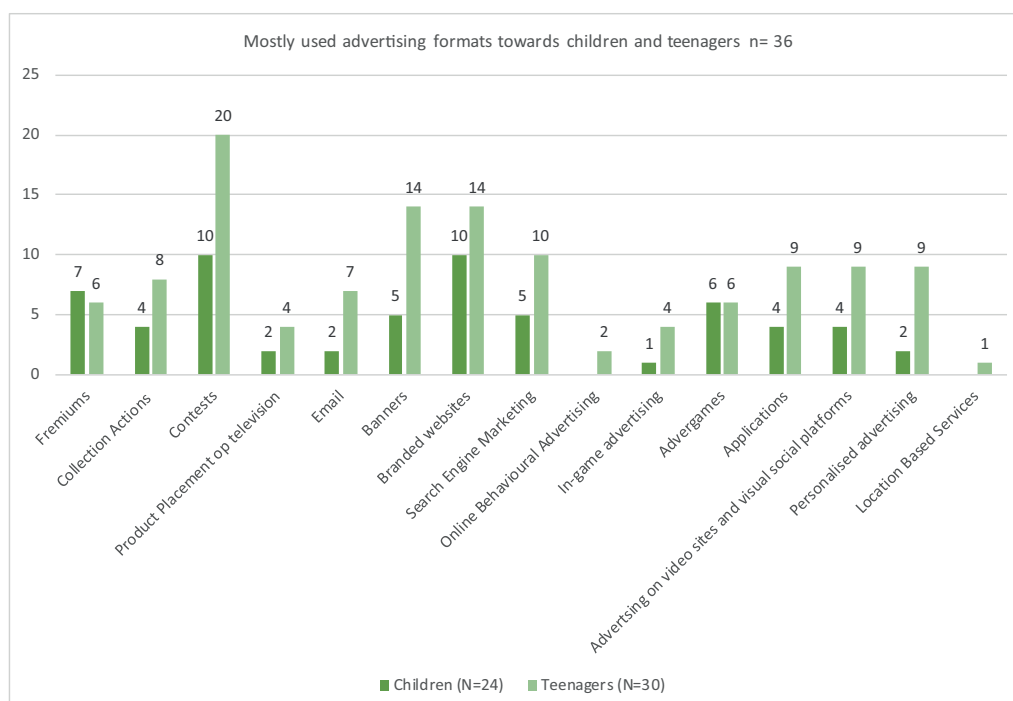


Figure 37. Advertising formats used towards children and teenagers

Understanding advertising formats

The understanding of advertising formats refers to both the identification of the advertising formats as well as the understanding of the commercial intention behind the advertising formats. Advertising professionals believe that minors can understand (novel) advertising formats from 12 years of age onwards. Some formats, especially integrated ones, were found to be more challenging than others, such as video advertising, location based services, product placement and in-game advertising. For these formats the average age that was answered was 13 years of age. Moreover, most advertising professionals answered that minors are not yet capable of understanding the latter formats.

Ethical acceptability of advertising formats

On average, advertising professionals perceive advertising formats as *ethical* from the age of 12-13 years onwards. This is in line with the age whereupon minors are perceived as capable to understand new advertising formats. Some formats are regarded to be less appropriate to use than others. For instance, online behavioural advertising, location based services and applications are only perceived as ethically and morally acceptable to use when minors are slightly older (13-14 years old) compared to the other advertising formats. Location based services and online behavioural advertising are perceived as the least moral and ethical advertising formats to use.

Informing minors about the commercial intent of advertising formats

On an average advertising professionals think minors should be made aware of the commercial character of marketing communication techniques from the age of 9-10 onwards. Hence, the average age indicated is younger compared to the previous results (understanding advertising and ethicality of advertising). In-game advertising, advergames and video advertising are the formats for which the answer option 'not necessary to inform minors about the commercial intention behind this advertising formats' was indicated most often. It has to be noted however, that video advertising refers in this study to video content for which an advertiser has paid without mentioning it instead of pre-rolls which appear before a video.

Study 2 - In-depth interviews

Overall perception

With regard to the statement that minors may be used as a target group for advertising the perceptions of the interviewees. Half of the interviewed professionals hold the opinion that children younger than 12 may by no means be targeted by advertising. Others stated that it depends on the type of product or service that is advertised. Overall, they argue that strict regulations are needed when children are considered as the target group. The overall majority of the professionals does not seem to have a problem with advertising aimed at teenagers. They mentioned that teenagers' abilities to understand advertising formats should not be underestimated. Furthermore, the professionals argued that minors from the age of 12 onwards should express a certain maturity and be capable of identifying and understanding the mechanisms and commercial intentions of advertising.

Understanding advertising formats

Almost all interviewees think that it's plausible to assume that when children are 12 years of age they are able to understand various advertising formats. This corresponds with the overall perception of advertising professionals that advertising aimed at teenagers is not a problem, whereas it is with children.

Ethical acceptability of advertising formats

Interviewees' perceptions concerning the ethicality of advertising formats corresponds to the results of the survey study. They agree that novel, integrated advertising formats are acceptable to use towards minors from the age of 12-13 years onwards. They acknowledge that location based services should only be used from an older age onwards since, in order to use this advertising format, the person targeted has to be mobile and needs to give his or her permission. Therefore advertisers perceive this format as less appealing to use towards children. Moreover, the interviewees find in-game advertising to be a very subtle advertising tech-

nique that is difficult for children to identify and comprehend.

Informing minors about the commercial intent of advertising formats

From the interviews it can be concluded that professionals' opinions about advertising disclosure and informing minors about the commercial intent of advertising are mixed. Some advertising professionals agree with the results of the survey study to inform minors from 10 years onwards, whereas others hold the opinion that children have to be informed from an earlier age onwards (6-7 years). Advertisers who would inform children from the age of 10 years say that it is important to take children's ability to understand the different advertising formats into account before informing them. Otherwise it would not make sense and it would work contradictory. Professionals in favour of informing children from the age of 6 or 7 years on, stress the importance of informing them gradually. For instance by means of pictograms. They add that because children start to have their own mobile devices and accounts from age 8 or 9 years, it is also the industry's responsibility to provide transparency and a safe experience.

Discussion

Advertising professionals acknowledge that children are a vulnerable target group for advertising. Nevertheless, they also think that teenagers (age 12 years and older) should be mature enough to identify and understand advertising formats and techniques that are used to target them. From the age of 12-13 years old onwards advertisers perceive new advertising techniques as ethical to use towards minors. Rather remarkable are the results concerning the disclosure of the persuasive intention behind advertising. According to the respondents, children should be made aware of the persuasion and selling intention from the age of 9-10 years onwards. On the one hand this seems like a justifiable age because then children are proactively informed since integrated formats are perceived as being ethical to use from 12-13 years onwards. On the other hand, the advertising professionals also hold the opinion that on average children are unable to understand new advertising formats before the age of 12. Therefore it is rather remarkable that concerning integrated advertising formats (in-game advertising, advergames and video advertising), advertisers indicated most often that it is not necessary to inform minors about the commercial intent behind it. Those formats are namely examples of novel, integrated advertising which is more difficult to recognize, especially for minors. Some interview respondents did however express a need to gradually inform children about advertising's persuasive intent from a younger age onwards. It thus appears that advertisers' opinions concerning the disclosure of advertising are rather mixed.

Especially if children (younger than age 12) are considered as a target group advertising professionals acknowledge that the use of integrated advertising formats should be strictly regulated. In-game advertising, online behavioural advertising, location based services and video advertising in the form of video content itself (not pre-rolls) are considered as very subtle advertising formats which are difficult to understand by children and least ethical to use towards minors. Online behavioural advertising and location based services are not used by the participating professionals towards children and were the least used advertising formats towards teenagers (13 years – 18 years). With regards to these two advertising formats it seems that advertisers' practice corresponds to their opinion. Namely that they do not or target these formats the least towards minors because these formats are considered as the most unethical and most difficult to understand. Advertisers seem not to have a problem with novel advertising target at teenagers, since they consider teenagers mature enough to identify and understand these advertising formats.

9

EDUCATION AND ADVERTISING LITERACY

B. ADAMS, T. SCHELLENS & M. VALCKE

To adequately identify and assess the risks connected to new advertising formats, it is also necessary to outline how children are currently being educated. The fourth question in the risk analysis goes as follows: **‘How do schools help children and teenagers to cope with new advertising formats?’**. This section summarizes the results of two previous AdLit research reports examining this question.

Research aim

To investigate how advertising literacy is included in Flemish education curricula and what educational packages have been developed to support teachers (Adams, Schellens & Valcke, 2015a; Adams, Schellens & Valcke, 2015b; Adams, Valcke & Schellens, 2016).

Method

Curriculum analysis

To investigate *how* advertising literacy is included in education, curriculum standards (in Dutch: ‘eindtermen’) as formulated by the Flemish government for primary and secondary education (i.e. macro level) were systematically analysed. Specifically, the term ‘advertising’ was scanned for throughout the curricula along with its intention and meaning. The curriculum standards, however, are often broad and vague. In Flanders, umbrella organizations (in Dutch: ‘onderwijskoepels’) - which are representative associations of school boards that differ based on their own ideological background - concretise the curriculum standards by drafting their own curricula (i.e. meso level). The majority of schools follow the curricula that has been set up by their associated umbrella organisation, in other words curriculum development on micro level is rather exceptional. Therefore, in the analysis, attention was also devoted to the curricula of three umbrella organizations, namely GO! education of the Flemish community, the Educational Secretariat of the Association of Flemish Cities and Municipalities (OVSG), and Catholic Education Flanders.

Analysis of educational material

Conform the curriculum standards of the government and the curricula of umbrella organizations, educational publishers develop text- and work-books with practical exercises that allow pupils to reach the predefined goals. To understand how advertising literacy is incorporated into these text- and work-books, we had the opportunity to browse educational material of three publishers. In addition, other national and international organizations, who were often specialized in media literacy, have also developed various educational packages on advertising literacy. The advertising literacy educational packages that were found and studied are the following: ‘Admongo’, ‘Media Smart UK (Be Advise 2)’, ‘Media Smart UK (Digital Advise)’, ‘Mediasmarts Canada’, ‘Reclame Rakkers’, ‘Jongeren op het Bot’, ‘Comprendre la Publicité’, ‘Reclamewijsheid – Reclame in Nieuwe media’, ‘Het vuil reclametruukske’ and ‘Reclame Masters’. Several of these educational packages were evaluated by paying attention towards, among other things, instruction methods and work formats that were used, advertising formats that were brought up, dimensions of advertising literacy that were mentioned, etc.

Results

Advertising literacy in primary education

No curriculum standards are formulated for toddlers concerning advertising literacy (age -6) and advertising in general. In primary school (age 6-12) only two curriculum standards that explicitly mention advertising can be observed. In the Dutch language segment, the following is formulated: “students can, based on their own opinions or information derived from other sources, judge information contained in advertising texts which are directly related to their world”. The latter is operationalized in various ways. The umbrella organization GO!, for example, puts forward the following learning objectives: 1) Children can understand the essence of advertising messages and reconstruct the message themselves, 2) Children are able to compare advertising messages with objective information, 3) Children are able to critically judge advertisement messages, 4) Children can develop their own advertisement slogan to their peers. A concrete exercise related to the general curriculum standard and associated learning objectives of the umbrella organisations is shown in Figure 38. In this exercise, pupils learn to distinguish advertisements from objective information.

Another attainment goal is formulated in the subject area *world orientation* (collective name for lessons about geographical, his-

torical, etc. related topics): “Students realize that their behaviour is/are influenced by advertising and media.” The catholic umbrella organization translates the latter attainment goal into following learning objectives: 1) Children know that there is a difference between welfare and wellbeing, 2) Children are aware that consumption is influenced.

It should be noted that besides the two curriculum standards that explicitly mention advertising other curriculum standards can be operationalized with advertising literacy in mind. For example, online advertising formats can be incorporated in cross-curricular¹¹ ICT curriculum standards (e.g., ‘children use ICT in a safe, responsible and effective way’). It becomes clear that they encourage schools to pay attention to advertising literacy from the first year of primary education onwards. However, a more intensive level of advertising literacy education is expected for children around age eight. When considering the curricula of the umbrella organizations all, it is clear that they aim to tackle advertising literacy from the second grade (8-9 year olds) onwards – with some minor differences in between.

LES 7.4 CREATIE SCHRIJVEN

oefening 1

Schrijf bij de juiste tekst: infobron, tekst om te leren, reclame, instructie.

Materiaal: vier rollen behangpapier, een pak lijmpoeder, een lijmborstel, een scherpe papierschaar, een meetlat of -lint.

- 1 Maak de lijm klaar. Meng water door het poeder en roer.
- 2 Rol het papier open. Meet en snijd af op de juiste lengte.
- 3 Smeer met de borstel de lijm gelijkmatig open op de achterzijde van het papier.
- 4 Kleef de bovenrand van het papier vast op de wand. Controleer of het papier recht hangt.
- 5 Wrijf met je vlakke hand of een droge borstel het papier tegen de wand.
- 6 Laat rustig drogen. De luchtbelletjes zullen vanzelf verdwijnen.

Mag ik me even voorstellen? Ik ben Abraham Van den Broeck en ben een metselaar. Ik werk in de bouw en maak muren met bakstenen en mortel. In die mortel zit cement om de stenen goed aan elkaar te houden. Een metselaar moet over goed materiaal beschikken. Een troffel dient om de mortel op een reeds gemetselde laag stenen te spreiden. Met een kaphamer kan ik stukken van een steen slaan of de baksteen bewerken, zodat hij netjes in het geheel past. Met het voegijzer maken we de mortel tot een mooie voeg tussen de stenen. Een draad, een waterpas, het schietlood en het timmermanspotlood komen goed van pas om de muur kaarsrecht te zetten. Ja, ik lever graag mooi werk.

Van verblijfplaats voor de graaf tot katoenspinnerij, van kleine versterking met houten gebouwen tot indrukwekkend kasteel, van machtsymbool tot toeristische trekpleister ... Het Gravensteen kende een boeiende geschiedenis van bouw, verval en herwaardering. Het Gravensteen in Gent is een middeleeuwse burcht waarbij je nog goed het verdedigingssysteem kunt zien. Het poortgebouw, de walmuur, de verblijfplaats van de vroegere graven en de paardstallen kan men nog bezoeken. Het Gravensteen is dagelijks open van 1 april tot 30 september van 9 tot 18 uur en van 1 oktober tot 31 maart tot 17 uur.





