This item is the archived peer-reviewed author-version of:

Advertisers' perceptions regarding the ethical appropriateness of new advertising formats aimed at minors

Advertisers' perceptions regarding the ethical appropriateness of new advertising formats aimed at minors.

Kristien Daems and Patrick De Pelsmacker and Ingrid Moons

Marketing Department, Faculty of Applied Economics, University of Antwerp, Antwerp, Belgium
Faculty of Design Sciences, University of Antwerp, Antwerp, Belgium

Kristien Daems
Kristien Daems is a PhD Student at the marketing department at the faculty of applied economics at the University of Antwerp. Her research focuses on children's and teenagers' advertising literacy.

Prinsstraat 13, 2000 Antwerp, Belgium
+3232654878
Kristien.daems@uantwerpen.be

Patrick De Pelsmacker *Ph.D.*
Patrick De Pelsmacker is professor of marketing at the faculty of applied economics at the university of Antwerp. His research focuses upon marketing communication effectiveness, new advertising media and formats, ethical consumer behavior and social marketing.

Prinsstraat 13, 2000 Antwerp, Belgium
Tel. +323654022
Patrick.depelsmacker@uantwerpen.be

Ingrid Moons *Ph.D.*
Ingrid Moons is an assistant professor of marketing and consumer research at the faculty of applied economics and the faculty of design sciences at the university of Antwerp. Her research is situated in the domain of processes underlying the adoption of new products and services. Co-creation leading to innovation is one of the focal points in her research.

Prinsstraat 13, 2000 Antwerp, Belgium
Tel. +3232654149
Ingrid.moons@uantwerpen.be

<u>*Corresponding author:</u> Kristien Daems. Email: Kristien.daems@uantwerpen.be

Advertisers' perceptions regarding the ethical appropriateness of new advertising formats aimed at minors.

Abstract

Although they are key stakeholders, advertisers' views on the usage of novel (integrated and/or interactive) advertising towards minors has remained largely unexplored in academic research. This study aims to fill this gap by examining advertising professionals' opinions about the ethical appropriateness of using novel advertising formats aimed at children and teenagers, how to advance advertising literacy in minors, and their views of practices that are potentially privacy-invading, by means of both a quantitative online survey and qualitative in-depth interviews with Belgian advertising professionals. Results show that advertisers perceive that from 12 years onwards, minors are capable to understand novel advertising formats and it is ethically justified to use them. Remarkably, advertisers would inform minors already from the age of 10 years onwards about the commercial intention behind new advertising formats. Advertisers have strict opinions about collecting information online from minors. They advocate a combination of laws and self-regulation and governmental and educational campaigns to raise awareness and develop advertising literacy.

Keywords: advertising professionals; children; ethical appropriateness; novel advertising formats; teenagers; (self-)regulation

Introduction

In the advertising world, (self-)regulation, guidelines and codes exist with respect to advertising aimed at minors. Examples of self-regulation initiatives are the ICC code of Advertising and Marketing Communication practice, the EU Pledge, and the CARU guidelines (EU Pledge 2017; ICC 2017; The Childrens' Advertising Review Unit 2009). However, despite these initiatives to protect minors against potentially misleading and deceptive advertising, there still exists a lack of regulation on novel (online) integrated and/or interactive advertising formats (Calvert 2008; Füg 2008; TaylorWessing 2013). Additionally, online advertising practices are often used to collect and use personal data (Bright and Daugherty 2012; McStay 2012; Terlutter and Capella 2013), and are therefore potentially privacy-invading.

Consequently, the use of novel advertising formats raises questions about their ethical appropriateness, and about how advertising literacy should be improved, especially with children and teenagers (Eagle and Dahl 2015; Moses and Baldwin 2005; Nebenzhal and Jaffe 1998). Research on new advertising formats aimed at children and teenagers from an advertiser perspective is lacking. Moreover, advertising professionals' view on advertising aimed at minors has received scant attention in academic literature and is limited to traditional advertising. (Clarke and Gardner 2005; Geraci 2004; Gray 2005; Grimm 2004; Martínez 2016).

The present study contributes to developing insights into how Belgian advertising professionals perceive several aspects of the ethical ramifications of using novel advertising formats to target children and teenagers. The study can inform the advertising profession and public policy about these perceptions and be a starting point to influence or change them.

Children's and teenagers' understanding of advertising

From an early age onwards, children are confronted with advertising practices, whilst a majority of them is unconscious about the commercial and persuasive intent behind them (Crane and Kazmi 2010). In order to be able to cope in a correct way with promotional efforts, the development of advertising literacy is of crucial importance. *Advertising literacy* is the knowledge about advertising, the ability to recognize advertising techniques, and the capability to understand the persuasive intentions behind them (John 1999; Rozendaal, Buijzen, and Valkenburg 2011). Identifying and understanding advertising depends on the ability to distinguish advertising from program- or entertainment context (Moses and Baldwin 2005). The ability to do so depends on factors such as the subtlety of the persuasive message, the similarity between the commercial and entertaining message and the presence of a cue or separator to announce the advertising message (Shiying et al. 2014).

The Persuasion Knowledge Model (PKM) (Friestad and Wright 1994) describes how people identify and process advertising and which knowledge and experience an individual needs to cope with persuasive attempts: topic knowledge (knowledge about the topic of the message, e.g. product), agent knowledge (knowledge about the advertiser behind the persuasive attempt) and persuasion knowledge (knowledge about advertising formats and persuasive tactics) (Wright, Friestad, and Boush 2005). The cognitive skills and experience to acquire this knowledge develop through childhood and adolescence (John 1999; Moses and Baldwin 2005; Wright, Friestad, and Boush 2005). Compared to adults, children and teenagers have limited cognitive skills, less advertising experience and less developed advertising knowledge. This makes them less able to process advertising in a conscious manner and more vulnerable for and at a greater risk of being misled by persuasive communication (Kunkel et al. 2004; Moses and Baldwin 2005; Rozendaal, Buijzen, and Valkenburg 2010). As a consequence, it is more difficult for minors to recognize and

understand different advertising formats and advertisers' intentions and activate their persuasion knowledge and advertising literacy (John 1999; Kunkel et al. 2004; Terlutter and Capella 2013). According to John (1999) consumer socialization of children is a sequence of three different stages (perceptual, analytical and reflective) through which children develop from preschool (3 years old) until adolescence (16 years old). From the analytical stage (7-11 years) onwards children are able to analyze stimuli (e.g. an advertisement) on multiple dimensions. Only from the reflective stage (11-17 years) onwards children or teenagers have the ability to fully understand advertising and advertisers' persuasive attempts as their social and information processing skills are further developed.

