Children's Advertising Literacy in a New Media Environment: An Introduction to the AdLit Research Project

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1. Introduction

Nowadays, children are confronted with a massive amount of advertising, not only through traditional formats but also through a wide range of (new) formats such as advergames, advertiserfunded programming, mobile advertising, social media advertising, native advertising, etc. Advertisers use these new formats to attract children's attention in an overly cluttered advertising environment and to persuade them more effectively. What all these formats have in common, however, is that they persuade children implicitly or 'under the radar'. Contrary to traditional formats, new ad formats fully integrate media content into commercial content, actively engage the user with the commercial content and have different aims than traditional advertising, such as the distribution of the commercial content among friends and the collection of personal information. These characteristics make it more difficult for young consumers to detect advertising and to understand its persuasive intent, also referred to as advertising literacy (e.g., Rozendaal et al., 2011). As children already have more difficulties to understand the commercial intent of traditional advertising than adults (Wright, Friestad & Boush, 2005), partly due to still developing cognitive capacities and consumer experience (Piaget, 1929), these recent developments have raised concerns among parents, policy makers, educators, societal organizations and the advertising industry about how to ethically target these young consumers. Some of them suggested to ban certain new media (e.g., tablets) for children, or to strictly regulate new advertising formats. However, as advertising spreads across country borders, the application of (national) legislation is increasingly challenged. Moreover, the complete banning of advertising out of children's lives is not only practically unattainable, it is also undesirable since it will make them even more vulnerable for persuasion at a later stage. According to consumer socialization theory, socialization can help children develop into critical and conscious consumers who adopt conscious consumption patterns. They can learn the skills, attitudes and knowledge necessary to make adequate consumer decisions (Ward, 1974). Therefore, children are seen as a target audience in need of empowerment in order to cope with persuasive messages which may evoke negative effects (such as higher levels of materialism, unhappiness,...) when they are inefficiently processed.

The current paper presents the approach of the *AdLit* interdisciplinary research project (funded by the IWT) which investigates how children can be empowered for, and protected against, persuasion at an unconscious level (due to their lack of knowledge and critical attitude) by these new advertising practices. The combination of a strong demand driven approach relying on needs and insights of relevant stakeholders in the field (i.e., advertising industry, broadcasting channels, societal organizations, the educational field and policy makers) and the experience and knowledge of six research groups from different disciplines, paved the path to develop the current project. The project has three general research questions:

- 1. What level of advertising literacy do minors have for the different new advertising formats, considering age differences and social contextual variables (i.e., parenting, peer influence, socio-economic household situation)?
- 2. How can minors' advertising literacy be improved?
- 3. How can a future-proof regulatory framework that aims to empower minors be constructed?

The current paper investigates how different disciplines (communication sciences, law, marketing and pedagogy) approach the topic of children's advertising literacy in a new media environment. Legal research on this topic, for instance, is strongly dependent on input from social sciences to develop efficient regulation (e.g. with regard to differentiation in regulation according to age). At the same time, results from research into the applicability of and gaps in the existing legal and self-regulatory framework can feed into recommendations on the legal or regulatory feasibility of certain strategies (such as for instance the use of cues). In addition, the project will include the impact of both individual (i.e., age) and social contextual variables (e.g., socio-economic household situation, parenting styles and peer influence). We take these variables into account because the diversity in age, socio-economic household situation, parenting style, or peer influence may explain potential differences in advertising literacy among minors.