DERDE WEEKEND MEI
OPENDEURDAG
bij de handelaars.
*Hoge kortingen
*Een geschenk voor
elke bezoeker
KOM MAAR ZELF ZIE

26

thema 7 mensen bouwen, besturen en beschermen

Figure 38. Exercise in textbook Dutch (educational publisher: Die Keure)

Advertising literacy in secondary education

In secondary education, it is remarkable that the term advertisements is integrated into *language* curriculum standards (i.e. Dutch) for every field of study in secondary education. Hereby, advertisements are often seen as one possible type of text that can be used to reach a more general curriculum standard as “pupils can read several types of text intended for unknown peers on a judging level”. Two exercises derived from workbooks Dutch are shown below as an example. Figure 39 shows an exercise aimed at

¹¹ Cross-curricular curriculum standards refer to curriculum standards that are not specific to a certain course. Instead, every school and teacher are encouraged, however not obliged, to operationalize cross-curricular curriculum standards into their education.

students' in grade 9 that only focuses on the language use in advertisements. However, in a workbook Dutch developed for grade 11, an exercise is found in which students have to give their opinion about personalized advertisements. To our knowledge, latter exercise is the only one referring to new advertising formats.

11.1 Stijl in reclame

Je hebt aandacht voor stijlfiguren.
Je herkent en benoemt stijlfiguren in reclame, literatuur en poëzie.

In de verschillende teksten die aan bod kwamen, leerde je al over een prolepsis, een ellips, een parallelisme en een repetitie.
Achterhaal aan de hand van de vragen welke stijltechniek de reclames in je bronnenboek gebruiken.

Opdracht 1
Bekijk het fragment over het biermerk *Maes*.

- Welke slogan gebruikt dat merk? Is dat een slogan die je kent?
- Uit hoeveel zinnen bestaat de slogan?
- Uit hoeveel woorden bestaat elke zin?
- Welke stijltechniek wordt hier gebruikt?
- Welke reclames in je bronnenboek maken nog gebruik van deze stijlfiguur?

Figure 39. Exercise in workbook Dutch - Grade 9 (Educational Publisher: De Boeck)

Opdracht 22

Jongeren mogen dan het liefst de televisiereclame links laten liggen, toch verafschuwen ze reclame niet in het algemeen. Lees het artikel en beantwoord de vragen.

Jongeren houden van gepersonaliseerde reclame op sociale media

1 Jongeren houden ervan om herkend te worden door online reclame. Hoe meer persoonlijke gegevens er gebruikt worden, hoe meer de reclame hen aanspreekt en hoe hoger de merkbinding.

10 Sociale netwerksites slaan munt uit de verkoop van persoonsgegevens van hun gebruikers voor reclamedoeleinden. Reclamemakers gebruiken die gretig om potentiële klanten aan te spreken met reclame op maat. Jongeren zien in deze vorm van reclame geen schending van hun privacy. Integendeel, ze worden graag herkend door online reclame, zo stelt Evert Van den Broeck (UA).

25 **Niet te veel, niet te weinig**
Van den Broeck, masterstudent Strategische Communicatie (UA), confronteerde 40 jongeren tussen 13 en 18 jaar

30 oud met gepersonaliseerde reclame op Facebook. Elke jongere kreeg advertenties voorgeschoteld die inspelden op zijn of haar persoonlijke interesses. De student wou zo bekijken hoe jongeren het gebruik van persoonsgegevens in online reclame waarderen en welk effect dit heeft op de effectiviteit van de reclame. Gevraagd naar hun mening over de waargenomen online reclame, gingen de jongeren de persoonlijkste reclame als

45 slecht evalueren.

50 Maar ook de onpersoonlijke advertenties vonden ze maar niets. Te veel personalisatie vinden ze beangstigend, te weinig zorgt dan weer voor saaiere reclame. Het komt er voor reclamemakers op aan om te doseren: wanneer ze juist voldoende persoonlijke informatie aanwenden, voelen jonge consumenten zich sterker aangetrokken tot de reclame.

60 Jongeren trekken dus een grens voor het gebruik van persoonlijke informatie. Of toch niet? In het tweede deel

65 van het onderzoek moesten jongeren de verschillende reclameboodschappen een score geven. Daarbij kreeg de reclame waarin de meeste persoonsgegevens werden verwerkt systematisch de hoogste waardering. Waaraan is dat inconsequente gedrag te wijten? Van den Broeck

75 verklaart: 'Het lijkt erop dat jongeren zich bewust zijn van de privacyrisico's die heersen op het internet en daarom een zeker voorbehoud aantekenen bij gepersonaliseerde reclame. Maar onbewust vinden ze een grote mate van personalisatie net aangenaam.'

80 Jongeren houden er dus wel van om herkend te worden door online reclame. Hoe meer persoonlijke gegevens er gebruikt worden, hoe meer de reclame hen aanspreekt en hoe hoger de merkbinding.

85

90

1

De titel *Jongeren houden van gepersonaliseerde reclame op sociale media* wordt in de tekst genuanceerd. Geef hier de correcte versie weer:

a

b

c

2

Waarom mogen we de resultaten van dit onderzoek slechts als een aanwijzing beschouwen en niet als een algemeen geldende waarheid?

3

Formuleer nu jouw mening over gepersonaliseerde reclame. Houd je ervan of niet? Waarom?

Figure 40. Exercise in workbook Dutch – Grade 11 (Educational Publisher: De Boeck)

Additionally, in the curriculum standards three other references were found for the courses *history* (1st grade), *cultural sciences* (2nd grade) and *modern languages* (3th grade). For example, for the course 'cultural sciences' students need to illustrate that advertisements employ a specific way of communication (persuasion) and should be able to grasp and discuss the ethical and legal aspects of advertisements. In secondary schools, advertising (literacy) is also implicitly integrated in cross-curricular curriculum standards. Two cross-curricular curriculum standards are formulated concerning media literacy – arguably advertising literacy can be interpreted as an important part of media literacy: 'students are alert to media' and 'students thoughtfully participate in the public space made available through media'.

References to advertisements were not only found in (cross-curricular) curriculum standards, but also in the concrete curricula of umbrella organisations. A number of examples are shown below:

- ❖ Curriculum Economy (umbrella organisation: GO!): By means of examples or inquiry, pupils can demonstrate that buying

habits are determined by prices, budget, needs, advertisements, etc.

- ❖ Curriculum office and sales (umbrella organisation: Katholiek Onderwijs Vlaanderen/Catholic Education Flanders): Pupils can explain why a salespersons make use of advertising.

Regarding to the curricula set up by umbrella organisations for both primary and secondary education, it is interesting to note the following two findings. On the one hand, although the term advertising is often treated in a general way by the umbrella organisations, especially traditional advertising formats (such as television commercials and print advertisements) are highlighted in more concrete examples in curricula. On the other hand, more goals in their curricula refer to the cognitive dimension of advertising literacy than to affective or moral advertising literacy (see Figure 40).

Educational material

As mentioned above, next to educational publishers, there are also other organisations who have developed educational packages about advertisements. Based on an analysis of these packages, following conclusions were drawn. First, it is noticeable that the educational materials are either financed by industry or governmental actors. No collaboration between both was found when developing these materials. Often, the packages are targeted to children (age 6-12), hereby neglecting teenagers. Although most educational materials are focused on children, the particular age or age group of the target audience is either defined to broadly or not at all. Second, it is unknown which theoretical foundations underscore the educational materials. Furthermore, no educational packages were tested on their effectiveness, i.e. whether educational materials positively influence indeed the advertising literacy level, including both dispositional advertising literacy and situational advertising literacy (see Figure 1 on page 13 in introductory chapter). Most packages make use of authentic advertising messages, but rarely refer to advertising in other cultures. Most of the time a clear manual is presented to teachers on how to employ the material. Because organisations mostly provide their output in pdf format, it is, however, difficult for teachers to make adjustments and add examples themselves. Once the material is developed no further adaptations are made the following years. Considering the rapid evolvement of new advertising formats the relevance of these educational packages is questionable. In addition, many different advertising formats are discussed but little attention has been paid to new, online advertising techniques.

Discussion

Although no curriculum standards are formulated for toddlers (age -6) by the Flemish government, there are curriculum standards about advertising for both primary and secondary education. Taking into account the concrete curricula of the umbrella organisations it is clear that mostly from the second grade (age 8-9) onwards attention is devoted to advertising. In the more concrete curricula set up by umbrella organisations for both primary and secondary education, it is remarkable that more attention is paid to the cognitive dimension of advertising literacy, compared to the affective and moral aspects. In addition, especially classic advertising formats are brought up, while new advertising formats and its tactics are not explicitly mentioned. The latter is also true considering the educational packages that were developed by several (inter)national organisations. Moreover, these learning materials are, among other things, mainly targeted to children below the age of 12 and not tested on its effectiveness. Consequently, in the AdLit project, we will develop and test learning material in which attention is paid for both new advertising formats and all dimensions of advertising literacy.

10

MAPPING OF
LEGISLATION AND
SELF-REGULATION
FOR NEW
ADVERTISING
FORMATS

V. VERDOODT, E. LIEVENS, I. LAMBRECHT, P. VALCKE AND L.
HELLEMANS

The protection of minors against certain forms of commercial communication has long been considered an objective of general interest. Accordingly, extensive and detailed requirements exist at both the EU and national level. The regulatory framework on commercial communication aimed at children is fragmented into legislation, on the one hand, and alternative regulatory instruments (i.e. self- and co-regulation), on the other hand.

As mentioned above, new advertising formats have specific features that make them particularly appealing to children. They are often digital (e.g. advergames) or hybrid (e.g. ads on smart/connected TV's) and as such, the exact application or interplay of the different regulatory frameworks is complex. The EU legislator has restricted the marketing of certain products (e.g. alcohol) and services, has regulated misleading and deceptive advertising and has imposed specific restrictions on the mixing of commercial and non-commercial content. The latter two are of particular importance in the context of new advertising formats, considering their embedded and interactive nature.

Aside from this, advertisers and advertising networks increasingly process children's personal data, as it allows them to tailor and personalise commercial communication based on children's online behaviour. A recent privacy sweep conducted by an international group of data protection authorities (GPEN) found that 67 % of the 1,494 websites and apps examined collected children's personal information and 50% shared personal information with third parties (Irish Data Protection Commissioner, 2015). Such data processing activities are only allowed if the rules of the EU data protection framework are respected.

In this section an overview is provided of whether and how the new advertising formats targeting children and teenagers are included in regulatory and self-regulatory initiatives. The goal is to address the fifth and final question in the risk analysis: "How are new advertising formats (self-)regulated?"

10.1. TELEVISION ADS AND ADS IN ON-DEMAND VIDEO SERVICES ("TRADITIONAL ADVERTISING FORMATS")

10.1.1. LEGISLATION

Introduction and scope: which advertising formats are covered?

The Audiovisual Media Services Directive ("AVMS Directive") is the cornerstone of media regulation in the EU. This Directive requires, by its nature, that Member States implement the provisions into national law. In Flanders, the Flemish Media Decree defines the general rules and principles for **audiovisual commercial communication ("ACC")** such as **television advertising and advertising in on-demand video services** (e.g. Netflix). ACC can be defined as images with or without sound which are designed to promote goods or services and which accompany or are included in a program in return for some type of payment. Included in this definition are the following formats:

Which formats are covered	Which formats are not covered
<ul style="list-style-type: none"> ✓ TV Commercial ✓ Advertising in on-demand video services ✓ Sponsorship ✓ Product placement ✓ Advertising funded programs ✓ Split screen ads ✓ Infomercial 	<ul style="list-style-type: none"> ✗ Digital commercial communications (though sometimes unclear)

The precise scope of application of the provisions of the AVMS Directive and its national implementation to new advertising formats is somewhat unclear. For instance in the case of advergames, they could in theory be interpreted as falling within the definition of an audiovisual commercial communication as defined by Article 1(h) AVMSD. On the other hand, Recital 22 stipulates that the definition of an audiovisual media service “*should exclude all services the **principal purpose** of which is not the provision of programs, i.e. where any audiovisual content is merely incidental to the service and not its principal purpose.*” Although advergames are games *per se*, one could argue that the game itself is merely the means for the delivery of the audiovisual commercial communication.

General principles: what are the rules for traditional advertising formats (targeted to both children and adults)?

The two most important principles that govern audiovisual commercial communication are the **principles of identification and separation**. These principles aim to (1) guarantee the neutrality of media in view of the economic competition of third parties, (2) ensure the **editorial integrity** of television programmes (3) **protect the consumer**. Protecting the consumer against disguised messages seems the most obvious. If it is not clear what constitutes advertising or when the line between editorial and commercial content is blurred, viewers can be misled as to the nature of what they see. The same is valid in relation to competing market players, who want to be judged fairly and on editorial grounds by the media, not because a competitor has paid more to the media enterprise. The principles of identification and separation have been implemented in the various Member States by means of national legislative and/or self-regulatory instruments.

- ❖ The principle of identification requires that audiovisual commercial communications are **clearly recognizable** as such. Moreover, it also prohibits surreptitious advertising. It is applicable to both television and on-demand advertising.
- ❖ Conversely, the principle of separation is only applicable to television advertising, which shall be **kept quite distinct** from other parts of the program by optical and/or acoustic and/or spatial means.

Specific principles on the protection of children for certain formats: what type of additional protections do children have?

Furthermore, the Flemish Media Decree contains specific principles on the protection of children. First of all, there are **restrictions on the use of certain forms of commercial communication in children’s programs**:

- ❖ Teleshopping (Art. 80) and self-promotion are **prohibited** in children’s programs.
- ❖ **Product placement** is prohibited in children’s programs of the public broadcaster. On the other hand, product placement is allowed in children’s programs of private broadcasters, but only if the goods or services were provided free of charge (Art. 99).
- ❖ The logo of a sponsor may not be mentioned or shown in children’s programs (Art. 97). Children’s programs may not be sponsored by companies which main commercial activity consists of the sale or production of alcoholic beverages.
- ❖ Alcohol advertising may not be broadcast right before or after children’s programs (Art. 83).