Changing advertising practices

Nowadays, children and teenagers grow up in a – predominantly online - media environment (websites, social media, games, mobile platforms, etc.) in which they encounter new integrated and/or interactive advertising formats on a regular basis (Blades et al. 2014; Bucy, Kim, and Park 2011; Rideout 2014). In integrated formats, the lines between advertising and other informative or entertaining media content have become increasingly blurred (Blades et al. 2014; Kunkel et al. 2004; Moore 2004; Terlutter and Capella 2013). An example of this integration in traditional media is brand placement, the paid inclusion of brand identifiers in media content (television programs, movies) (Gupta and Lord 1998; Karrh 1998).

Besides, novel advertising formats persuade children and teenagers in an implicit manner by means of subtle affective associations (Nairn and Fine 2008). Interactive advertising formats give the receivers the opportunity to interact with the message and are often perceived as fun and enjoyable (Hudders, Cauberghe, and Panic 2016; Mallinckrodt and Mizerski 2007) Advergames are a typical example of online, interactive advertising formats aimed at children and teenagers. Advergames embed specific brand or product related items (e.g. logos, brand names, brand mascots) in a game (Mallinckrodt and Mizerski 2007). This

can lead to a circumventing of minor's persuasion knowledge activation (Owen et al. 2013; Panic, Cauberghe, and De Pelsmacker 2013). In a highly entertaining environment especially children may not be able to identify the commercial intention and lack the ability to activate and retrieve their persuasion knowledge (Waiguny, Nelson, and Terlutter 2012). It is harder to identify these (online) advertising formats as advertising and more difficult to understand their persuasive intent than it is for prominent (online) formats such as banner ads (Tutaj and van Reijmersdal 2012).

Online (integrated) advertising practices are also often used to collect personal data (Bright and Daugherty 2012; McStay 2012; Terlutter and Capella 2013) and are therefore liable to practices that are privacy-invading and that inappropriately use personal data the media user is not always aware of, for instance, by having minors first subscribe to a newsletter or submit personal information before they can participate in a contest or play a game. Here again, based on children's limited cognitive skills, it can be expected that children are less likely than adults to take the privacy risks involved into account (Steeves 2006).

Using integrated and/or interactive advertising formats, is often considered as inherently unethical, since they may hamper the activation of persuasion knowledge (Nairn and Fine 2008; Owen et al. 2013), and raise questions about when and how they can be used, and how advertising literacy should be improved (Eagle and Dahl 2015; Nebenzhal and Jaffe 1998; Palmer 2005). This is especially relevant when these formats are targeted at minors. John's analysis about minors' advertising literacy dates back to 1999 and the Persuasion Knowledge Model (Friestad and Wright 1994) was developed based on insights from traditional advertising (Rozendaal, Buijzen, and Valkenburg (2010). However, current advertising is no longer dominated by traditional mass media advertising, but by integrated and interactive advertising formats (Kunkel et al. 2004). Consequently, recognizing commercial messages as advertising, understanding the commercial and persuasive intention

behind integrated and online advertising, and the activation of persuasion knowledge is even more challenging for children and teenagers than before (Moses and Baldwin 2005). As a result, there may be an increased need to protect them and educate them about advertising to develop their advertising literacy (Crane and Kazmi 2010).

Existing (self-)regulation and guidelines

Both governmental institutions and the advertising industry have formulated principles regarding advertising aimed at minors. The ICC Code provides guidelines about ethical and responsible advertising directed at children for self-regulated organizations (ICC 2017). The Children's Advertising Review Unit is a self-regulated initiative in the United States which implies standards (CARU guidelines) regarding the ethicality of advertising aimed at children (Ji and Laczniak 2007; The Childrens' Advertising Review Unit 2009). In Belgium, the Belgian Pledge (derived from a similar initiative at European level, the EU Pledge) is a voluntary, joint initiative between the Union of Belgian Advertisers (UBA), FEVIA (Federation of food industry in Belgium) and COMEOS (representative for Belgian commerce and services) in which their members commit to not target advertising towards children under the age of twelve for food and beverages which do not meet the nutritional standards (so called HFSS products) or not to target products at children under the age of 12, regardless of the product (The Belgian Pledge 2017). In June 2017 the Belgian Pledge was updated and additional integrated and interactive (online) media channels (beyond television and print advertising) were add to the range of the Belgian Pledge (FEVIA 2017).

However, despite the existing (self-)regulation, codes and guidelines, there still is a lack of regulation on novel, integrated and/or interactive advertising formats (Calvert 2008; Füg 2008; TaylorWessing 2013). The specific characteristics of these formats warrant up-to-date legislation and/or self-regulation. Advertising professionals are key stakeholders in this debate. Their fundamental understanding of the ethical ramifications of the use of novel

advertising formats towards minors and their willingness to take them into account in developing advertising campaigns is crucial.

Advertising professionals' opinions regarding advertising aimed at minors: research questions

Advertising professionals' view on the ethical acceptability of advertising and advertising formats has received scant attention in academic research. Apart from Harris Interactive's study (Geraci 2004; Grimm 2004) and Martínez (2016) study, to the best of our knowledge, there are no published studies on advertisers' opinions regarding advertising practices aimed at children and teenagers, let alone their view with respect to new advertising formats. However, advertising professionals are the main decision makers with respect to the target groups, formats and stimuli used in their campaigns. Besides commercial concerns, one might expect that ethical considerations also play a role in these decisions. Consequently, developing insights into advertising professionals' opinions about the ethical appropriateness of novel advertising formats aimed at children and teenagers, how minors should be informed and how their advertising literacy should be improved, and how they could be protected by (self-)regulation, is important. The current study aims at exploring the practice and perception of advertising professionals regarding these issues, and aims to answer the following research questions:

1. Which new advertising formats are mostly used towards children and teenagers?

2. 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 new advertising formats ethically acceptable,

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

3. What are the characteristics of an ethical data collection and data protection policy aimed at minors?

4. How should advertising towards children and teenagers be regulated and how should advertising literacy be developed?

Method

The study uses a mixed method approach by means of both a quantitative online survey and follow-up qualitative interviews.