2. Defining advertising literacy as a concept

At the start of the project, three major aims are defined. First, the project should gain insight in the different (new) ad formats children and youngsters are confronted with. Therefore, an overview of children's and youngsters' media use is needed. Children and youngsters grow up in a changing media environment (Calder, Malthouse & Schaedel, 2009; Montgomery & Chester, 2009; Schor, 2004). This media environment is constantly evolving due to digitization and convergence of media devices (Dwyer, 2010). Accordingly, digital media content can now be used across different media as more and more devices stream digital content (e.g., digital television, smartphones, mp3-players, ebooks, and game consoles) (Ha & Chan-Olmsted, 2004; Roscoe, 2004; SPOTtime, 2010). Advertisers make use of these new media to target minors. This implies that minors are confronted with new advertisement formats developed for and distributed through these various new media channels and devices (e.g., Internet, iPad, games, etc.). In addition, an overview of the ad formats mostly used by advertisers to target children and youngsters is needed. In sum, the new formats are characterized by three unique elements. First, advertisements are now embedded into media content. The integration of advertising content into media content is not only more natural and less disturbing for the viewers compared to, for instance, advertising breaks, it also makes it more difficult for viewers to recognize the content as advertised content. Embedding advertisements into media content blurs the distinction between advertising, information and media content (Calvert, 2008; Moore, 2004). This is also referred to as 'advertainment'. This implies that consumers cannot skip or miss the advertising content, since the advertising and media content are shown simultaneously (also called 'forced exposure'). This embedded nature, however, may also hinder individuals to activate their advertising literacy, because they do not recognize the commercial message as such. This may be especially the case for inexperienced consumers, as children and youngsters are. Second, and related to the first strategy, is that due to technological innovations in the media landscape, the new advertising formats are interactive in nature (e.g., mobile advertising or advergames). This implies that such advertisements are able to actively engage the user with the advertised content, which is in contrast to traditional, passive exposure to advertising. Interactive advertising formats are often challenging and motivate consumers to keep interacting, resulting in a longer length of brand exposure. The interactivity in itself demands cognitive capacity of individuals, which might reduce the capacity to develop counterarguments against the advertisement (Hoffman & Novak, 2004), since individuals only have limited cognitive resources (cf. Limited Capacity Model; Lang, 2000). Third, the goals of advertisers are extended and thus are no longer limited to convincing consumers to purchase their products. They now also try to alter consumers' attitudes implicitly, gather personal data or use them (unconsciously) as brand spokespersons in viral campaigns. This expansion of goals may make it more difficult for consumers to understand the commercial intent of advertisements, as many of these goals are new. Although these goals have been introduced and applied in the last decennia, they became more apparent since new technology (such as advanced data mining tools) has facilitated to achieve these goals.

Second, a *clear conceptualization should be provided of advertising literacy*. Although many academic studies on advertising literacy can be found, there is still no consensus about the dimensions underlying the concept. In the past, advertising literacy was mainly approached from a cognitive perspective. refers to individuals' knowledge of persuasion and the goals of advertising, their understanding of the commercial intent and the techniques used by advertisers (Friestad & Wright, 1994; John, 1999). This cognitive component of advertising literacy functions as a cognitive defense mechanism and incites consumers to process advertisements more critically (Livingstone & Helsper, 2006; Brucks et al., 1988; Rossiter & Robertson, 1974). In literature, the two main cognitive advertising literacy skills are defined as:

- The ability to distinguish advertising content from regular media content (Bandyopadhyay et al., 2001; Kunkel et al., 2004; Rozendaal et al., 2008). This skill refers to the extent to which consumers are able to recognize commercial messages.
- The ability to understand the underlying commercial intent advertising. This implies that consumers understand that advertising is made to persuade consumers and to encourage them to purchase certain products (John, 1999). However, various authors (Kunkel et al., 2004; Moses & Baldwin, 2005; Young, 1990) argue that this skill is too broad and subdivided it into two subskills:
 - The ability to understand the selling intent of advertising, and realize that the goal of advertising is to make you buy something.
 - The ability to understand the specific tactics of advertising. This knowledge is broader than an understanding of the selling intent, and enables consumers to understand that advertisers try to influence their behavior implicitly or indirectly, by influencing their mental state and their desires and beliefs about a product. Past research has shown that before an in-depth understanding of the persuasive intentions of advertising takes place, individuals need to recognize the commercial message as such.

However, in 2011, Rozendaal and colleagues emphasized the importance of an affective dimension (i.e., how much do you like the advertising format?) when it comes to the new advertising formats.