Secondly, the Flemish Media Decree contains certain **content restrictions** for audiovisual commercial communication.

- ❖ **Food:** do not encourage or trivialize the excessive intake of food and beverages containing nutrients of which immoderate use is not recommended, such as fats, transfatty acids, salt or sodium or sugars. Additionally, commercial communication relating to candy which contains sugar has to display a specific image of a toothbrush (Art. 69).
- ❖ **Alcohol** advertising may not be aimed specifically at minors and may not specifically show minors consuming alcohol (Art. 68).
- ❖ **Tobacco** advertising is prohibited (Art. 65).
- ❖ **Medication** advertising is prohibited (Art. 66).
- ❖ **Toys that resemble fire arms** may not be advertised (Art. 73 §4).

Liability for breach of the advertising rules: who is responsible?

The broadcaster is responsible for ensuring that the commercial communication is conform the rules of the Media Decree.

Enforcement: who enforces the rules or handles complaints?

The Flemish Regulator for the Media (Vlaamse Regulator voor de Media, hereafter “VRM”) oversees compliance with the provisions of the Flemish Media Decree and handles complaints of individuals. Although within the VRM, a specific chamber composed of experts in child-related matters oversees the provisions with regard to impartiality and the protection of minors, all complaints with regard to commercial communications (also those with regard to minors) are addressed by the General Chamber.

10.2. DIGITAL COMMERCIAL COMMUNICATIONS (“NEW ADVERTISING FORMATS”)

10.2.1. LEGISLATION

Introduction and scope: which advertising formats are covered?

The e-Commerce Directive defines certain rules for digital commercial communications. More specifically, the e-Commerce Directive establishes de facto obligations for advertisers, by requiring Member States to implement **identification and information requirements** for commercial communications which are part of or constitute an information society service (e.g. sponsored search results, advergames, in-app advertising, ads on social media, online banner ad, sponsored blogs, sponsored vlogs, branded websites, in-game advertising). The Directive has been implemented in Belgium by the Information Society Act of 11 March of 2003 and later replaced by the Law of 15 December 2013 on the Right of the electronic economy, which forms part of the Belgian Code of Economic Law.

The definition of commercial communication should be interpreted broadly and entails both direct and indirect promotion. The commercial character of the communication entails that it promotes goods or services of a certain company or organisation. Excluded from this definition is the mere ownership of a website or e-mail address, linking to a commercial site without getting paid for it, providing information not constituting promotion, consumer-testing services, and price or product comparisons.

Which formats are covered	Which formats are not covered
<ul style="list-style-type: none"> ✓ Advergames ✓ Online banner ✓ In-game advertising ✓ Native advertising ✓ Video advertising ✓ Virtual worlds ✓ Profile targeting and social media advertising ✓ Application advertising ✓ Location based advertising 	<ul style="list-style-type: none"> ✗ Audiovisual commercial communications (traditional formats)

General principles: what are the rules for digital advertising formats aimed at both children and adults?

The following requirements of the e-Commerce Directive could be relevant for new advertising formats:

- ❖ Identification of the commercial communication ("clearly identifiable as such") (see also Article 9 ICC Code as mentioned supra).
- ❖ Identification of the advertiser (i.e. the person on whose behalf the commercial communication is made is to be **clearly identifiable**). This means that the main contact details such as name and address need to be accessible, for instance via a hyperlink.
- ❖ **Promotional offers, competitions or games** must be clearly identified and the conditions for participation must be presented in a clear and unambiguous way and make them easily accessible.

Liability for breach of the advertising rules: who is responsible?

The advertiser is responsible for ensuring that the commercial communication conforms to e-Commerce law. Considering that social network sites are often used to spread commercial messages (e.g. by sponsored bloggers), questions may rise regarding the potential liability of the social network provider for harmful or illegal commercial messages. In this regard, the Belgian law contains a liability exemption for providers of hosting services for illegal web content uploaded by the users of the service.

Enforcement: who enforces the rules or handles complaints?

In Belgium, there are two different enforcement mechanisms, (1) filing a complaint before an administrative body and (2) bringing a claim before the courts. The Directorate General Control and Mediation is the administrative body competent for receiving administrative complaints, which can be filed by every natural or legal person without the need to prove a legitimate interest. Secondly, there is the possibility of a specific cease-and-desist procedure before the President of the Commercial Court for unfair commercial practices. In addition, a claim for civil damages could be filed before the competent civil court. In this regard, the applicant will have to provide evidence of a direct and legitimate interest.

10.2.2. SELF- AND CO-REGULATION

Aside from the e-Commerce Directive, the ICC Code (cfr. infra 10.3.B) contains certain guidelines for implementing the identification and information requirements in practice. If advertisers want to make use of digital interactive marketing communication, they will have to take into account the following guidelines (Article D1-D6):

Principle	Guidelines for implementation
Identification	<ul style="list-style-type: none"> ✓ Whenever such commercial communications are addressed to an individual, the subject descriptor and context should make this clear. ✓ Product endorsements or reviews that are created by marketers should be clearly indicated and not presented as being from an individual consumer or independent body. ✓ Marketers have to take appropriate steps to ensure that the commercial nature of the content or social network site under his/her control is clearly indicated and that the rules and standards of acceptable commercial behaviour are respected (identification principle).
Information	<ul style="list-style-type: none"> ✓ Inform the consumer beforehand of the steps leading to the placing of an order, a purchase, the concluding of a contract or any other commitment.

10.3. PERSONALIZED ADVERTISING FORMATS

10.3.1. LEGISLATION

Introduction and scope: which advertising formats are covered?

As mentioned, advertisers and advertising networks increasingly use children's personal data to tailor commercial communications based on their online behaviour. Until recently, the Data Protection Directive of 1995 was the main legal instrument of data protection law at the EU level. In April 2016 however, the General Data Protection Regulation ("GDPR") was adopted, which sets out the general conditions for the lawful processing of personal data.¹² The GDPR also contains certain provisions that apply specifically when children's personal data are being processed. It will be directly applicable in all Member States from 25 May 2018.

Which formats are covered	Which formats are not covered
<ul style="list-style-type: none"> ✓ Personalized ads: <ul style="list-style-type: none"> – Profile targeting and social media advertising, online behavioural ads – Location based advertising 	<ul style="list-style-type: none"> ✗ Non-personalized ads

General conditions for the processing of personal data

The general data protection principles need to be respected when **processing children's personal data for the purpose of personalized ads**. However, they need to be adequately adapted when dealing with children. The following table provides an overview of the relevant principles of the Data Protection Directive and includes some elements that have been interpreted by the Article 29 Working Party.

¹² The GDPR entered into force on 24 May 2016.

Principle	Article	Comment
Fair and lawful processing	6 (1) (a) DPD 5 (1) (a) GDPR	The personal data of children need to be processed <i>fairly and lawfully</i> . Since children's maturity is still developing, this principle needs to be interpreted strictly (WP29, 2008).
Purpose limitation	6 (1) (b) DPD 5 (1) (b) GDPR	The data can only be collected for <i>specified, explicit and legitimate purposes</i> and not further processed in a way incompatible with the initially specified purpose(s).
Proportionality and relevance	6 (1) (c) DPD 5 (1) (c) GDPR	Only <i>adequate, relevant and non-excessive</i> data can be collected and/or further processed. The collecting entity needs to carefully consider which data are strictly necessary to meet the goal or, for mobile apps for example, the desired functionality (WP29, 2013).
Accuracy	6 (1) (d) DPD 5 (1) (d) GDPR	Personal data must be <i>accurate</i> and, where necessary, kept <i>up to date</i> . Every reasonable step must be taken to ensure that data are inaccurate or incomplete, having regard to the purpose for which they were collected or for which they are further processed, are erased or rectified. In short, only data necessary to reach the purpose can be collected and these data should be kept updated. As children are constantly developing, data controllers must pay particular attention to the duty to keep personal data up-to-date (WP29, 2008).
Data retention	6 (1) (e) DPD 5 (1) (e) GDPR	When no longer necessary for the purposes of collection, personal data should either be <i>deleted</i> or kept in a form which does not allow identification. This principle is particularly important for children. As they are developing a lot, data related to them could very quickly change and become outdated, so that it becomes irrelevant to the original purpose of collection. Such information should be deleted (WP29, 2008).

Table 24: Principles as interpreted by the Article 29 Data Protection Working Party.

Conditions specific to the processing of children's personal data for advertising purposes

Article 8 of the GDPR explicitly requires **parental consent** for the processing of personal data of children under the age of 16 years (Article 8 GDPR) unless Member States decide to implement a lower threshold (provided it is not below 13 years). More specifically, the GDPR uses the notion of "verifiable consent" but remains vague on how to obtain such consent. Indeed, it merely mentions that "reasonable" efforts shall be made to obtain this consent, "taking into consideration available technology" (Article 8, par. 1 of the GDPR). In sum, when advertisers want to collect children's personal data for advertising purposes they will need to ensure that the manner in which they obtain consent is well-considered and takes into account the child's potential vulnerability and capacity to understand the consequences of their consent.

Liability for breach of the data protection rules: who is responsible?

In Belgium, liability for data protection violations is regulated by article 15bis of the Law of 8 December 1992 on the protection of privacy in relation to the processing of personal data. According to this article, the data controller shall be liable for damages resulting from unlawful processing activities (Van Alsenoy & Verdoodt, 2014). However, in the context of personalized advertising, a variety of players may be involved, including ad network providers, publishers and advertisers. Therefore a **case-by-case analysis** to define who is the data controller (i.e. who determines the purposes and the means for the processing) is necessary. It is also possible that several parties jointly determine the purposes and means for one or more processing activities (e.g. the publisher and the advertising network). In those cases, the liability shall in principle be solidary in nature for the common processing operations. This means that the harmed data subject may bring a claim against any of them for the full amount of damages (Van Alsenoy, 2016).

Enforcement: who enforces the rules or handles complaints?

Individuals can file a complaint for a breach of data protection law with the Belgian Data Protection Authority (i.e. the Privacy Commission). Furthermore, if individuals suffered damage, they can exercise their right to compensation under article 15bis of the Belgian Data Protection Act against the data controller/joint controllers before the Court of First Instance.

10.3.2. SELF- AND CO-REGULATION

Conditions specific to the processing of children's personal data for advertising purposes

Children need to be **adequately informed** about the collection and use of their personal data. In practice, the informed element implies that information needs to be presented in a simple, concise, readable format and in language that can be easily understood as adapted to the age of the individual in question (WP29, 2009). However, children are not always capable of understanding the nature of such decisions and to a large extent. In this regard, several authoritative bodies have expressed their opinion that it is not in the best interest of the child to allow **behavioural advertising** aimed at children. Indeed, following the **ICC Code (D7.4)**:

- ❖ Segments specifically designed to **target children 12 and younger** for OBA purposes **should not be created**.

This is in line with the Article 29 Working Party opinion 02/2013, in which it stressed that, in the best interest of the child, companies “*should not process children's data for behavioural advertising purposes, neither directly nor indirectly, as this will be outside the scope of a child's understanding and therefore exceed the boundaries of lawful processing*”. Moreover, it has been argued that behavioural advertising aimed at children may qualify as **undue influence** under the Unfair Commercial Practices Directive, resulting in an aggressive commercial practice (BEUC, 2010). However, at the moment there is no case law confirming this opinion.

10.4. ALL ADVERTISING FORMATS

10.4.1. LEGISLATION

Introduction and scope: which advertising formats are covered?

At a more general level, the Unfair Commercial Practices Directive (“UCP Directive”) prohibits **any unfair commercial practices**, including misleading or aggressive commercial communication. The Belgian consumer protection rules can be mainly found in Title VI of the Code of Economic Law, i.e. Market practices and consumer protection. The requirements are **applicable to both traditional and new forms of advertising**.

Which formats are covered	Which formats are not covered
✓ All advertising formats	/

General principles: what are the rules for advertising formats aimed at both children and adults?

There is a two-step criterion for determining **unfairness**: (1) the lack of professional diligence of the trader and (2) the influence on the economic behaviour of the consumer. The Directive takes as a **benchmark the average consumer**, who is “reasonably well-informed and reasonably observant and takes into account social, cultural and linguistic factors”. In relation to commercial communication aimed at vulnerable consumers such as children, the assessment will be done from the perspective of the average member of that target group. For instance, children might be particularly vulnerable to advertisements about videogames, whereas teenagers are often targeted by rogue traders that promote appealing products by exploiting teenagers’ immaturity and their lack of attention or reflection (e.g. mobile phone services ad saying that by subscribing to the service, they will make friends more easily) (European Commission, 2009).

A commercial communication will be **misleading if**, taking into account the specific circumstances of the case:

- ❖ an average consumer takes a transactional decision which he would normally not have taken, because he is **deceived**; or if
- ❖ **material information** needed by the average consumer to make an informed transactional decision is **missing**, thereby causing him or her to take a decision which he or she would not have taken otherwise;

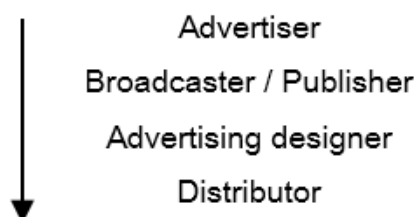
Moreover, in line with the identification requirement (see *infra*) a commercial communication will be **misleading and prohibited under all circumstances** if an advertiser uses editorial content in the media to promote a product where a trader has paid for the promotion without making that clear in the content or by images or sounds clearly identifiable by the consumer. This could be of particular relevance for advertisements posted by bloggers or Twitter account holders who are being paid to do so by the brand (Scaife, 2015).

Specific principles on the protection of children: what type of additional protections do children have?

Finally **direct exhortations to children** to buy advertised products or persuade their parents or other adults to buy advertised products for will also be **prohibited under all circumstances**. This ban is valid for all media, including television as well as internet advertising. For instance, the TV advertisement “Your favourite book is now out on DVD – tell your dad to buy it for you!” would constitute an aggressive commercial practice, prohibited under the Unfair Commercial Practices Directive.