Online survey

Research population and sample

The research population is staff of Belgian advertisers and Belgian advertising agencies. The sampling frames for the online survey were the membership list of the UBA (Union of Belgian Advertisers) and a list of employees of advertising agencies retrieved from the website of the ACC (Association of Communication Companies). In total, 2,614 advertisers from 245 different companies and 160 advertising professionals working in 79 advertising agencies were invited by email to participate to an online survey. The survey consisted of forced response questions (except for the question were the respondents could leave their email address to participate in the follow-up study). As a result the respondents could not skip questions they did not wanted to answer. However, the respondents could stop and leave the survey any time. Each respondent received the questions of the survey in the same order. Only the order of the vignettes was randomized across respondents. As a results the questions at the beginning of the survey were answered by more respondents compared to questions at the end of the survey. One hundred and sixty one respondents started the survey. Seventy-one of them only partially completed it, because they dropped out after the introductory questions (44), after the vignettes (18), or after part of the last sections (9) of the questionnaire. Ninety

respondents completed the full survey. The analyses were carried out on the number of respondents who answered the question analyzed.

Questionnaire and measures

In the current study a minor is defined as an individual between six and eighteen years old. This group is divided into two subgroups, namely children (between six and twelve years old) and teenagers (between thirteen and eighteen years old).

After a number of introductory questions, nine vignettes were presented in randomized order. Vignettes are descriptions of concrete situations or scenarios presented to the respondents to reflect upon or give their opinion about (Mortelmans 2007). The nine vignettes describe new integrated and/or interactive advertising formats used to target minors in both offline and online environments without mentioning the specific name or advertising format they refer to: product placement on television (PP), in-game advertising (IGA), advergames, applications, video advertising, merchandising, online behavioral advertising (OBA), search engine marketing (SEM) and location based services (LBS). These advertising formats are prominent examples of novel advertising formats. They were most often mentioned in exploratory interviews with advertisers and advertising agencies as formats that are used towards minors. Merchandising is the only traditional advertising format and was chosen because it was often mentioned as a very prominent technique when targeting children. The vignettes can be found in Appendix 1. 117 respondents answered all three questions for each of the nine vignettes.

By means of a slider ranging from 6 to 18 years old, for each vignette the respondents answered two questions:

1) *from which age onwards are minors capable of understanding the persuasive nature of the advertising technique described in the vignette?*

2) *from which age onwards is the type of advertising ethically acceptable to use?*

10

If respondents held the opinion that minors were not capable of understanding the advertising format, or that the usage of an advertising format was not ethically acceptable towards minors, they could indicate this answer option and they did not have to indicate an age on the slider. Only when a respondent indicated an age to the second question, they had to answer a third question:

3) from which age onwards minors need to be notified about the commercial intent of the advertising format described in the vignette?

For this question, they could also indicate that minors do not have to be warned about the commercial intent of the advertising format, and thus they did not have to indicate an age. These questions were based on the Harris Interactive study (Geraci 2004; Grimm 2004).

In the second section, respondents were asked how advertising to minors should be regulated, and through which organizations (governmental or educational) advertising literacy in minors should be improved. 99 respondents answered the questions in this survey block. The following five questions were presented (five-point Likert scale ranging from totally disagree to totally agree):

- *Commercial communication with regard to children/teenagers should be regulated…:*
  - *…exclusively through self-regulation*
  - *…exclusively through legislation*
  - *…through a combination of legislation and self-regulation*
- *The government should strive for awareness building in order to promote advertising literacy amongst children/teenagers,*

- *The educational system has a duty to promote advertising literacy amongst children/teenagers.*

In the third section, respondents were asked about the verification rules in ethical minors' protection (yes/no answer option) (97 respondents answered this question):

- *A proper data-protection policy on a social media platform that is accessible to children/ teenagers…*

  o *provides verification of the ages of children.*

  o *allows verification of the status of the parent or legal guardian.*

  o *provides clear information concerning the use of cookies and the possibility of disabling them.*

Respondent's opinion about the usage of advertising formats to collect personal data was asked by means of four questions (5-point Likert scale ranging from totally disagree to totally agree) (95 respondents answered these questions):

- *Children/teenagers should not be allowed to register with a brand website or mobile platform without permission from a parent or legal guardian,*

- *The collection of personal information from children/teenagers should be prohibited,*

- *Personal information from children/teenagers should not be collected, processed or used without permission from their parents or legal guardians,*

- *It is important for parents or legal guardians to be notified of the processing of personal information from their children /teenagers.*

Additionally, two questions were asked concerning collection of personal data from minors (95 respondents answered these questions):

- *The collection of personal information from children/teenagers…*

- *is an ethically acceptable strategy.*
- *is a strategy for which it is important to receive permission from parents or legal guardians.*

The questions concerning privacy policy, data collection and protection were based on a report from the Federal Trade Commission (2012) and on the rules about (verifiable) parental consent and online privacy from the U.S.' COPPA (Children's Online Privacy Protection Act 1998).

The fourth section of the survey asked advertisers who target minors which forms of advertising they use towards children and/or teenagers. Respondents had to answer these questions only for the target group (children and/or teenagers) towards whom they target advertising. 94 respondents answered this question.

The survey ended with demographic questions: the industry of the company the respondent works in, in which department the respondent works, level of education, age and gender. If respondents were willing to participate in a follow-up in-depth interview they could leave their email address.

Qualitative follow-up study

As a follow-up to the survey, 10 semi-structured in-depth interviews with advertising professionals were held (hereafter referred to as 'the interviewees'). Of these 10 interviewees, three were advertisers out of a list of 23 who completed the survey and were willing to participate in a follow-up interview. The other seven interviewees did not participate in the survey. The latter were selected from a list obtained from the Belgian Union of Advertisers with 27 companies that advertise to either children or teenagers. The interviews took place in a face-to-face setting and took about 45 minutes to one hour. The purpose of this qualitative follow-up study was to corroborate, nuance, interpret and enrich the insights from the survey. The interviews covered the same topics as the survey. For each topic, the interviewees were

asked to voice their opinion, were confronted with the results from the survey, and were probed to comment on them and to explain their agreement and/or nuances. The mix of both interviewees that did participate in the survey and those that did not participate in the survey was useful to have the interviewees reflected upon their own perceptions if they participated in the survey, or to have the interviewees reflect upon the perceptions of other advertisers if they did not participated in the survey. All interviews were recorded and transcribed afterwards to facilitate the analysis with the NVivo software program.