This affective dimension appears to be very important, especially for the new advertising formats that put fun and pleasure at the foreground and heavily appeal to minors' emotions (e.g., advergames or branded applications; Moses & Baldwin, 2005). Previous studies investigating minors' advertising literacy reported contradicting results in terms of the impact of advertising literacy on advertising effects (Rozendaal et al., 2011). This is mainly because they solely focused on the cognitive component. When confronted with new, fun formats or 'advertainment', it is difficult to retrieve cognitive knowledge for minors. Therefore, affective evaluations also need to be taken into account when investigating minors' advertising literacy for new advertising formats. Based on studies in neuropsychology, Nairn and Fine (2008) argue that the impact of advertising is not only mediated by conscious knowledge of the persuasive tactics used, but also by an implicit persuasive mechanism, induced by affective processes. Next to this affective component, research on minors' critical reflections concerning advertising suggests that values and norms that minors hold toward advertising practices in general are important variables to include in the advertising literacy concept. The perceived acceptability of the usage of such formats by advertisers may influence the impact of cognitive and affective advertising literacy on advertising effectiveness. The current project therefore proposes the addition of a third and moral dimension (i.e., do you find it appropriate that advertisers use this advertising technique?) to measure advertising literacy, as this can be strongly related to the integrated and unconscious persuasion mechanisms of contemporary advertising. Within the current project, the advertising literacy concept is therefore considered as three-dimensional: cognitive, affective and moral. Together, these dimensions may incite minors' actual use of advertising literacy and thereby increasing children's and youngsters' critical processing of advertisements as they become aware and knowledgeable of the persuasive intents of these new advertising formats, and develop a critical consciousness.

Third, more insights should be gathered on how advertising literacy can be measured. As a consequence of the need for a new conceptualization of advertising literacy, the existing measurement scales and operationalization of advertising literacy needs to be adjusted in order to integrate new dimensions of advertising literacy which are relevant in the current advertising environment. Also, advertising literacy has often been measured using different measuring techniques (e.g. think aloud method, hand raising technique, paper and pencil questionnaire, etc.), making it difficult or even impossible to compare the findings across studies. Therefore, the AdLit research project aims to develop a standardized way of measuring advertising literacy, which can be adjusted to address different target groups (e.g. children, youngsters, parents, etc.). As young children (under twelve) have limited cognitive capacities, some methods (e.g., standardized questionnaires) or measurement instruments (e.g., open-ended questions) may just be too difficult or confusing for them, influencing their responses. Therefore, qualitative studies (e.g., focus groups or interviews) and predefined multiple-choice questions or picture response options may be better suited for these young children. Quantitative methods (e.g., experiments and surveys) and unaided formats may be more suited for children older than twelve years old. The current project will provide an overview of the methods and measurement instruments that are most suited to measure advertising literacy with different age groups. In addition, the current project will also take the socioeconomic household situation of minors into account. Important to note is that doing research on and with socio-economically disadvantaged people entails crucial ethical issues, such as: invasiveness in difficult life stories, unequal power relation between researcher and participants, emphasis on the negatives and deficiencies, implicit value judgments (see Shaw, 2003). These issues need to be handled carefully. One of the key challenges in doing research with socio-economically disadvantaged families and minors, is to get access to these 'hidden' families (Liamputtong, 2007) and build a trust relation with the participants, who often feel excluded and stigmatized. This requires a socially-sensitive approach, which has to take issues of confidentiality and informed consent much more seriously.

3. Measuring minors' advertising literacy for different new advertising formats

After defining advertising literacy as a concept, as well as how it can be measured, the next step into the project is to actually measure the level of advertising literacy for new advertising formats among minors in Flanders. Different methods will be used, depending on the age of minors (e.g., qualitative versus quantitative studies). The choice of ad formats is based on the thorough overview of minors' media use, and the advertising formats that are most often used to target them. The level of advertising literacy for the three dimensions will be measured. In addition, we will investigate how the three dimensions of advertising literacy are interrelated. To be able to perform a risk analysis, it is necessary to investigate the impact of age and social contextual variables. In this respect, based on theories of cognitive and affective development and moral reasoning, we will investigate how advertising literacy develops according to the age of the minor. In particular, we will investigate at which age minors have sufficient advertising literacy for which format. In addition, within the current project special attention goes to the impact of social contextual variables. First, we will investigate how socio-economic household situation has an impact on minors' advertising literacy. As such, we will use a qualitative approach to gain a better understanding of the advertising literacy of people who feel socio-economically disadvantaged. Second, the study will investigate the association between minors' advertising literacy and parenting, like the role of parental communication about consumption issues and parenting styles. In this respect, we can assume that adequate communication and appropriate parenting styles might enhance children's advertising literacy. Questions, however, raise about how parents are involved with their children and how they communicate about the 'new' issues related to the new advertising formats, which are much more complicated than the former traditional advertising formats. Third, when investigating youngsters' advertising literacy the impact of peer influence will be taken into account. The present study will therefore investigate how several forms of peer influence relate to youngsters' advertising literacy. As parents and teachers have an important impact on minors, we will also measure their current level of advertising literacy for new advertising formats. This knowledge will be used to develop the educational programs and awareness campaigns, keeping their perceptions and knowledge in consideration.