Liability for breach of the advertising rules: who is responsible?

The Belgian Code of Economic Law establishes a cascade liability system for commercial communication that constitutes an unfair commercial practice (Art. XVII.10). This entails that when the advertiser resides in Belgium, the proceedings explained below (i.e. the cease-and-desist procedure) should be taken against the advertiser. However, if the advertiser does not reside within the jurisdiction or does not have an appointed representative residing in Belgium, one should then resort to the following hierarchy:



Enforcement: who enforces the rules or handles complaints?

The same procedures can be followed as for breaches of electronic commercial advertising (see above 10.1.2)

10.4.2. SELF- AND CO-REGULATION

Introduction and scope: which advertising formats are covered?

Aside from the legislative instruments, the advertising industry is known for its strong tradition of **self- and/or co-regulation**. One of the most important self-regulatory instruments is the Consolidated Code of Advertising and Marketing of the International Chamber of Commerce (“ICC Code”). Although the rules are voluntary, they are taken into account daily in countless transactions and, as such, have become part of international trade. The ICC Code applies to both traditional and new advertising formats and is based on the general principles of honesty, legal compliance, truthfulness and decency of ads.

Which formats are covered	Which formats are not covered
✓ All advertising formats	/

General principles: what are the rules for all advertising formats aimed at both children and adults?

In line with the legislative framework, Article 9 of the ICC Code requires that:

- ❖ Marketing communications should be **clearly distinguishable** as such, whatever their form and whatever the medium used.

Marketers are thus required to identify digital commercial communications as commercial content. In practice, the principle of identification has led certain advertisers to **use a type of labelling or ‘cues’** to make commercial content identifiable. In this regard, the Belgian Jury for Ethical Practices in Advertising recommends the use of an explicit label such as “sponsored by” or “in cooperation with” (JEP, 2015). Where appropriate, such designation has to be clearly legible or audible and understandable. It is also recommended to add visible and/or audible differences to the communication and the editorial/journalistic content.

Specific principles on the protection of children: what type of additional protections do children have?

Furthermore, the Code requires special care for commercial communications targeted towards children and youngsters. In this regard, Article 18 defines certain qualitative requirements that need to be kept in mind: (1) ads should not undermine positive social behaviour, lifestyles and attitudes; and (2) products that are unsuitable for them should not be advertised in media targeted to them, or ads targeted towards children should not appear on media where the editorial content is not suitable for children (e.g. an online wine shop).

Enforcement: who enforces the rules or handles complaints?

The Belgian self-regulatory organisation of the advertising industry is the Jury for Ethical Practices in Advertising (JEP), a private body financed by the Belgian advertisers, media and marketing bureaus. Its main task is to watch over the correct and fair nature of commercial messages aimed at the public. The task of the JEP is limited to researching content of advertising messages that are spread via mass media (such as daily or weekly magazines, radio, television, internet, movie theatres etc.) as well as via emailing or direct mail.

11

GENERAL CONCLUSION

11.1. STUDY OBJECTIVES

The advertising landscape has altered dramatically in the last decade. Advertising is omnipresent and is reaching us into nearly all areas of our lives. More importantly, minors (children and teenagers) are targeted by advertising professionals more often and new tactics are being used for persuasion. The lines between the commercial message and media content have blurred. Many advertising formats are no longer static, but encourage people to actively engage with the commercial content. With the emergence of web 2.0, much personal information and user generated content is now used to tailor and personalize advertisements. Finally, advertising has become highly entertaining and capitalizes on the emotions of consumers. These new tactics of integration, interaction, personalization and high entertainment challenge children's advertising literacy that helps them to understand and cope with advertising.

The overall aim of the current research report was **to identify and assess the risks connected to advertising formats in a new media environment targeting minors aged 7 to 18**. Therefore, we need an overview of the advertising formats minors are exposed to and their level of advertising literacy towards each of these formats. After all, the combination of high exposure rate to an advertising format with a low level of advertising literacy, entails a high risk. Table 1 summarizes the advertising formats to which minors are exposed to. In this report, we established that children (<12 years old) and teenagers (>12 years old) are not always targeted via the same advertising formats.

Advertising format	Target Group
TV commercial	Children and teenagers
Advergame	Mainly Children
Brand placement	Children and teenagers
Online banner	Children and teenagers
In-game advertising	Children and teenagers
Native advertising	Children and teenagers
Video advertising	Children and teenagers
Virtual worlds	Mainly Teenagers
Social media advertising	Mainly Teenagers
Application advertising	Mainly Teenagers
Location based advertising	Mainly Teenagers

Table 1. Advertising formats frequently used to target minors

In addition, we need to know how their immediate (parents and teachers) and non-immediate surrounding (advertising professionals and policy) offers empowerment and protection to cope with these new advertising formats. When children have a low level of advertising literacy towards a certain advertising format without any provided protection or encouraged empowerment, an even higher risk can be expected.

To take into account the capabilities and skills of minors as well as their surroundings, the following key questions were put forward in the risk analysis: 1) Which new advertising formats are minors the most exposed to?; 2) What is the current level of advertising literacy of minors for new advertising formats?; 3) How do parents and advertising professionals perceive new advertising formats?; 4) How do schools help children and teenagers to cope with new advertising formats?; 5) How are these advertising formats (self-)regulated?

In this final section, we will summarize and discuss the main findings of the research report addressing the abovementioned groups (minors, parents, advertising professionals, schools and regulation) and formulate policy recommendations.

11.2. CHILDREN'S ADVERTISING LITERACY FOR HYBRID ADVERTISING

S. De Jans, P. De Pauw, I. Vanwesenbeeck, V. Cauberghe & L. Hudders

A thorough analysis of children's media usage and the advertising formats used to target children enabled us to identify five advertising formats that children are exposed to most often: television commercials, advergames, brand integration, online banners and video advertising. Next to an extensive literature review, six empirical studies conducted within the AdLit project provide new insights on children's current level of advertising literacy towards these formats. A total of 1.343 Flemish children between 7 and 12 years participated in our research studies. One qualitative and five experimental studies were conducted to compare children's advertising literacy for the traditional TV commercial versus embedded and hybrid advertising.

11.2.1. ADVERGAMES ARE PUZZLING YOUNG CHILDREN

Results of various experiments suggest that young children had most difficulties to recognize advergames as commercial content and to understand their persuasive intent, which is in line with previous studies. At the same time, children report a more positive brand attitude when they played an advergame, compared to when they watched a TV spot. The positive effect on children's brand attitude can be attributed to the positive feelings that are induced by the game. In other words, the positive attitude towards the game is transferred over to the brand. Because advergames are fun, children are not motivated to think critically about the commercial content embedded in the game. In addition, when children do recognize the advergame's commercial intentions, this does not impact children's brand attitude. This indicates that they do not activate their advertising literacy when playing an advergame due to its fun and immersive nature.

11.2.2. BANNER BLINDNESS, ALSO FOR YOUNG CHILDREN?

Our research reveals that children are able to recognize banners better as commercial content and understand its persuasive intent compared to advergames, but slightly worse compared to the television commercial. When looking at the advertising effects, results of an experimental study reveal that only 17% of the young children remembered the brand that was depicted in the online banner, which was the lowest of the ad formats investigated. This indicates that banner blindness also occurs at this very young age. The brand shown in the TV commercial scored highest on brand recall: 47% of the children correctly recalled the brand. Both advergames and sponsored content induced a correct brand recall of about 40%, which is significantly higher compared to the online banner. The results show that correct brand recall is higher when children have a good advertising recognition and a higher understanding of advertising. These results imply that a high cognitive advertising literacy may result in more positive (cognitive) brand effects. To conclude and whereas results show a low effectiveness of online banners in terms of cognitive ad effects, the affective and behavioural effects appear to be higher. An online banner leads to slightly higher pester power compared to TV commercials and sponsored content (this latter is the least effective in terms of pestering parents to buy the product).

11.2.3. PRODUCT PLACEMENT, A PROBLEMATIC FORMAT FOR YOUNG CHILDREN

A literature review and experimental research found that young children have a lot of difficulties with recognizing product placement as advertising. In one experiment, results indicated that only 11% of the children recognized the brand placed in the program, though children between 10 and 11 years old did score significantly higher than the younger children (7-8 years). In another study, it was demonstrated that (8- to 10-year-old) children's cognitive advertising literacy for brand placement can be triggered, namely through disclosures, and most effectively through visual forewarning cues (using a disclosure before the movies or program starts).

However, it was also found that the advertising literacy (as activated by these cues) did not mitigate children's attitude toward the placed brand. While this cue-activated advertising literacy had no effect on brand attitude among the most sceptical children, it even resulted in more positive brand attitudes among the least sceptical children. This may indicate that children's knowledge about the use of covert marketing tactics is incomplete (and even more so among the less sceptical children), which prevents them from forming well-substantiated (moral) evaluations about formats such as brand placement.

11.2.4. THE IMPORTANCE OF MORAL ADVERTISING LITERACY

Almost all experiments indicate that children's moral (judgments of the advertising fairness) and affective advertising literacy (affective evaluation of the advertising format) is low for the embedded and hybrid advertising formats. Although this may indicate that children are not critical towards the different strategies and do not question their use, these facets appear to be important moderators in altering advertising effects (see also previous section). Accordingly, our experimental research on advergames and product placements show that cognitive advertising literacy (ad recognition and understanding of the persuasive intent) has a positive effect on brand attitudes, but only for children who are less critical towards advertising. For children who are more critical towards advertising, cognitive advertising literacy can lower their attitude towards the brand placed in the game. In the case of product placement, the positive effects of cognitive advertising literacy on brand attitudes just disappeared among children that are more sceptical toward the format.

11.2.5. IF YOU DIDN'T NOTICE, YOU'RE NOT PERSUADED?

Furthermore, a qualitative study showed that young children are under the impression that advertising does not affect them when they do not consciously notice the brand. This may explain why their judgements of fairness of the embedded and hybrid ad formats are quite positive, as they evaluate these formats primarily on the fact that such formats do not interrupt the media content and therefore do not cause irritation. Of course, the empirical studies show persuasion does occur among these children, but implicitly through affect transfer from context to brand, without their conscious awareness. Making them aware of such processes, however, children showed the ability (to use their moral advertising literacy) to judge ad formats using covert tactics as unfair or manipulative.

11.3. TEENAGERS ADVERTISING LITERACY

B. Zarouali, M. Walrave, K. Poels & K. Ponnet

For various advertising formats, such as television commercials, advergames and brand integration, the literature indicates that one's advertising literacy increases with age. Therefore, teenagers (12-18 year) have received less scholarly attention because they are considered less vulnerable to advertising effects, and thus no priority group for academic exploration. However, this line of reasoning does not apply to all new (online) advertising practices.

Already in the mid-nineties, studies demonstrated that even teenagers may have difficulties with understanding traditional advertising. Nowadays, with regards to embedded and hybrid advertising formats (e.g. advergames, product placement, etc.), adolescents have poor knowledge about these persuasive techniques due to inexperience and unfamiliarity. Therefore, it is imperative that teenagers are not to be left aside in contemporary marketing research, and more so, be considered a priority group. A very interesting research venue to investigate among teenagers is advertising on social networking sites (SNSs). SNSs have witnessed an enormous increase in popularity over the past few years, with teenagers being the most active users of these social platforms. On SNSs, teenagers are regularly exposed to a particular kind of commercial content that is omnipresent, namely targeted advertising. Unfortunately, little empirical efforts have been undertaken so far to investigate this topic, making it an underdeveloped research

area. Therefore, it is important to gain a thorough understanding of how teens cope with these targeted persuasion strategies on SNSs.

First, a large scale survey study showed that teenagers claim to have a moderate recognition and understanding of advertising. In addition, teenagers have a rather negative stance towards advertising, perceive it as an unfair practice and claim to strongly resist advertising in the current commercial media environment. Further, the study revealed that approximately 26.9% of the teenagers sometimes use ad blockers. However, more than half of the teenagers 56.3% had no idea what ad blockers are.

Next, an experimental study showed how targeted advertising leads to a higher ad scepticism than non-targeted advertising. In turn, this negatively influences the purchase intention of a product. Moreover, teenagers who are more concerned about their privacy are also more sceptical towards retargeting. Therefore, it could be advisable to teach adolescents about online privacy risks in order to protect their personal information and react more critically to online marketing strategies that use their personal information, as does retargeting. Furthermore, results showed that when adolescents were helped by a cue that informs them about the persuasion tactic (debriefing text), they reacted more sceptically toward retargeting. This could imply that that adolescents are not always consciously aware of retargeted advertising. Based on the latter, it could be interesting to implement an advertising cue to notify adolescents that advertising is being shown, which should then activate their critical and sceptical advertising coping strategies.

In a second experimental study, it was investigated how peer communication influences both cognitive advertising literacy and attitudes toward social advertising. Specifically, the authors showed that when teenagers are chatting on SNS, they generate more positive attitudes towards social advertising, and at the same time, they activate less persuasion knowledge. Moreover, a difference was found between chatting with a weak or strong connection: chatting on SNS with a strong tie leads to an even lower persuasion knowledge for social ads. In short, this shows that peer influence plays an important explanatory role in adolescents' advertising literacy and attitudes. These findings reveal some important conclusions regarding the social influence dynamics on SNS that affects adolescents advertising literacy. More specifically, adolescents are not always aware of the commercial intent of social advertising on SNSs (i.e. lower advertising literacy) when they engage in online peer communication, and certainly when they chat with a strong tie.

11.4. VULNERABLE AUDIENCES AND ADVERTISING LITERACY

S. Lissens & J. Bauwens

In the risk analysis we have argued that little research has been devoted to socio-economic status (SES) when investigating advertising literacy of minors and virtually no studies have focused on vulnerable children and young people. However, it is not unconceivable that household income, parents' education and occupation, hence consumption opportunities and behaviours in general affect minors' advertising literacy. Indeed, in the larger field of media literacy SES is identified as a major factor influencing the possession and access to media technologies and the development of digital skills and literacies. The literature review further revealed that when SES-related data is considered, it is most often from an instrumental point of view (e.g., in terms of describing the sample).