Results

The results from both the quantitative and qualitative study are reported together for each research question.

Sample characteristics

One hundred and sixty one respondents started the survey and 90 respondents (85 advertising professionals and 5 advertising agency professionals, 54 females, M_{age}=41.5, 70 respondents educated at master's level) fully completed it. Both groups were taken together in the analysis. The financial industry (14.13%), the food industry (11.96%) and government (11.96%) are most represented. Most advertisers work in a marketing (50%) or a communication department (30.2%). The five participating advertising agency professionals work for more than ten industries.

Advertising formats used towards minors

The majority (61.7%) of the respondents only target adults (older than 18 years). 38.8% (36) professionals work for a company that advertises to minors. Six of these 36 advertising professionals only target children and twelve of them only advertise to teenagers. Half of the

14

advertisers who target minors (18) focus on both children and teenagers. So, overall, 24 target children and 30 advertise to teenagers. The advertising formats used by advertisers who target children or teenagers are given in absolute numbers in Figure 1.

(Figure 1)

The most often used advertising formats towards children are contests, branded websites, premiums (a gift in exchange for the purchase of the product (Rideout 2014)) and advergames. Contests, banners and branded websites are the most often used advertising formats towards teenagers. Online behavioral advertising and location-based services are the least used advertising formats towards both children and teenagers.

Vignettes

The results for the responses to the vignettes are divided into three sections: the understanding of advertising formats, ethical acceptability of advertising formats, and the need to inform minors about the commercial intentions of advertising formats. For each section, by means of independent sample t-tests, it was analyzed whether significant differences exist between the opinion of advertisers who target children and/or teenagers and advertisers who only target adults.

Understanding advertising formats

According to the respondents, the average age at which minors can understand the different advertising formats is around 12-13 years (Table 1). Compared to the other formats, the average age for location-based services, product placement and video advertising is slightly higher (13-14 years), with video advertising being the format with the highest average age

indicated. The last column of the table indicates that in-game advertising, product placement and especially video advertising are considered the most difficult formats to understand since for these formats it was indicated most often that minors are not able to understand them. For none of the nine vignettes an acceptable age under 12 years was reported.

(Table 1)

Almost all interviewees agree that 12 years as an average age to understand these different advertising formats is plausible. The interviewees refer to research that takes 12 years as a threshold for advertising regulations (World Federation of Advertisers 2007) (quote 1).

Quote 1:

> *In our company we adhere to the principle that we do not advertise towards children below the age of 12. There are good reasons for making this distinction. Academic research shows that children from the age of 12 onwards can interpret and judge advertising.*

Table 2 shows that for merchandising, applications and online behavioral advertising, significant differences between respondents who advertise towards minors and advertisers who only advertise towards adults were found. Advertisers who also target minors hold the opinion that, on average, minors can understand merchandising, application and online behavioral advertising from an earlier age onwards (12 years), compared to advertisers who only target adults (13 years).

(Table 2)

Ethical acceptability of advertising formats

On average, advertising formats are perceived as ethical when targeted at minors from the age of 12-13 years onwards (Table 3). Online behavioral advertising, location-based services and applications are perceived as ethically acceptable to use towards minors from an older age onwards (13-14 years). The majority of the interviewees agrees with this opinion. These opinions correspond with the overall perception of advertising professionals that advertising aimed at teenagers is not a problem, whereas it is with children. The results are also in correspondence with 'The Belgian Pledge' and the 'CARU guidelines' (Ji and Laczniak 2007; The Belgian Pledge 2017; The Childrens' Advertising Review Unit 2009).

Significant differences in the opinions of advertisers who only target adults and those who target minors were only found for applications. The average age whereupon applications are considered as being ethically acceptable to use towards minors by advertisers who target towards minors is 12-13 years. Advertisers who only target adults indicate a significantly older average age, namely 14 years.

(Table 3)

Informing minors about the commercial intent of advertising formats

The average age from which minors should be informed about the commercial intent of advertising formats indicated is around 9-10 years (Table 4). The age is lower than the average age of 12 years to understand different advertising formats and to use the different formats in an ethical way. Some advertisers indicate that it is not necessary to inform minors about the commercial intent of advertising. This is especially the case for in-game advertising, advergames, video advertising and product placement.

(Table 4)

Some interviewees would not inform children early on, whereas others hold the opinion that children have to be informed from an even earlier age onwards (e.g. 6 years). Quotes 2 and 3 illustrate these mixed opinions.

Quote 2:

> *The ages indicated are quite old. I personally think that children can be gradually informed from an earlier age on, let's say six years. The explanation given to a 6-year old cannot be the same as the one given to a 9-year old or 12-year old child. (…) I think there are sufficient courses to integrate advertising education in school. Especially since advertising has become more complex. Additionally, parents do not always understand these advertising types themselves.*

Quote 3:

> *It is important to take into account the ability of children to understand the different advertising formats before informing them about it. Otherwise, it would work contradictory. I would say up to eight years old it has to be the parent who explains advertising formats*

Compared to advertisers who only target advertising towards adults, advertisers who target minors hold the opinion that, on average, it is desirable to inform minors about the commercial content from a younger age onwards. This is especially the case for novel, integrated advertising formats which are more difficult to recognize (product placement, in-game advertising and video advertising) (Table 5).

(Table 5)

Ethical data collection and data protection policy

18

According to the vast majority of the respondents, a proper data collection and protection policy should provide verification of the age of the children (93.8%) or teenagers (88.7%), allow verification of the status of the children's (80.4%) or teenagers' (71.1%) parents or legal guardians, and should provide clear information concerning the use of cookies and the possibility of disabling them to children (97.9%) and teenagers (95.9%). A substantial majority of the respondents (79%) agrees that the collection of personal information of children should be prohibited. Half of the advertisers (56.8%) agrees with this statement if teenagers are concerned. One in four (25.2%) disagrees if teenagers are the target group and 10.5% disagrees if children are the target group. If children (teenagers) are considered as a target group 71.5% (55.8%) agrees and 18.9% (25.3%) disagrees.