To meet these shortcomings an exploratory qualitative study was set up with 59 respondents (pre-adolescents, aged 11-13) from schools with a disadvantaged profile, identified by means of aggregate and anonymized SES-characteristics of the school population. Specifically, the study focused on the preadolescents' advertising opinions, experiences and perceptions in order to expose issues potentially affecting disadvantaged minors' advertising literacy. Overall, the pre-adolescents mainly mentioned clearly delineated and overt advertising formats (i.e. advertising in folders, on busses, in shops and on TV). This finding reinforces AdLit's overall plea to put greater efforts in research and education on more covert advertising strategies that young people are dealing with on a daily basis. However, the pre-adolescents also showed elaborate reasoning and reflection skills when less noticeable and more immersive advertising strategies and formats were brought up by the researcher, such as: premiums, celebrity branding, product

placement, advergames, in-game advertising and personalized advertising on social networks. The elaborate, savvy and vivid discussions provided a clear illustration of the embeddedness of advertising in these young people's everyday lives. They also exemplified how advertising can be a tool for empowerment and emancipation, not only in the way they are processing and interpreting advertising, but also in the way they make use of advertising in terms of educational performances. Talking about advertising; reciting advertising texts; reasoning what certain advertising strategies aim to do: the pre-adolescents felt particularly confident and knowledgeable in a formal school context, which is not self-evident for young people with a disadvantaged background.

Further, the respondents also ascribed a strong informational function to advertising. Although this is generally interpreted as indicating lower levels of advertising literacy, we learned that advertising plays a key role in their everyday consumer opportunities and experiences in terms of spending and saving money, with concrete financial implications and outcomes for themselves, their parents and their families. Hence, looking out for deals and offers through advertising is closely related to the experienced cost of living. Finally, the majority of the pre-adolescents had a migration background, resulting in the consumption of international media, TV channels first and foremost, which obviously affects the nature and amount of advertising they are exposed to. For example, they mentioned comparative advertising and they had the impression that the TV channels stemming from the country of their (parents') origins broadcast a lot more advertising.

Based on the results, we argue that the following issues might affect disadvantaged minors' advertising literacy. First, the disadvantaged pre-adolescents were elaborate on advertising presented in the public environment and on traditional advertising formats, but rarely referred to new media and new advertising formats when not prompted to it. This might imply that these preadolescents have a high advertising literacy for traditional advertising, but are less knowledgeable about new advertising formats typically consumed in the home environment. Second, because popular television shows are also consumed via foreign channels they might be exposed to other and/or more types of advertising – which might also not be included in Flemish regulation or education.

To further understand how (much) SES affects advertising literacy and how advertising literacy is developed among vulnerable audiences, more systematic research is required to surpass the explorative nature of the current study. When doing so, the complex and diversified conceptualization and operationalization of SES should be taken into account. This includes the following: the study of parental educational level, parental professional level and household income; indirect questioning by means of job description, number of books the family possesses, social geographic information, school indicators, etc.; qualitative and quantitative variation in response categories; the challenge of non-stigmatizing phrasing and verbalization in both the communication with the respondents and the reporting on data.

11.5. PARENTS' VIEWS ON ADVERTISING TOWARDS CHILDREN

K. Daems, P. De Pelsmacker, I. Moons, P. De Pauw, L. Hudders, V. Cauberghe, & I. Vanwesenbeeck

Parents play an important role in minor's consumer socialization. They assist children and young-adolescents gaining consumers skills, of which an important part are the advertising literacy skills. Two studies within the AdLit project have paid attention to parental views on advertising towards children: one study focusing on parental advertising literacy and mediation towards contemporary advertising formats, the other study focusing on parental perception towards advertising.

In the first study, 300 parents from children between 7 and 12 years old participated in a study on parental advertising literacy and advertising mediation styles in the context of five advertising formats: TV commercials, product placement, online banners, retargeted pre-roll video ads and advergames. This study established that parents are quite aware of the studied advertising formats. Advergames are an exception: parents' ability to recognize this format is lower. Further, parents adopt a critical attitude towards advertising in general. However, most parents prefer to avoid advertising completely. While communicating with their children about advertising, parents are rather neutral: they are more likely to talk about the selling intent of advertising, rather than telling their children that advertising can be 'bad'. Analysing parental advertising literacy and mediation, it can be considered a good thing

that parents indicate to be knowledgeable about most new advertising formats (except advergames). However, they rarely discuss the existence or presence of these advertising formats with their children.

The second study, which included 436 parents, used a survey to map parental opinions on the usage of new advertising formats targeting minors. Although young children are exposed to many new advertising formats, parents find it appropriate to inform minors about the commercial intentions of advertising around 10 years of age. Further, parents argue that children are capable of understanding the advertising formats around the age of 12, and thus also find it ethical to use such formats when children are 12 to 13 years old.

Studies investigating children's advertising literacy, however, indicate that children are capable to process advertising and have a basic understanding (e.g., understanding selling intent) around the age of 8. The perceptions of parents on children's capabilities are more in line with the literature on children's advertising literacy in that at the age of 12 children do develop a more elaborate advertising literacy level (e.g. understanding persuasive intent). It is, however, very surprising that parents find it least necessary to inform children of integrated advertising formats, because all research shows how children are especially struggling with recognizing such formats as advertising and understanding the implicit mechanism of unconscious persuasion.

11.6. ADVERTISING PROFESSIONALS

K. Daems & P. De Pelsmacker

Next to the parents, advertising professionals are an important stakeholder with regard to children and advertising. Our risk analysis includes one study addressing this stakeholder. A survey (N = 90) and qualitative (in-depth interviews, N = 10) study was used to map the perceptions of advertising professionals about the use of new advertising formats aimed at minors. During this study, it became clear that, overall, advertising professionals acknowledge that children are a vulnerable group for advertising. Further, the perceptions of advertising professionals about new advertising formats are very similar to those of parents: from the age of 12-13 years old onwards, advertisers perceive new advertising techniques as ethical to use towards minors; children should be made aware of the commercial intentions of advertising from the age of 9 to 10 onwards; they hold the opinion that on average children are unable to understand new advertising formats before the age of 12, but should be mature enough to identify and understand different advertising at age 12 and older. Online behavioural advertising, location based services and video advertising were considered the most difficult advertising formats for children and the least ethical to use.

11.7. ADVERTISING LITERACY IN EDUCATIONAL PROGRAMMES

B. Adams, T. Schellens & M. Valcke

To instil minors' advertising literacy, the role of education has been repeatedly stressed in literature. Therefore, we investigated how schools help children and teenagers to cope with new advertising formats. By analysing the curriculum, we found that the Flemish government did not formulate any curriculum standards for toddlers (<age 6); that two curriculum standards explicitly mention advertising in primary education (age 6 to 12); and that advertising literacy is also tackled in secondary education (age 12 to 18). Regarding to the latter, it is noticeable that references to advertising are mainly integrated into language curriculum standards (i.e., Dutch language). For both primary and secondary education, advertising literacy is also embedded in cross-curricular curriculum standards in a more implicit way. Aside from this, in the Flemish educational landscape, it is also important to take into account how the umbrella organizations (i.e. representative associations of school boards differing based on other ideological backgrounds) operationalize the generally formulated curriculum standards. In particular for primary education, it was noticeable that umbrella organisations aim to pay attention to minors' advertising literacy throughout the six years, but especially from the

second grade (age 8 to 9). This finding is in line with previous research in which is stated that children from the age of eight have a more developed understanding of advertising. Additionally, there are primarily references to both traditional advertising formats and the cognitive dimension of advertising literacy in curricula for primary and secondary education. The latter is also advocated by International scholars who plea for reformulating the focus of advertising literacy education, because of the emphasis on cognitive advertising literacy.

Next to the exercises that are, conform the Flemish curriculum, integrated into text- and work-books by educational publishers, there are also (inter)national organizations who develop stand-alone educational packages on advertising. An analysis of these educational packages (shows, inter alia, that they are mostly (1) providing guidance to teachers, (2) targeting children of primary education, and (3) rarely discussing new advertising formats. Moreover, to our knowledge, the effectiveness (i.e. whether educational materials positively influence minors' advertising literacy) of these educational packages is not tested until now. Therefore, the AdLit project seeks to obtain data which will help to address this research gap. Following the practical research methodology design-based research, multiple iterations (i.e. continuous cycles of investigation, development, testing and refinement) will be set up to determine the effectiveness of the learning material that we have developed based on suggestions of previous studies.

11.8. REGULATION AND SELF-REGULATION

V. Verdoodt, P. Valcke, E. Lievens & I. Lambrecht

The mapping of European and national legislative and self-regulatory provisions has confirmed that a myriad of obligations are imposed on advertisers, first and foremost with regard to the identification of commercial communications, but also with regard to the content of the commercial message. However, this does not mean that, automatically, the level of protection and empowerment of minors is high. First, both the legislative and self-regulatory principles are often formulated in a general or abstract manner ("commercial communications must be recognisable as such"), and guidelines for the implementation in practice thereof is often lacking. This leads to a situation where different methods, "labels" or "cues" are used by advertisers, across different media channels, which may be confusing for consumers, and especially for children. Second, certain definitions in legislative or self-regulatory instruments are formulated in a manner which leads to uncertainty as to its scope of application for new, digital advertising formats. Third, although different regulators (both government regulatory bodies, such as the Flemish Media Regulator, and self-regulatory bodies, such as the Jury for Ethical Practices in Advertising) are competent to enforce the existing provisions, in practice few decisions with regard to commercial communications, minors and new advertising formats have been issued in recent years. This provides both advertisers and researchers with little guidance on how the (often general) provisions should be implemented in practice. As indicated above, at the moment, it is unclear which reasons underlie this finding. Possible reasons could be a lack of awareness of citizens that complaints with regard to digital advertising formats may be submitted, for instance to the JEP; uncertainty for regulators whether specific rules are applicable to new advertising formats; lack of resources of regulators to instigate investigations on their own initiative; or compliance by advertisers.

With regard to advertising formats that collect and process children's personal data, different legislative obligations and principles apply. First, there needs to be a legitimate ground for such processing, this means that there must be consent given, depending on the age of the child, by the parents or by both the parents and the child. From 25 May 2018, when the General Data Protection Regulation will apply in practice, processing data of children under a certain age (ranging from 13 to 16 years of age, depending on the choice made by the Member State in question) will only be possible when verifiable parental consent is obtained. Second, a number of principles must be adhered to: for instance, the personal data of children need to be processed fairly and lawfully, the data can only be collected for specified, explicit and legitimate purposes and must not further processed in a way incompatible with the initially specified purpose(s), and only adequate, relevant and non-excessive data can be collected and/or further processed. According to the ICC behavioural advertising should not be aimed at children under 12 years.

Finally, the application and enforcement of the existing legislative and self-regulatory provisions will always be assessed on a case-by-case basis: first, it will be determined whether a specific provision is applicable, and second, it will be determined whether the commercial message – the content, the identification or other elements – infringes the provision in question.

11.9. RISK ASSESSMENT

When putting together all the results of the different AdLit studies (measurement of minors' advertising literacy with the analysis of the Flemish curriculum and parents' and ad professionals' perceptions of advertising), we come to the following conclusion and risk assessment.

Television commercials pose a lower risk for minors as they are clearly distinguished from media content and labelled as commercial content. Moreover, many schools teach children how to cope with these commercials from the age of eight. However, this is on an ad hoc basis in different courses and not yet integrated in the end goals.

The more embedded and hybrid advertising formats pose a greater threat. Not only because schools do not yet teach children how to cope with these formats, minors also have less experience with them and they are not clearly indicated as advertising. In addition, parents' knowledge of these embedded formats is rather limited and they rarely discuss these advertising formats with their children. Accordingly, we can conclude that the risk assessment for these embedded and hybrid advertising formats is high. In particular, we found that while children have a moderate advertising literacy level for banners; the advertising literacy level for brand integration, advertiser funded programs, social media advertising and advergames is rather low, posing a greater risk for children and teenagers.

Not only for traditional television commercials, but also for the embedded and hybrid formats, results reveal that children are better able to recognize the ad format and understand its persuasive intent when they grow older. However, this is not the case for affective and moral advertising literacy which appeared to be rather low when minors were exposed to specific advertising formats. This may pose a risk, especially for teens since parents and advertising professionals think that teenagers from the age of 12-13 are capable of understanding advertising formats and critically reflecting on them.

This risk assessment shows the need for initiatives to improve children's and teenagers' advertising literacy for new advertising formats. AdLit suggests an all-round approach in which minors are stimulated to develop their advertising literacy by their environment. An all-round approach suggests including minors' immediate environment (i.e. parents and schools) and their non-immediate environment (i.e. advertising professionals and policy makers). In the risk analysis, we therefore, also took into account the perceptions of parents, educators, advertising professionals and policy makers. To conclude this report, we will discuss the future policy guidelines.

11.10. POLICY GUIDELINES TO EMPOWER MINORS TO COPE WITH HYBRID ADVERTISING

The AdLit project aims to **empower minors to cope with embedded and hybrid advertising**. In particular, children and youngsters need to develop a high level of advertising literacy as this implies that they recognize and understand advertising, embrace a critical and nuanced attitude, are capable of formulating and expressing a (moral) judgment, and activate the knowledge and processing skills when needed. Therefore, we formulate different actions that are needed to empower minors. Along this line it is important to note that the AdLit project strongly focusses on the effects of advertising format (e.g. difference in advertising literacy towards TV advertisement and advergames). However, knowledge on the persuasive tactics used within each of the formats (e.g., celebrity endorsement or emotional tactics) is also a crucial part of advertising literacy and future studies should therefore take the impact of advertising tactics into account.

11.10.1. DEVELOPMENT OF AN ADVERTISING DISCLOSURE

Recognition is a first and indispensable facet in the effective coping with advertising. The risk analysis, however, showed that this recognition is difficult for advertising formats that are fully embedded in the media content (e.g., product placement) or interactively engage children with the commercial content (e.g., advergames). Accordingly, AdLit suggests to develop an advertising

disclosure that helps minors to recognize advertising. This is particularly important for the integrated and interactive advertising formats.