A majority (74.7%) of the advertisers agrees that children should not be allowed to register on brand websites or mobile platforms without permission of their parents or legal guardians (11.6% disagrees). If teenagers are considered as a target group the results are mixed (41.1% disagrees and 33.7% agrees). Advertisers think that it is important to notify parents or legal guardians if personal information from their children (87.4%) and teenagers (76.8%) is processed. If children are a target group, collection of personal data is perceived as unethical by a majority of the advertising professionals (84.2%). The results for teenagers are mixed (42.1% agrees, 57.9% disagrees). The majority of advertisers agrees with the statement that parents should give their permission for the data collection of their children (89.5%) and teenagers (78.9%).

Regulation and awareness building

The vast majority of advertising professionals do not agree with the statement that advertising towards children (76.7%) and teenagers (69.7%) should be regulated exclusively by means of self-regulation, or exclusively by means of legislation (children:62.6%; teenagers: 69.7%).

The majority of the advertising professionals agrees that advertising towards minors should be regulated by a combination of self-regulation and legislation for both children (77.8%) and teenagers (72.7%). The opinions of the interviewees with respect to the regulation of commercial communication towards minors are mixed. Quotes 4 and 5 illustrate both opinions.

Quote 4:

> *With self-regulation you have certain mechanisms at work which work good. I think this type of regulation is the most efficient one. It is impossible to have all rules made by the legislator. In my opinion you have a stronger case if companies are willing to impose certain restrictions upon themselves and have these restrictions monitored by an independent institution. Regulation exclusively through legislation requires that the government has to invest in monitoring, because making laws without any type of monitoring does not makes sense. Therefore I think it is much more efficient to work with self-regulation. This requires a certain level of governmental confidence in companies. I do think however that companies take their responsibility seriously.*

Quote 5:

> *'Legislation should set certain rules, and self-regulation can go further. Regulation exclusively through self-regulation, especially if it is not monitored, does not make a lot of sense.'*

Most advertisers agree with the statement that the government should strive for awareness building to promote advertising literacy amongst children and teenagers (both 66.7%) as with the statement that it is the educational system's duty to promote advertising literacy amongst children (76.8 %) and teenagers (73.8%).

Discussion

Main findings

In general, all advertising professionals acknowledge that children are a vulnerable advertising target group. Teenagers are considered to be mature enough to identify advertising and to understand the commercial intention behind advertising formats. This finding is in line with John (1999) who noted that from the analytical stage in consumer socialization onwards (age 11-12), teenagers have the skills to identify and understand traditional advertising. Protecting minors from persuasive communication is therefore more important for children (6-12 years) than for teenagers (Eagle, Bulmer, and De Bruin 2003). The results from the current study show that advertising professionals hold more or less the same perception for integrated and interactive advertising formats as for traditional ones. This is remarkable since their characteristics make it harder to identify them as advertising and recognize their persuasive intent.

Contests, brand websites and premium offers are the most often used advertising formats towards children. Contests, banners and branded websites are used mostly towards teenagers.

Advertisers consider minors capable of understanding novel advertising formats on average from 12 years onwards. In the study of Harris Interactive (Geraci 2004; Grimm 2004) the average age whereupon minors were considered to view advertising critically was nine years. However, this study does not provide a clear definition of which type of advertising was studied. Martínez (2016) found that advertisers perceive children capable of identifying and understanding the intent of advertising at ten to twelve years of age.

Novel advertising formats are considered ethically acceptable to use towards minors from the age of 12-13 years onwards. These results are substantially different from Harris Interactive's study (Geraci 2004; Grimm 2004) in which marketers state that it is appropriate to target advertising to children at age seven. Advertising professionals in our study indicate that the

average age to inform minors about the commercial intentions of novel advertising formats age is around 9-10 years. This is remarkable since the average age whereupon advertising is considered as ethical as well as the age whereupon minors are considered to be capable to understand the different advertising formats is 12-13 years. It appears that advertisers would inform minors about advertising even before they consider minors to be able to understand how novel advertising formats work. This is somewhat counterintuitive, since one would expect that it is only meaningful to inform or explain something to an individual, when this individual can comprehend what is explained. In the current study, formats for which it was indicated that it is not necessary to inform minors about the commercial intention are in-game advertising, advergames and video advertising. These results are also remarkable because these advertising formats are characterized by their integrated nature, which makes it more difficult to recognize these formats as advertising. One would expect that especially for these integrated, implicit advertising formats it is necessary to disclose the commercial intent to minors.

The majority of the advertisers agrees that a proper policy should provide a verification of the ages of children, allows verification of the status of the parent or legal guardian and provides clear information concerning the use of cookies and the possibility of disabling them. According to the majority of advertising professionals, parents should give their permission for the data collection of both their children and teenagers.

A combination of both legislation and self-regulation to regulate advertising aimed at minors is preferred by the respondents, and governments and schools have a responsibility to make children advertising literate.

Theoretical implications

The results of our study show that advertisers' perceptions are still based on old theories about the different stages of consumer socialization in childhood (John 1999) and models about children's cognitive development (e.g. the Persuasion Knowledge Model (Friestad and Wright 1994) and that they still adhere to the principles in these models and theories that are based on traditional media. However, contemporary advertising formats as the ones explored in the current study differ from these traditional media because of their integrated and/or interactive characteristics. However, these characteristics of novel advertising formats do not seem to be taken into account when it comes to the usage and ethical acceptability of these formats when targeted at children and teenagers. As such, traditional models still function as standards for today's advertisers' perceptions, despite the fact that the way minors encounter advertising has changed a lot over the last decades and it is questionable whether these theories and models still apply to the use of contemporary advertising formats.

It appears that advertisers are satisfied with just complying with the existing ethical guidelines and rules (e.g. it is allowed to advertise to children from the age of 12 onwards) and that they are not questioning whether they should take the lead themselves in updating the ethical guidelines or apply stricter ones. As such they apply the 'ethics code' view in ethical decision making: they adhere to the law and to standards in ethical guidelines (De Pelsmacker, Geuens, and Van den Bergh 2017; Pickton and Broderick 2005). Nevertheless, given the vulnerability of minors, adhering to the 'consumer sovereignty' principle (taking the vulnerability, decision making process and the available information to the consumer into account) or to the 'caveat venditor' principle (doing everything in the best interest of the consumers) might be more appropriate.