AdLit will conduct research on how this disclosure should look like (**form**), when it should be placed (**timing**) and what the **content** should be. It is important that the meaning of the disclosure is clear for all minors and that the same or a similar disclosure is used for all advertising formats targeting children. Next to **facilitating ad recognition**, this disclosure should help children **triggering the dispositional advertising literacy**. Therefore, in educational packages, the disclosure should be linked to implementation intentions, or if-then rules. This could entail simple rules for the young children and more sophisticated rules for the older ones. These rules should help them select the appropriate coping strategy.

11.10.2. INCREASING GENERAL KNOWLEDGE OF ADVERTISING AMONG MINORS

To be able to effectively cope with advertising, it is important that minors develop an extensive dispositional advertising literacy. We underline the importance of all aspects of this dispositional advertising literacy: the **cognitive, moral and affective sub-dimension**. One possibility to increase children's dispositional advertising literacy is through the educational system. Previously, education did not pay attention to new advertising media formats. Currently AdLit is **developing and testing educational packages**, for both primary and secondary schools to increase children's advertising literacy. In the development of educational packages, the living environment of children and adolescents will be taken into account. Therefore, other new advertising formats will be mentioned in educational packages for primary and secondary education. Whereas especially advertising in games seems to be important in learning material for primary education, the focus in secondary education will be on social media advertising. These materials will also support teachers by supplying them with knowledge on how to empower minors. Unlike past educational programs on advertising literacy, these packages will not only pay attention to the cognitive advertising literacy sub-dimension, but also to the affective and moral dimension of advertising literacy. This latter implies that minors learn how advertising affects them and how they can regulate these emotions and help them to judge the fairness of advertising techniques. Further, it is crucial to **train children's coping skills**, by letting them practice. This practice will help them build their dispositional advertising literacy and select the right coping tactics when confronted with advertising. In addition, our research revealed that children are under the impression that if they did not see the brand, that they are not influenced by advertising. It is important that they are aware that this is not the case.

However, it is also crucial to target the minors **out of this school context** and create awareness and knowledge on the topic in a playful and fun manner. In this respect, AdLit already developed **two serious mini-game platforms** to help children and youngsters cope with advertising and develop their dispositional advertising literacy. In addition, **awareness campaigns** will be developed, in cooperation with vloggers to raise awareness on advertising literacy among children and youngsters.

11.10.3. INCREASING PARENT'S ADVERTISING LITERACY AND THEIR PARENTAL MEDIATION

Our findings suggest that parents are knowledgeable about most new advertising formats. However, they indicate that their knowledge of advergames is rather low. Currently only the advertising literacy of parents of children younger than 12 years old was examined. Hence, further AdLit research should examine the level of advertising literacy of parents of youngsters. They are more exposed to social media advertising and behavioural targeting giving their more extensive online media consumption. In general, AdLit aims to **increase the level of advertising literacy of parents**. In addition, increasing the awareness of the importance of advertising literacy and its different dimensions will be crucial to stimulate parents to talk about advertising in general and the specific advertising formats with their children. This type of active parental mediation will increase the role of the parents as socialization agents to educate their children to become critical consumers.

The results of the AdLit studies show however, that parents are not always that critical towards advertising themselves. They mainly try to avoid advertising, or emphasizes the negative aspects of advertising without explaining the underlying intentions, or the persuasive strategies used when discussing it with their children. Therefore, the AdLit researchers need to **stress the importance of parental mediation**. By developing specific guidelines parents might be stimulated to discuss advertising strategies more in depth, focusing on the different dimensions of advertising literacy (cognitive, affective and moral). In addition, they need to be triggered to talk about the new, integrated advertising formats.

AdLit is currently using a series of serious games which parents can play together with their children, and stimulate both parental advertising literacy as their children's advertising literacy. The launch of these serious games was supported by a series of information flyers explaining new advertising formats and tips and tricks for parents on how to discuss advertising with their children. Both games as flyers are being distributed to parents and children by stakeholders linked to the AdLit project. Further initiatives will be developed to **educate parents about the importance of advertising literacy and increase their advertising literacy level**. Awareness campaigns will motivate parents to take up their role as consumer socialization agents. Further, they need information about potential complain procedures and how they should start such procedure and which organization is responsible for the follow-up on this.

11.10.4. INCREASING AWARENESS AMONG ADVERTISING PROFESSIONALS

Compared to adults, children are less skilled to judge the fairness of advertising (i.e. moral advertising literacy). Therefore, we want to make a plea for “**ethical and transparent advertising**” instead of covert marketing techniques. Advertising professionals do not act as socialization agents and are not a part of the children's immediate environment. Nevertheless, they are responsible for which advertising information reaches the children and how this information is distributed. If advertisers use advertising formats that are more clearly understandable for children, then children will be more capable to make informed consumers decisions.

In addition, the mapping of the legal framework showed that there is legislation at different levels (European, Federal, Regional, etc.) related to embedded and hybrid advertising targeting minors. For advertising professionals, it is difficult to see the forest for the trees. It is therefore, important to give them a **clear overview of the legal and self-regulatory framework**. AdLit already developed a short one-pager with an overview of the most important laws in this context. However, there is a need for a **legal vademecum** that bundles all the guidelines.

11.10.5. POLICY MAKERS

As mentioned, policy makers and regulatory bodies have issued different sets of rules with regard to commercial communication aimed at minors. However, this does not automatically lead to a high level of protection and empowerment of minors.

First of all, more awareness is needed among citizens regarding the available complaint mechanisms. Policy makers and regulatory bodies should provide citizens with clear and accessible information on how to file complaints against unlawful digital advertising formats. Second, a better coordination between existing regulatory bodies, i.e. the Jury for Ethical Practices in Advertising, the Flemish Media Regulator and even the Privacy Commission (for instance in relation to behavioural advertising) is needed. Through improved dialogue and joint consultations, more concrete guidelines and common recommendations on the implementation of the often general or abstract principles of the regulatory framework and their application to new advertising formats could be developed. Finally, more empirical research on the effect of advertising cues on minors is needed before such a measure could be embedded into the legal or self- and co-regulatory framework on commercial communication.

In conclusion

To empower children, teenagers and vulnerable audiences, both the immediate surrounding (parents and children) and non-immediate surroundings (policy makers and advertising professionals) should take action to increase minor's advertising literacy towards new media formats. The following two years, AdLit will work on initiatives involving not only children, teenagers and vulnerable minors, but also parents, advertising professionals, educational professionals, policy makers and all other stakeholders able to empower children's advertising literacy.

REFERENCES

- ARTICLE 29 DATA PROTECTION WORKING PARTY (2008). Working Document 1/2008 on the protection of children's personal data (General guidelines and the special case of schools), retrieved from <http://bit.ly/1h8V0pf>.
- ARTICLE 29 DATA PROTECTION WORKING PARTY (2013). Opinion 02/2013 on apps on smart devices, retrieved from <http://bit.ly/1bu35Be>.
- ARTICLE 29 DATA PROTECTION WORKING PARTY (2009). Opinion 2/2009 on the protection of children's personal data 10.
- Adams, B., Schellens, T. & Valcke, M. (2015a). Een analyse van het Vlaamse onderwijscurriculum anno 2015. In welke mate is reclamewijsheid aanwezig in het curriculum? Een rapport in het kader van het AdLit onderzoeksproject. Document available on www.AdLit.be.
- Adams, B., Schellens, T. & Valcke, M. (2015b). Reclame-educatie anno 2015: een overzicht van het (inter)nationaal educatief materiaal over reclame. Een rapport in het kader van het AdLit onderzoeksproject. Document available on www.AdLit.be.
- Adams, B., Schellens, T., Valcke, M. (2016). Het bevorderen van reclamewijsheid als taak van het Onderwijs? Een analyse van het Vlaamse curriculum. Publicatie ingediende voor Pedagogische Studiën.
- Anderson, J. R., & Bower, G. H. (1973). Human Associative Memory. Retrieved from <http://eric.ed.gov/?id=ED078371>
- Ali, M., Blades, M., Oates, C., & Blumberg, F. (2009). Young children's ability to recognize advertisements in web page designs. *British Journal of Developmental Psychology*, 27, 71–83.
- Alwitt, L. F., & Donley, T. D. (1996). *The Low-Income Consumer. Adjusting The Balance Of Exchange*. London: Sage.
- An, S., Jin, H. S., & Park, E. H. (2014). Children's Advertising Literacy for Advergaming: Perception of the Game as Advertising. *Journal of Advertising*, 43(1), 63–72.
- An, S., & Stern, S. (2011). Mitigating the Effects of Advergaming on Children. *Journal of Advertising*, 40(1), 43–56.
- Andronikidis, A. I., & Lambrianidou, M. (2010). Children's Understanding of Television Advertising: A Grounded Theory Approach. *Psychology & Marketing*, 27(4), 299–322.
- Apestaartjaren. (2014). Onderzoeksrapport Apestaartjaren 5. Gent.
- Apestaartjaren. (2016). Onderzoeksrapport Apestaartjaren 6. Gent.
- Auty, S., & Lewis, C. (2004). Exploring children's choice: The reminder effect of product placement. *Psychology & Marketing*, 21(9), 697–713.
- Bansal, R., John, S., & Ling, P. M. (2005). Cigarette advertising in Mumbai, India: targeting different socioeconomic groups, women, and youth. *Tobacco Control*, 14, 201–206.
- Barbeau, E. M., Wollin, K. Y., Naumova, E. N., & Balbach, E. (2005). Tobacco advertising in communities: associations with race and class. *Preventive Medicine*, 40(1), 16–22.
- Bartholomew, A., & O'Donohoe, S. (2003). Everything Under Control: A Child's Eye View of Advertising. *Journal of Marketing Management*, 19(3–4), 433–457.
- Batada, A., & Borzekowski, D. (2008). Snap! Crackle! What? Recognition of cereal advertisements and understanding of commercials' persuasive intent among urban, minority children in the US. *Journal of Children & Media*, 2(1), 19–36.
- Lissens, S. & Bauwens, J. (2015). Mediabezit en –gebruik bij minderjarigen: de rol van de socio-economische status. Een rapport in het kader van het AdLit onderzoeksproject. Document available on www.AdLit.be.
- Berger, J. (2014). Word of mouth and interpersonal communication: : A review and directions for future research. *Journal of Consumer Psychology*, 24(4), 586–607.
- BEUC (2010). Data collection, targeting and profiling of consumers online BEUC discussion paper, 6 Irish Data Protection Commissioner (2015). 'GPEN Privacy Sweep 2015' <https://www.dataprotection.ie/docs/04-09-2015-Concerns-over-childrens-apps-and-websites-/1485.htm> accessed 24.09.2015.
- Bijmolt, T. H. A., Claassen, W., & Brus, B. (1998). Children's Understanding of TV Advertising: Effects of Age, Gender, and Parental Influence. *Journal of Consumer Policy*, 21(2), 171–194.
- Blades, M., Oates, C., & Li, S. (2013). Children's recognition of advertisements on television and on Web pages. *Appetite*, 62, 190–193.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.) *Handbook of Theory and Research for the Sociology of Education*.

New York: Greenwood, 241-258.

- Boush, D., Friestad, M., & Rose, G. (1994). Adolescent Scepticism Toward Tv-Advertising and Knowledge of Advertiser Tactics. *Journal of Consumer Research*, 21(1), 165–175.
- Bower, G. H. (1981). Mood and memory. *American Psychologist*, 36(2), 129–148.
- Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing*, 21(3), 2–20.
- Brucks, M., Armstrong, G. M., & Goldberg, M. E. (1988). Children's Use of Cognitive Defences Against Television Advertising: A Cognitive Response Approach. *Journal of Consumer Research*, 14(4), 471–482.
- Buijzen, M., & Valkenburg, P. M. (2005). Parental mediation of undesired advertising effects. *Journal of Broadcasting & Electronic Media*, 49(2), 153–165.
- Buijzen, M. (2009). The effectiveness of parental communication in modifying the relation between food advertising and children's consumption behaviour. *British Journal of Developmental Psychology*, 27, 105-121.
- Buijzen, M., Rozendaal, E., Moorman, M., & Tanis, Martin (2008). Parental versus Child Reports of Parental Advertising Mediation: Exploring the Meaning of Agreement. *Journal of Broadcasting & Electronic Media*, 52(4), 509-525.
- 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), 427–450.
- Buijzen, M. & Valkenburg, P. (2003). The effects of television advertising on materialism, parent-child conflict, and unhappiness: A review of research. *Journal of Applied Developmental Psychology*, 24(4), 437-456.
- Bulmer, S. (2001). Children's Perceptions of Advertising, Working paper series no 01.05, Department of Commerce, Massey University at Albany, Auckland, New Zealand. Retrieved from https://www.researchgate.net/profile/Sandy_Bulmer/publication/228594038_Children's_perceptions_of_advertising/links/0c96052faf0d5675ee000000.pdf
- Calkins, S. D., & Hill, A. (2007). Caregiver influences on emerging emotion regulation. In J.J. Gross (Ed), *Handbook of emotion regulation* (pp. 229-249), New York: The Guilford Press.
- Calvert, S. L. (2008). Children as Consumers: Advertising and Marketing. *The Future of Children*, 18(1), 205–234.
- Campbell, M.C. (1999). Perceptions of Price Unfairness: Antecedents and Consequences. *Journal of Marketing Research*, 36(2), 187-199.
- Campbell, M. C., & Kirmani, A. (2000). Consumers' use of persuasion knowledge: The effects of accessibility and cognitive capacity on perceptions of an influence agent. *Journal of Consumer Research*, 27(1), 69–83.
- Carter, O. B. J., Patterson, L. J., Donovan, R. J., Ewing, M. T., & Roberts, C. M. (2011). Children's understanding of the selling versus persuasive intent of junk food advertising: implications for regulation. *Social Science & Medicine* (1982), 72(6), 962–968.
- Chartrand, T. L. (2005). The role of conscious awareness in consumer behavior. *Journal of Consumer Psychology*, 15(3), 203-210.
- Cialdini, R. B. (2006). *Influence: The Psychology of Persuasion*, Revised Edition (Revised edition). New York: Harper Business.
- Cornish, L. S. (2014). "Mum, can I play on the internet?" Parents' understanding, perception and responses to online advertising designed for children'. *International Journal of Advertising*, 33(3), 437-473.
- Cowley, E., & Barron, C. (2008). When product placement goes wrong - The effects of program linking and placement prominence. *Journal of Advertising*, 37(1), 89-98.
- D'Alessio, M., Laghi, F., & Baiocco, R. (2009). Attitudes toward TV advertising: A measure for children. *Journal of Applied Developmental Psychology*, 30(4), 409-418.
- Daems, K., & De Pelsmacker, P. (2015a). Marketing communication techniques aimed at children and teenagers. Een rapport in het kader van het AdLit onderzoeksproject. Document available on www.AdLit.be.
- Daems, K. & De Pelsmacker, P. (2015b) – Advertising Professionals' perceptions of the use of new advertising formats aimed at minors: A quantitative and qualitative approach - Een rapport in het kader van het AdLit onderzoeksproject. Document available on www.AdLit.be.
- Daems, K., Moons, I., De Pelsmacker, P. & Du Bois, E. (2016). Co-creating advertising literacy awareness campaigns with children, teenagers & professionals. Submitted for publication in *Children & Society*.
- De Houwer, J., Thomas, S., & Baeyens, F. (2001). Association learning of likes and dislikes: A review of 25 years of research on human evaluative conditioning. *Psychological bulletin*, 127(6), 853.
- De Jans, S., Hudders, L., & Cauberghe, V. (2016a). The Immediate versus Delayed Effects of an Advertising Literacy Training on Children's Responses to Product Placement. Submitted for *Journal of Advertising*.
- De Jans, S., Hudders, L., & Cauberghe, V. (2016b). Hoe gaan jongeren om met nieuwe reclamevormen? Een grootschalig onderzoek

naar de impact van mediabezit en leeftijd op de reclamewijsheid van jongeren en hoe ze omgaan met reclame. Ingediend voor Tijdschrift voor Communicatiewetenschap.

- De Pauw, P. De Wolf, R. Hudders, L. and Cauberghe, V. (2016). Children's knowledge and judgment of contemporary advertising formats and tactics. Submitted for publication in *New Media & Society*.
- Dias, M., & Agante, L. (2011). Can advergames boost children's healthier eating habits? A comparison between healthy and non-healthy food. *Journal of Consumer Behaviour*, 10(3), 152–160.
- Dijksterhuis, A., Smith, P. K., van Baaren, R. B., & Wigboldus, D. H. J. (2005). The unconscious consumer: Effects of environment on consumer behaviour. *Journal of Consumer Psychology*, 15(3), 193–202.
- Durkin, S. J., Biener, L., & Wakefield, M. A. (2009). Effects of Different Types of Antismoking Ads on Reducing Disparities in Smoking Cessation Among Socioeconomic Subgroups. *Research & Practice*, 99(12), 2217–2223.
- Donohue, T. R., Meyer, T. P. & Henke, L. L. (1978). Black and White Children: Perceptions of TV Commercials. *Journal of Marketing*, 42(4), 34–40.
- Dorr, A. (1986). *Television and children: A special medium for a special audience*. Sage Publications (CA).
- Eurobarometer (2014). *Media use in Europe*. Brussels: European Commission. Retrieved from
- European Social Survey. (2012). ESS Round 6: European Social Survey Round 6 Data. Norwegian Social Science Data Services, Norway.
- Evans, N. J., Carlson, L., & Hoy, M. G. (2013). Coddling Our Kids: Can Parenting Style Affect Attitudes Toward Advergames? *Journal of Advertising*, 42(2–3), 228–240.
- Evans, N. J., & Park, D. (2015). Rethinking the Persuasion Knowledge Model: Schematic Antecedents and Associative Outcomes of Persuasion Knowledge Activation for Covert Advertising. *Journal of Current Issues & Research in Advertising*, 36(2), 157–176.
- Flash Eurobarometer (2008). Towards a safer use of the Internet for children in the EU – a parents' perspective, Analytical report, European Commission. Retrieved from http://ec.europa.eu/public_opinion/flash/fl_248_en.pdf
- FOD Economie. (2014a). Barometer van de informatiemaatschappij 2014.
- FOD Economie. (2014b). ICT-gebruik in huishoudens. Retrieved from http://statbel.fgov.be/nl/statistieken/cijfers/arbeid_leven/ict/
- Folkvord, F., Anschütz, D. J., Buijzen, M., & Valkenburg, P. M. (2013). The effect of playing advergames that promote energy-dense snacks or fruit on actual food intake among children. *The American Journal of Clinical Nutrition*, 97(2), 239–245.
- Fransen, M. L., Verlegh, P. W. J., Kirmani, A., & Smit, E. G. (2015). A typology of consumer strategies for resisting advertising, and a review of mechanisms for countering them. *International Journal of Advertising*, 34(1), 6–16.
- Freeman, D., & Shapiro, S. (2014). Tweens' Knowledge of Marketing Tactics Sceptical Beyond Their Years. *Journal of Advertising Research*, 54(1), 44–55.
- Friestad, M., & Wright, P. (1994). The Persuasion Knowledge Model - How People Cope with Persuasion Attempts. *Journal of Consumer Research*, 21(1), 1–31.
- Friestad, M., & Wright, P. (2005). The next generation: Research for twenty-first-century public policy on children and advertising. *Journal of Public Policy & Marketing*, 24(2), 183–185.
- GfK. (2013). Trends in digitale media.
- Gigerenzer, G. (2008). Why Heuristics Work. *Perspectives on Psychological Science*, 3(1), 20–29.
- Gorn, G. J., & Goldberg, M. E. (1977). The Impact of Television Advertising on Children from Low Income Families. *Journal of Consumer Research*, 4(2), 86–88.
- Goldfarb, A. (2013). What is Different About Online Advertising? *Review of Industrial Organization*, 44(2), 115–129.
- Griskevicius, V., Goldstein, N. J., Mortensen, C. R., Sundie, J. M., Cialdini, R. B., & Kenrick, D. T. (2009). Fear and Loving in Las Vegas: Evolution, Emotion, and Persuasion. *Journal of Marketing Research*, 46(3), 384–395.
- Ham, C.-D., Nelson, M. R., & Das, S. (2015). How to Measure Persuasion Knowledge. *International Journal of Advertising*, 34(1), 17–53.
- Hargittai, E., & Hinnant, A. (2008). Digital Inequality. Differences in Young Adults' Use of the Internet. *Communication Research*, 35(5), 602–621.
- Hudders, L., Cauberghe, V. & Panic, Katerina (2015). An experimental study on the effects of age on brand placement effectiveness: The moderating impact of parental mediation. Paper presented at Icoria 2015, Londen.
- Hudders, L., Cauberghe, V., Panic, K. & De Vos, W. (2015). Children's Advertising Literacy for New Advertising Formats: The Mediating Impact of Advertising Literacy on the (Un)Intended Effects of Advergames and Advertising Funded Programs. In

- Verlegh, P., Voorveld, H. & Eisend, M. (Eds.), *Advances in Advertising Research: The Digital, The Classic, The Subtle and The Alternative*. The Netherlands. <https://biblio.ugent.be/publication/5811561/file/5814869.pdf>
- Hudders, L., Cauberghe, V. & Panic, K. (2016a). How Advertising Literacy Training Affect Children's Responses to Television Commercials versus Advergames. *International Journal of Advertising*, forthcoming (SSCI impact factor 2014: 1.094).
- Hudders, L., De Pauw, P., Cauberghe, V., Panic, K., Zarouali, B. & Rozendaal, E. (2016b) Children's Processing of New Advertising Formats: Automatic Techniques to Improve Children's Dispositional and Situational Advertising Literacy. Submitted for publication in *Journal of Advertising*.
- Hamman, D., & Plomion, B. (2013). *The Retargeting Barometer Report* (pp. 1–21). Chango & Digiday.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (1 edition). New York: The Guilford Press.
- Henriksen, L. (1996). Naive theories of buying and selling: Implications for teaching critical-viewing skills. *Journal of Applied Communication Research*, 24(2), 93–109.
- Hernandez, M. D., & Chapa, S. (2009). The Effect of Arousal on Adolescent's Short-Term Memory of Brand Placements in Sports Advergames. In N. K. Pope, K.-A. L. Kuhn, & J. J. H. Forster (Eds.), *Digital sport for performance enhancement and competitive evolution : intelligent gaming technologies*. Hershey: IGI Global.
- Hernandez, M. D., & Chapa, S. (2010). Adolescents, advergames and snack foods: Effects of positive affect and experience on memory and choice. *Journal of Marketing Communications*, 16(1-2), 59–68.
- Hobbs, R., Broder, S., Pope, H., & Rowe, J. (2006). How adolescent girls interpret weight-loss advertising. *Health education research*, 21(5), 719-730.
- John, D. R. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *Journal of Consumer Research*, 26(3), 183–213.
- Karrh, J. A. (1998). Brand placement: A review. *Journal of Current Issues & Research in Advertising*, 20(2), 31-49.
- Keller, K. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), 1–22.
- Knoll, J. (2015). Advertising in social media: a review of empirical evidence. *International Journal of Advertising*, 0(0), 1–35.
- Kohlberg, L. (1971). *From Is to Ought: How to Commit the Naturalistic Fallacy and Get Away with It in the Study of Moral Development*. New York: Academic Press.
- Kunkel, D. (1988). Children and Host - Selling Television Commercials. *Communication Research*, 15(1), 71–92.
- Kunkel, D., Wilcox, B. L., Cantor, J., Palmer, E., Linn, S., & Dowrick, P. (2004). Report of the APA task force on advertising and children. Washington, DC: American Psychological Association. Retrieved from http://www.sfu.ca/cmns/faculty/kline_s/320/06-spring/resources/sup_readings/childrenads.pdf
- Kunkel, D. (2010). Commentary Mismeasurement of children's understanding of the persuasive intent of advertising. *Journal of Children and Media*, 4(1), 109-117.
- Lang, A. (2000). The limited capacity model of mediated message processing. *Journal of Communication*, 50(1), 46–70.
- Lapierre, M. A. (2015). Development and Persuasion Understanding: Predicting Knowledge of Persuasion/Selling Intent From Children's Theory of Mind. *Journal of Communication*, 65(3), 423–442.
- Lawlor, M.-A., & Prothero, A. (2008). Exploring children's understanding of television advertising - beyond the advertiser's perspective. *European Journal of Marketing*, 1203-1223.
- Lenhart, A. (2015). *Teens, Social Media & Technology Overview 2015* (pp. 1–47). PEW Research Center.
- Livingstone, S., & Helsper, E. J. (2006). Does advertising literacy mediate the effects of advertising on children? A critical examination of two linked research literatures in relation to obesity and food choice. *Journal of Communication*, 56(3), 560–584.
- Mangleburg, T. F., Grewal, D., & Bristol, T. (1997). Socialization, gender, and adolescent's self-reports of their generalized use of product labels. *Journal of Consumer Affairs*, 31(2), 255–279.
- Mallinckrodt, V., & Mizerski, D. (2007). The effects of playing an advergame on young children's perceptions, preferences, and requests. *Journal of Advertising*, 36(2), 87–100.
- Martin, M. C. (1997). Children's Understanding of the Intent of Advertising: A Meta-Analysis. *Journal of Public Policy & Marketing*, 16(2), 205-216.
- Matthes, J., & Naderer, B. (2015). Children's consumption behaviour in response to food product placements in movies. *Journal of Consumer Behaviour*, 14(2), 127–136.
- McAlister, A. R., & Cornwell, B. T. (2009). Preschool Children's Persuasion Knowledge: The Contribution of Theory of Mind. *Journal of Public Policy & Marketing*, 28(2), 175-185.