Moreover, it is even possible that the advertisers who participated in this study are more engaged with the subject of ethical advertising aimed at children and teenagers and are more ethically concerned than advertisers who did not participate.

Managerial and public policy implications

The results of the current study can inform advertising professionals and public policy. Generally speaking, advertisers seem to be well aware of the vulnerability of especially young children when it comes to coping with (novel) advertising formats. The majority holds the opinion that children do not have a good understanding of new advertising formats, that ethical concerns when advertising towards especially young minors should be taken into account, and, overwhelmingly, that especially children (not so much teenagers) should be protected against the inappropriate collection and use of personal data. Apparently, they are well aware of the measures that are taken to protect minors (for instance especially in case of unhealthy products) and to develop their advertising literacy, and they acknowledge to support them. This provides a solid basis for further developing these initiatives. Especially the educational system has a role to play, since advertisers hold the opinion that advertising literacy in children should be developed early on in primary school. Children's persuasion knowledge can be enhanced by teaching programs that focus on advertising literacy education and that learn how minors should reflect critically about advertising messages (Nelson 2016). However, important improvements can still be made. In our sample, 24 respondents indicate that they target children, and half of both the respondents and the interviewees find this appropriate. This goes against (self-)regulatory measures in the Belgian Pledge and CARU guidelines. Advertising professional associations and the government could and should make more efforts to make professionals aware of these rules. Twenty to 25% of the respondents find it appropriate to collect personal information about children younger than 12, and to allow children to register on online platforms without parental consent. This is also an area for further improvement.

Integrated and/or online advertising formats are, on average, perceived by advertising professionals as ethically appropriate to use towards minors from the age of 12-13 years

onwards. However, for professionals who are currently advertising towards minors, this age is significantly lower. Public policy and advertising associations have to remain vigilant as to the ethical values of companies that market products targeted at children.

Importantly, in their appreciation of appropriateness to advertise (differently) to children and teenagers, advertising professionals seem to be largely inspired by their experience and appreciation of traditional advertising, and by the rules and regulations that are now in place. They implicitly assume that the implications of advertising today do not differ from the situation in the past when only traditional advertising formats were used. They do not seem to realize that novel integrated and interactive formats that develop brand commitment in a different way than before may constitute different challenges than traditional advertising with respect to how children and teenagers understand and process them, and what this entails with respect to the development of advertising literacy and ethical considerations with respect to these novel formats. This constitutes a major challenge for advertising organisations and public policy. Due to the specific nature of these novel advertising formats, there is an urgent necessity to revise what 'ethical advertising' aimed at minors means and to protect minors against the implicit influence of these novel formats. This is a task for both public policy and the advertising industry.

Limitations

The response rate of the survey was relatively low (90 out of 2,614 fully completed and 161 partly completed the survey). This is common in on online surveys (Sheehan 2002) and if the subject of the survey is a rather sensitive topic, as is the case with the topic of the current study, it can be expected that this will affect the response rate negatively (Fan and Yan 2010). Nevertheless, due to the possibility of non-response bias, one should be careful with broad generalizations of the study results. Moreover, the advertising professionals completed the survey voluntarily. This might have resulted in reaching only those advertisers who have a

particular interest into the subject of advertising literacy of minors. The selection of respondents for the in-depth interviews partly compensated for this by also interviewing advertising professionals who did not participate in the survey.

Besides differences between children and teenagers, with regard to cognitive development, there might also be differences within these age categories. Future research could make this more fine-grained distinction.

Due to the limited information available in the description of the vignettes it is likely that certain situational factors which could have had an influence on the respondents' answers were not provided. However, the in-depth interviews provided a somewhat more nuanced and deeper insight into these situational factors.

The researchers tried to control for socially desirable answers by making the survey anonymous. Nevertheless, a certain degree of social desirability bias cannot be excluded.

References

Blades, Mark, Caroline Oates, Fran Blumberg, and Barrie Gunter. 2014. *Advertising to children: New directions, new media*. Basingstoke: Palgrave Macmillan.

Bright, Laura F., and Terry Daugherty. 2012. "Does customization impact advertising effectiveness? An exploratory study of consumer perceptions of advertising in customized online environments." Review of. *Journal of Marketing Communications* 18 (1):19-37. doi: 10.1080/13527266.2011.620767

Bucy, Erik Page, Sojung Claire Kim, and Miyeong Cecilia Park. 2011. "Host selling in cyberspace: Product personalities and character advertising on popular children's websites." Review of. *New Media & Society* 13 (8):1245-64.

Calvert, S. L. . 2008. "Children as consumers: Advertising and Marketing." Review of. *The Future of Children* 18 (1):205-34. doi: 10.1353/foc.0.0001

Children's Online Privacy Protection Act. "Children's Online Privacy Protection Rule (COPPA)." https://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/childrens-online-privacy-protection-rule.

Clarke, Barbie, and Catherine Gardner. 2005. "Concerned Children's Advertisers leads the way." Review of. *Young Consumers* 6 (4):24-8.

Crane, Andrew, and Bahar Ali Kazmi. 2010. "Business and children: Mapping impacts, managing responsibilities." Review of. *Journal of Business Ethics* 91 (4):567-86.

Eagle, Lynne, Sandy Bulmer, and Anne De Bruin. 2003. "Marketing communications implications of children's new electronic media use: a survey of parental opinions and perceptions." Review of. *Journal of Marketing Communications* 9 (3):129-46.

Eagle, Lynne, and Stephan Dahl. 2015. "Product placement in old and new media: examining the evidence for concern." Review of. *Journal of Business Ethics*:1-14.

EU Pledge. 2017. "About the EU Pledge " Review of.

Fan, Weimiao, and Zheng Yan. 2010. "Factors affecting response rates of the web survey: A systematic review." Review of. *Computers in human behavior* 26 (2):132-9.

Federal Trade Commission. 2012. "Mobile Apps for Kids; Current Privacy Disclosures are disappointing." In. Document retrieved from http://www.ftc.gov/reports/mobile-apps-kids-current-privacy-disclosures-are-disappointing: FTC Staff Report

Friestad, M., and P. Wright. 1994. "The Persuasion Knowledge Model: How People Cope with Persuasuion Attempts." Review of. *Journal of Consumer Research* 21 (1):1-31.

Füg, Oliver C. 2008. "Save the children: The protection of minors in the information society and the audiovisual media services directive." Review of. *Journal of Consumer Policy* 31 (1):45-61.

Geraci, John C. 2004. "What do youth marketers think about selling to kids?" Review of. *Young Consumers* 5 (3):11-7.

Gray, Oliver. 2005. "Responsible advertising in Europe." Review of. *Young Consumers* 6 (4):19-23.

Grimm, M. 2004. "Is Marketing to Kids Ethical? ." Review of. *Brandweek* 45 (14):44-8.

Gupta, Pola B, and Kenneth R Lord. 1998. "Product placement in movies: The effect of prominence and mode on audience recall." Review of. *Journal of Current Issues & Research in Advertising* 20 (1):47-59.

Hudders, Liselot, Veroline Cauberghe, and Katarina Panic. 2016. "How advertising literacy training affect children's responses to television commercials versus advergames." Review of. *International Journal of Advertising*:1-23. doi: 10.1080/02650487.2015.1090045.

ICC. 2017. "Marketing and Advertising to Children ", Accessed July 12th https://iccwbo.org/global-issues-trends/responsible-business/marketing-advertising/marketing-and-advertising-to-children/.

Ji, Mindy F, and Russell N Laczniak. 2007. "Advertisers' implementation of CARU guidelines for advertising targeted at children." Review of. *Journal of Current Issues & Research in Advertising* 29 (2):27-38.

John, Deborah Roedder. 1999. "Consumer Socialization of Children: A Retrospective Look At Twenty-Five Years of Research." Review of. *Journal of Consumer Research* 26 (3):183-213. doi: 10.1086/209559.

Karrh, James A. 1998. "Brand placement: A review." Review of. *Journal of Current Issues & Research in Advertising* 20 (2):31-49.

Kunkel, Dale, Brian L. Wilcox, Joanne Cantor, Peter Dowrick, Susan Linn, and Edward Palmer. "Report of the APA Task Force on Advertising and Children." http://www.apa.org/pubs/info/reports/advertising-children.aspx.

Mallinckrodt, Victoria, and Dick Mizerski. 2007. "The effects of playing an advergame on young children's perceptions, preferences, and requests." Review of. *Journal of Advertising* 36 (2):87-100.

Martínez, Carolina. 2016. ""They Are Totally Unfiltered" Constructions of the Child Audience among Swedish Advertising Producers." Review of. *Television & New Media*:1-17.

McStay, Andrew. 2012. "I consent: An analysis of the Cookie Directive and its implications for UK behavioral advertising." Review of. *New Media & Society* 15 (4):596-611.

Moore, Elizabeth S. 2004. "Children and the Changing World of Advertising." Review of. *Journal of Business Ethics* 52 (2):161-7. doi: 10.1023/B:BUSI.0000035907.66617.f5.

Mortelmans, D. 2007. *Handboek kwalitatieve onderzoeksmethoden (Handbook Qualitative Research Methods)*. Leuven: Acco.

Moses, Louis J, and Dare A Baldwin. 2005. "What can the study of cognitive development reveal about children's ability to appreciate and cope with advertising?" Review of. *Journal of Public Policy & Marketing* 24 (2):186-201.

Nairn, A., and C. Fine. 2008. "Who's messing with my mind? The implications of dual-process models for the ethics of advertising to children." Review of. *International Journal of Advertising* 27 (3):447-70.

Nebenzhal, Israel D, and Eugene D Jaffe. 1998. "Ethical dimensioins of advertising executions." Review of. *Journal of Business Ethics* 17 (7):805-15.

Nelson, Michelle R. 2016. "Developing Persuasion Knowledge by Teaching Advertising Literacy in Primary School." Review of. *Journal of Advertising* 45 (2):169-82. doi: 10.1080/00913367.2015.1107871.

Owen, Laura, Charlie Lewis, Susan Auty, and Moniek Buijzen. 2013. "Is children's understanding of nontraditional advertising comparable to their understanding of television advertising?" Review of. *Journal of Public Policy & Marketing* 32 (2):195-206.

Palmer, Daniel E. 2005. "Pop-ups, cookies, and spam: Toward a deeper analysis of the ethical significance of Internet marketing practices." Review of. *Journal of Business Ethics* 58 (1):271-80.

Panic, Katarina, Verolien Cauberghe, and Patrick De Pelsmacker. 2013. "Comparing TV ads and advergames targeting children: the impact of persuasion knowledge on behavioral responses." Review of. *Journal of Advertising* 42 (2-3):264-73.

Rideout, Victoria. 2014. "Advertising to Children and Teens: Current Practices. A Common Sense Media Research Brief " In. Avalable at: https://www.commonsensemedia.org/research/advertising-to-children-and-teens-current-practices.

Rozendaal, Esther, Moniek Buijzen, and Patti Valkenburg. 2010. "Comparing Children's and Adults' Cognitive Advertising Competences in the Netherlands." Review of. *Journal of Children and Media* 4 (1):77-89. doi: DOI: 10.1080/17482790903407333

———. 2011. "Children's understanding of advertisers' persuasive tactics." Review of. *International Journal of Advertising* 30 (2):329-50.

Sheehan, Kim Bartel. 2002. "Online research methodology: Reflections and speculations." Review of. *Journal of Interactive Advertising* 3 (1):56-61.

Shiying, Li, Megan Pickering, Ali Moondore, Mark Blades, and Caroline Oates. 2014. "Young Children's Ability to Identify Advertisements on Television, Web Pages and Search Engine Web Pages." In *Advertsing to Children, New Directions, New Media* edited by M. Blades, C. Oates, F. Blumberg and B. Gunter, 199-218. London: Palgrave Macmillan.

Steeves, Valerie. 2006. "It's not child's play: The online invasion of children's privacy." Review of. *University of Ottawa Law and Technology Journal* 3 (1):169-88.

TaylorWessing. 2017. "Advertising across different media - a guide to the regulatory playing field in the UK." Accessed July 13th https://www.taylorwessing.com/download/article_advertising_different_media.html#.WWeBElGkKpo.

Terlutter, Ralf, and Michael L. Capella. 2013. "The Gamification of Advertising; Analysis and Reserach Directions of In-Game Advertising, Advergames, and Advertising in Social Network Games." Review of. *Journal of Advertising* 42 (2-3):95-112.