- McKenney, S., & Reeves, T.C. (2012). *Conducting educational design research*. London: Routledge.
- Meeus, W., Walrave, M., Van Ouytsel, J., & Driesen, A. (2014). Advertising literacy in schools: Evaluating free online educational resources for advertising literacy. *Journal of Media Education*, 5(2), 5-12.
- Mehta, K., Coveney, J., Ward, P., Magarey, A., Spurrier, N., & Tuesday, U. (2010). Australian children's views about food advertising on television, *Appetite*, 55 (1), 49-55.
- Mertens, S., & D'Haenens, L. (2010). The Digital Divide Among Young People in Brussels: Social and Cultural Influences on Ownership and Use of Digital Technologies. *Communications*, 35(2), 187-207.
- Moore, E. S. (2004). Children and the Changing World of Advertising. *Journal of Business Ethics*, 52(2), 161-167.
- Morgenstern, M., Isensee, B., Sargent, J. D., & Hanewinkel, Reiner (2011). Attitudes as Mediators of the Longitudinal Association Between Alcohol Advertising and Youth Drinking. *Archives of Pediatrics & Adolescent Medicine*, 165(7), 610-616.
- Mortelmans, D. (2007). *Handboek kwalitatieve onderzoeksmethoden*: Acco-Leuven.
- Moses, L. J., & Baldwin, D. A. (2005). What can the study of cognitive development reveal about children's ability to appreciate and cope with advertising? *Journal of Public Policy & Marketing*, 24(2), 186-201.
- Murray, E., Lo, B., Pollack, L. Donelan, K., & Lee, K. (2004). Direct-to-Consumer Advertising: Public Perceptions of Its Effects on Health Behaviours, Health Care, and the Doctor-Patient Relationship. *Journal of the American Board of Family Medicine*, 17(1), 6-18.
- Nairn, A., & Fine, C. (2008). Who's messing with my mind? The implications of dual-process models for the ethics of advertising to children. *International Journal of Advertising*, 27(3), 447-470.
- Nelson, M. R. (2016). Developing Persuasion Knowledge by Teaching Advertising Literacy in Primary School. *Journal of Advertising*, 45(2), 169-182.
- Nelson, M. R., & McLeod, L. E. (2005). Adolescent brand consciousness and product placements: awareness, liking and perceived effects on self and others. *International Journal of consumer studies*, 29(6), 515-528.
- Newman, N., & Oates, C. J. (2014). Parental mediation of food marketing communications aimed at children. *International Journal of Advertising*, 33(3), 579-598.
- Niederdeppe, J., Farrelly, M.C., Nonnemaker, J., Davis, K.C., & Wagner, L. (2011). Socioeconomic variation in recall and perceived effectiveness of campaign advertisements to promote smoking cessation. *Social Science & Medicine*, 72(5), 773-780.
- Oates, C., Blades, M., & Gunter, B. (2002). Children and television advertising: when do they understand persuasive intent? *Journal of Consumer Behaviour*, 1(3), 238-245.
- Oates, C., Blades, M., Gunter, B. & Don, J. (2003). Children's understanding of television advertising: a qualitative approach. *Journal of Marketing Communications*, 9(2), 59-71.
- Obermiller, C., & Spangenberg, E. (1998). Development of a Scale to Measure Consumer Scepticism Toward Advertising. *Journal of Consumer Psychology*, 7(2), 159-186.
- O'Donohoe, S., & Tynan, C. (1998). Beyond sophistication: dimensions of advertising literacy. *International Journal of Advertising*, 17(4), 467-482.
- Oprea, D. S. J., & Rozendaal, D. E. (2015). The Advertising Literacy of Primary School Aged Children. In I. B. Banks, P. D. Pelsmacker, & S. Okazaki (Eds.), *Advances in Advertising Research* (Vol. V) (pp. 191-201). Springer Fachmedien Wiesbaden. Retrieved from http://link.springer.com/chapter/10.1007/978-3-658-08132-4_14
- Owen, L. H., Lewis, C., Auty, S., & Buijzen, M. (2010). The Role of Personal Salience in Children's Implicit Processing of Brand Placements in Movies. Retrieved from http://citation.allacademic.com/meta/p_mla_apa_research_citation/4/0/2/8/0/p402801_index.html?phpsessid=8a05eagrhdvdi3a786lkn08002
- Owen, L., Lewis, C., Auty, S., & Buijzen, M. (2013). Is Children's Understanding of Nontraditional Advertising Comparable to Their Understanding of Television Advertising? *Journal of Public Policy & Marketing*, 32(2), 195-206.
- Paas, F. G., & Van Merriënboer, J. J. (1993). The efficiency of instructional conditions: An approach to combine mental effort and performance measures. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 35(4), 737-743.
- Panic, K., Cauberghe, V., & De Pelsmacker, P. (2013). Comparing TV Ads and Advergaming Targeting Children: The Impact of Persuasion Knowledge on Behavioural Responses. *Journal of Advertising*, 42(2-3), 264-273.
- Piaget, J. (1929). *The child's conception of the world*. London: Routledge & K. Paul.
- Pettigrew, S., Tarabashkina, L., Roberts, M., Quester, P., Chapman, K., & Miller, Caroline (2013). The effects of television and Internet food advertising on parents and children. *Public Health Nutrition*, 16(12), 2205-2212.
- Pornpitakpan, C. (2004). The Persuasiveness of Source Credibility: A Critical Review of Five Decades' Evidence. *Journal of Applied*

Social Psychology, 34(2), 243–281.

- Premack, D., & Woodruff, G. (1978). Does the Chimpanzee Have a Theory of Mind. *Behavioural and Brain Sciences*, 1(4), 515–526.
- Primack, B. A., Gold, M. A., Land, S. R., & Fine, M. J. (2006). Association of Cigarette Smoking and Media Literacy about Smoking among Adolescents. *Journal of Adolescent Health*, 39 (4), 465–472.
- Rifon, N. J., Quilliam, E. T., Pack, H.-J., Weatherspoon, L. J., Kim, S.-K., & Smreker, K. C. (2014). Age-dependent effects of food advergame brand integration and interactivity. *International Journal of Advertising*, 33(3),
- Ritson, M., & Elliott, R. (1999). The Social Uses of Advertising: An Ethnographic Study of Adolescent Advertising Audiences. *Journal of Consumer Research*, 26(3), 260–277.
- Robertson, T. S. & Rossiter, J. R. (1985). Consumer satisfaction among children. *Advances in Consumer Research*, 12, 279–284.
- Robertson, T. S., Rossiter, J. R., & Gleason, T. C. (1979). Children's receptivity to proprietary medicine advertising. *Journal of Consumer Research*, 6(3), 247–255.
- Robertson, T. S., & Rossiter, J. R. (1974). Children's tv commercials - Testing differences. *Journal of Communication*, 24(4), 137–144.
- Ross, R. P., Campbell, T., Wright, J. C., Huston, A. C., Rice, M. L., & Turk, P. (1984). When celebrities talk, children listen: An experimental analysis of children's responses to TV ads with celebrity endorsement. *Journal of Applied Developmental Psychology*, 5(3), 185–202.
- Rose, G. M., Bush, V. D., & Kahle, L. (1998). The Influence of Family Communication Patterns on Parental Reactions toward Advertising: A Cross-National Examination. *Journal of Advertising*, 27(4), 71–85.
- Rossiter, J. R., & Robertson, T. S. (1980). Children's dispositions toward proprietary drugs and the role of television drug advertising. *Public Opinion Quarterly*, 44(3), 316–329.
- Rossiter, J. R., & Robertson, T. S. (1976). Canonical analysis of developmental, social, and experiential factors in children's comprehension of television advertising. *Journal of Genetic Psychology*, 129(2), 317–327.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. (2008). Developmental changes in children's cognitive advertising competences. *Tijdschrift Voor Communicatiewetenschap*, 36(4), 270–283.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. (2009). Do children's cognitive advertising defences reduce their desire for advertised products? *Communications-European Journal of Communication Research*, 34(3), 287–303.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. (2010). Comparing Children's and Adults' Cognitive Advertising Competences in the Netherlands. *Journal of Children and Media*, 4(1), 77–89.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. (2011). Children's understanding of advertisers' persuasive tactics. *International Journal of Advertising*, 30(2), 329–350.
- Rozendaal, E., Lapierre, M. A., van Reijmersdal, E. A., & Buijzen, M. (2011). Reconsidering Advertising Literacy as a Defence Against Advertising Effects. *Media Psychology*, 14(4), 333–354.
- Rozendaal, E., Buijzen, M., & Valkenburg, P. (2012). Think-Aloud Process Superior to Thought-Listing in Increasing Children's Processing of Advertising. *Human Communication Research*, 38(2), 199–221.
- Rozendaal, E., Slot, N., van Reijmersdal, E. A., & Buijzen, M. (2013). Children's Responses to Advertising in Social Games. *Journal of Advertising*, 42(2–3), 142–154.
- Rozendaal, E., Oprea, S. J., & Buijzen, M. (2016). Development and Validation of a Survey Instrument to Measure Children's Advertising Literacy. *Media Psychology*, 19(1), 72–100.
- Sandberg, H., Gidlöf, K., & Holmberg, N. (2011). Children's Exposure to and Perceptions of Online Advertising. *International Journal of Communication*, 5(0), 21–50.
- Scaife, L. (2015). *Handbook Of Social Media And The Law*. Informa Law from Routledge, 346.
- Settle, P. J., Cameron, A. J., & Thornton, L. E. (2014). Socioeconomic differences in outdoor food advertising at public transit stops across Melbourne suburbs. *Australian and New Zealand Journal of Public Health*, 8(5), 414–418.
- Shen, G. C.-C., Chiou, J.-S., Hsiao, C.-H., Wang, C.-H., & Li, H.-N. (2016). Effective marketing communication via social networking site: The moderating role of the social tie. *Journal of Business Research*, 69(6), 2265–2270.
- Shin, W., Huh, J., & Faber, R. J. (2012). Developmental antecedents to children's responses to online advertising. *International Journal of Advertising*, 31(4), 719–740.
- Sundar, S. S., & Marathe, S. S. (2010). Personalization versus customization: The importance of agency, privacy, and power usage. *Human Communication Research*, 36(3), 298–322
- Slot, E., Rozendaal, E., van Reijmersdal, E., & Buijzen, M. (2013). Advertising in online social communities for children: persuasion knowledge and susceptibility to peer influence. *Tijdschrift voor Communicatiewetenschap*, 41(1), 19–40.

- Spielvogel, J., & Terlutter, R. (2013). Development of TV advertising literacy in children Do physical appearance and eating habits matter? *International Journal of Communication*, 32(3), 343-368.
- Standard Eurobarometer 78 (2012). Media Use in the European Union, European Commission, autumn 2012. Retrieved from http://ec.europa.eu/public_opinion/archives/eb/eb78/eb78_media_en.pdf
- Tucker, C. E. (2014). Social Networks, Personalized Advertising, and Privacy Controls. *Journal of Marketing Research*, 51(5), 546–562.
- Terlutter, R., & Capella, M. (2013). The Gamification of Advertising: Analysis and Research Directions of In-Game Advertising, Advergames, and Advertising in Social Network Games. *Journal of Advertising*, 42(2-3), 95-112.
- Terlutter, R., Diehl, S., Koinig, I., & Waiguny, M. K. J. (2016). Positive or Negative Effects of Technology Enhancement for Brand Placements? Memory of Brand Placements in 2D, 3D, and 4D Movies. *Media Psychology*, 1-29.
- Uribe, R., & Fuentes-García, A. (2015). The effects of TV unhealthy food brand placement on children. Its separate and joint effect with advertising. *Appetite*, 91, 165–172.
- Van Alsenoy, B. & Verdoodt, V. (2014). Liability and accountability of actors in social networking sites https://lirias.kuleuven.be/bitstream/123456789/475608/1/SPION_D6.3_Liability_actors_SNS_final.pdf
- Van Bauwel, S. (2010). De televisie eet je op: over jongeren en televisie. In K. Segers & J. Bauwens (Eds.), *Maak mij wat wijs: media kennen, begrijpen en zelf creëren* (pp. 133–142). Leuven: LannooCampus.
- Van Coillie, J., & Raedts, M. (2014). Zijn digikids nog boekenbeesten? Onderzoek naar de leesattitude, het (digitale) leesgedrag en de vrijetijdsbesteding van de Vlaamse jongeren tussen 9 en 12 (p. 66). Stichting Lezen.
- Vanhaelewyn, B., Pauwels, G., Maes, M., De Marez, L. (2014). Adoption and usage of media & ICT in Flanders. Unpublished report, Ghent, iMinds.
- Van Reijmersdal, E. A., Rozendaal, E., & Buijzen, M. (2012). Effects of Prominence, Involvement, and Persuasion Knowledge on Children's Cognitive and Affective Responses to Advergames. *Journal of Interactive Marketing*, 26(1), 33–42.
- Van Reijmersdal, E. A., Lammers, N., Rozendaal, E., & Buijzen, M. (2015). Disclosing the persuasive nature of advergames: moderation effects of mood on brand responses via persuasion knowledge. *International Journal of Advertising*, 34(1), 70–84.
- Vanwesenbeeck, I., Walrave, M., & Ponnet, K. (2015). Jongeren en reclame in sociaalnetwerkgames. *Tijdschrift Voor Communicatiewetenschap*, 43(4), 392–415.
- Vanwesenbeeck, I., Ponnet, K., & Walrave, M. (2016a). Go with the flow: How children's persuasion knowledge is associated with their state of flow and emotions during advergence play. *Journal of Consumer Behaviour*, 15(1), 38–47.
- Vanwesenbeeck, I., Walrave, M., & Ponnet, K. (2016b). Young Adolescents and Advertising on Social Network Games: A Structural Equation Model of Perceived Parental Media Mediation, Advertising Literacy, and Behavioural Intention. *Journal of Advertising*, 45(2), 183–197.
- Verdoodt, V., Lievens, E., & Helleman, L. (2015). Mapping and analysis of the current legal framework of advertising aimed at minors. A report in the framework of the AdLit research project. Document accessible at www.AdLit.be.
- Verdoodt, V., & Lievens, E. (2016). Mapping and analysis of the current self- and co-regulatory framework of commercial communications aimed at minors. A report in the framework of the AdLit research project. Document accessible at www.AdLit.be.
- Verhellen, Y., Oates, C., Pelsmacker, P., & Dens, N. (2014). Children's Responses to Traditional Versus Hybrid Advertising Formats: The Moderating Role of Persuasion Knowledge. *Journal of Consumer Policy*, 37(2), 235–255.
- Waiguny, M., Nelson, M., & Terlutter, R. (2010). Persuading Playfully? The Effects of Persuasion Knowledge and Positive Affect on Children's Attitudes, Brand Beliefs and Behaviours. *American Academy of Advertising. Conference Proceedings*, 67-70.
- Waiguny, M. K. J., Nelson, M. R., & Terlutter, R. (2014). The Relationship of Persuasion Knowledge, Identification of Commercial Intent and Persuasion Outcomes in Advergames—the Role of Media Context and Presence. *Journal of Consumer Policy*, 37(2), 257–277.
- Ward, S. (1974). Consumer Socialization. *The Journal of Consumer Research*. 1(2), 1-14.
- Wollslager, M. E. (2009). Children's Awareness of Online Advertising on Neopets: The Effect of Media Literacy Training on Recall. *SIMILE: Studies In Media & Information Literacy Education*, 9(2), 31–53.
- Wright, P. (1986). Schemer Schema - Consumers Intuitive Theories About Marketers Influence Tactics. *Advances in Consumer Research*, 13, 1–3.
- Wright, P., Friestad, M., & Boush, D. M. (2005). The development of marketplace persuasion knowledge in children, adolescents, and young adults, *Journal of Public Policy & Marketing*, 24(2), 222-233.

Young, B. M. (1990). Television advertising and children. Oxford University Press, USA.

Zarouali, B., Walrave, M., Poels, K. & Ponnet, K. (2016a) "Do you like cookies?" Adolescents' sceptical processing of retargeted Facebook-ads and the moderating role of privacy concern and a debriefing cue. Submitted for publication in Journal of Advertising.

Zarouali, B., Poels, K., Ponnet, K., & Walrave, M. (2016b). "You talking to me?" How peer communication affect adolescents' persuasion knowledge and attitudes toward social advertising.

Zarouali, B., Walrave, M., Poels, K., Ponnet, K., & Vanwesenbeeck, I. (2016c). Children's advertising literacy: recognition and understanding of banners and the role of need for cognition and advertising literacy classes. Tijdschrift voor communicatiewetenschap, 44(1), 24-45.

Legislation

Directive 2010/13/EC of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) (2010) O.J. L 95/1.

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L 119, available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.119.01.0001.01.ENG&toc=OJ:L:2016:119:TOC.