The Belgian Pledge. 2017. "Responsible advertising and marketing towards children." Accessed July 12th https://www.belgianpledge.be/nl/engagementen.

The Childrens' Advertising Review Unit. "Self-Regulatory Program for Children's Advertising ". www.caru.org/guidelines/guidelines.pdf.

Tutaj, Karolina, and Eva A van Reijmersdal. 2012. "Effects of online advertising format and persuasion knowledge on audience reactions." Review of. *Journal of Marketing Communications* 18 (1):5-18.

Waiguny, Martin KJ, Michelle R Nelson, and Ralf Terlutter. 2012. "Entertainment matters! The relationship between challenge and persuasiveness of an advergame for children." Review of. *Journal of Marketing Communications* 18 (1):69-89.

World Federation of Advertisers. "Food and beverage advertising to children: When is a child a child? ." www.wfanet.org/pdf/.../when_is_a_child_a_child.pdf.

Wright, P., M. Friestad, and D. M. Boush. 2005. "The Development of Marketplace Persuasion Knowledge in Children, Adolescents, and Young Adults." Review of. *Journal of Public Policy & Marketing* 24 (2):222-33.

Appendix 1: Overview of advertising formats in vignettes

Product Placement (PP) on television	In a television series, a particular brand of soft drink is consumed often, and the logo is brought into focus. The brand has paid for the soft drink to be used in the television series.
In-game advertising (IGA)	In a popular racing game, players can choose from several existing brands of cars, and billboards advertising these car brands appear along the roadside. The car brands have paid the developers of the game to have their brands used in the racing game.
Search Engine Marketing (SEM)	Lucas would like to know more about the rules of tennis. To this end, he types 'tennis' as a search term in Google. A large number of advertisements for sports brands related to the search term appear in a sidebar next to the actual results.
Location-Based Services (LBS)	Marie goes shopping with some of her friends during the school holiday. As they approach a popular chain store, she receives a text message on her mobile telephone containing a promotional code for a chain store.
Online Behavioral Advertising (OBA)	Tom is searching the internet for camping equipment for his youth movement's annual camp. When he then looks through Facebook, the NewsFeed contains advertisements related to camping equipment.
Advergames	To promote the newest product in its line, a brand has developed a game that can be played on the brand's website. While playing this game, the game elements are related to the product and the brand, and players attempt to capture as many brand logos as they can.

Video advertising	A video on YouTube shows a child and a father singing the soundtrack of the latest Disney movie together. Disney paid the child's father to post the video online for the purpose of advertising. The Disney logo does not appear anywhere in the music clip, and there is no statement that the video is part of an advertising campaign.
Advertising in Applications	Lori has her own tablet. Every day, she plays a music quiz that is installed as an application on her tablet. The music quiz application was a free download, with advertising appearing between the questions. A large amount of the advertising consists of ads for the latest CD from her favorite group.
Merchandising of popular figures in a virtual world	Sam has installed an application from a media company on his parents' tablet. The application is a virtual world in which he comes into contact with various media figures and in which he and his friends try to complete challenges in this virtual world successfully. A great deal of merchandising is associated with these media figures. For example, the media figures also appear in television programs, they are present in amusement parks and they are portrayed on many products for children and teenagers.

Table 1: Average age whereupon minors understand different advertising formats.

Advertising formats	Mean age	SD	N= Advertisers who indicated an age	N= Advertisers who indicated: 'Minors not able to understand the advertising format'
Merchandising	12.74	2.58	118	6
Applications	12.40	2.54	115	8
Product Placement (PP)	13.03	2.75	114	12
In-game Advertising (IGA)	12.86	2.69	113	10
Search Engine Marketing (SEM)	12.26	2.59	121	5
Location Based Services (LBS)	13.25	2.68	116	7
Online Behavioral Advertising (OBA)	12.72	2.59	121	6
Advergames	12.13	2.61	124	5
Video advertising	14.06	2.73	95	28

Table 2: Understanding advertising formats - significant differences between respondents who do and do not advertise to minors

Format	Advertiser group	N	Mean	SD	P
Merchandising	minors	35	12.00	2.62	.013
	adults	54	13.31	2.24	
Applications	minors	35	11.42	2.69	.004
	adults	54	13.04	2.32	
Online Behavioral Advertising (OBA)	minors	35	11.97	2.53	.035
	adults	54	13.14	2.52	

Table 3: Average age whereupon the use of different advertising formats towards minors is considered as ethically acceptable.

Advertising format	**Mean age**	**SD**	**N= Advertisers who indicated an age**	**N= Advertisers who indicated: *'advertising format morally/ethically not acceptable'***
Merchandising	12.62	3.36	115	9
Applications	13.44	2.91	111	12
Product Placement (PP)	12.85	3.36	114	12
In-game Advertising (IGA)	12.85	3.66	108	15
Search Engine Marketing (SEM)	12.76	3.33	119	7
Location Based Services (LBS)	14.73	2.94	102	21
Online Behavioral Advertising (OBA)	13.52	3.30	116	11
Advergames	12.48	3.32	123	6
Video advertising	12.32	3.89	97	26

Table 4: Average age whereupon minors should be informed about the commercial intent of advertising formats.

Advertising format	Mean age	SD	N= Advertisers who indicated an age	N = Advertisers who indicated: *'No need to inform about commercial intent'.*
Merchandising	9.88	3.37	105	7
Applications	9.82	3.29	110	1
Product Placement (PP)	9.9	3.25	101	10
In-game Advertising (IGA)	10.52	3.61	93	14
Search Engine Marketing (SEM)	9.92	3.18	110	8
Location Based Services (LBS)	10.68	3.36	98	3
Online Behavioral Advertising (OBA)	10.43	3.39	107	8
Advergames	9.86	3.28	109	12
Video advertising	10.15	3.58	85	12

Table 5: Information about commercial content – significant differences between respondents who do and do not advertise to minors

Format	Advertiser group	N	Mean	SD	P*
Product Placement	minors	33	9.06	2.65	.012
	adults	47	10.81	3.45	
Video advertising	minors	24	8.79	3.17	.052
	adults	43	10.47	3.40	
In-game advertising (IGA)	minors	31	8.97	2.93	.011
	adults	48	11.00	3.62	

Figure 1: Advertising formats used towards children and teenagers

Industry - Advertisers (in percentages) N=85