This measurement does not only allow us to determine the current level of advertising literacy among minors, it also enables us to create a benchmark or a status quo that future measurements of advertising literacy can be compared to, in order to detect a possible increase.

4. A 360°-approach to improve minors' advertising literacy

When more insights are obtained about the level of advertising literacy of minors, the next question is how this level can be increased. This topic will be studied from a communication science, a

pedagogical and a legal point of view. It is important to use a 360° approach to successfully improve minors' advertising literacy.

4.1 The development of advertising cues

In traditional literature, advertising literacy is often considered to be a prerequisite for children to defend themselves against all sorts of advertising (Rozendaal, Lapierre, van Reijmersdal, & Buijzen, 2011). However, several studies found that having advertising knowledge does not automatically leads to less persuasion (e.g. Mallinckrodt & Mizerski, 2007; van Reijmersdal, Rozendaal, & Buijzen, 2012). In other words, even if children possess the required advertising knowledge, it does not necessarily follow that they actually will use this knowledge when exposed to commercial content (Moses & Baldwin, 2005; Rozendaal et al., 2011). A possible reason can be that children are 'cued processors': they need a cue to trigger their persuasion knowledge (Brucks, Armstrong, & Goldberg, 1988). From this point of view, it is assumed that children do not automatically use their advertising knowledge during a persuasive attempt, but they must be cued or helped to do so (John, 1999). This is especially the case for new, nontraditional advertising formats, known for their embedded and subtle nature (Calvert, 2008).

Therefore, the next objective of the current project is to investigate how advertising cues (also referred to as program/commercial separation devices or disclaimers) can be used to empower children by helping them to recognize advertising content. Academic research devoted to the effect of cues in stimulating children's advertising literacy is surprisingly limited, and provides far from univocal results (e.g. An & Stern, 2011; Butter, Popovich, Stackhouse, & Garner, 1981; Brucks et al., 1988; Boerman, van Reijmersdal, & Neijens, 2012, 2014; Panic, Cauberghe, & De Pelsmacker, 2013; Palmer & McDowell, 1979; Stutts & Hunnicutt, 1987). Therefore, the AdLit project aims to gather more insight in the effectiveness of advertising cues.

Three research questions underpin this objective: (1) Can advertising cues be used to empower children? In this is the case, the question arises what this cue should look like. According to the literature, a cue with the right characteristics could function as the optimal trigger to incite minors to use their advertising knowledge when encountering advertising. Therefore, the second and third research questions read: (2) Which features should this cue contain? (3) How long should this cue be shown to be effective? In sum, the AdLit project aims to investigate cues on several area's: format (pre-warnings, a single or multiple sentence, icon or symbol, etc.), semantic content (the text that appears in the cue), characteristics (static/dynamic nature, visual/audio, color, interactivity, emphasis, placement, etc.), exposure time, etc. Based on this information, the final aim of is to develop and implement an *AdLit advertising cue*.

Finally, for a cue to be effective, it needs to be interpreted and recognized as an advertising cue. Noticing the cue is one thing, understanding its meaning and purpose is clearly another. Even if an advertising cue is noticed and encoded, it might not be comprehended. That is, it is possible to see and read an advertising cue, and yet not understand precisely what the it means (Rogers, Lamson, & Rousseau, 2000). Therefore, it is essential to communicate the purpose of an advertising cue and to make clear how it works and for what reason. In other words, an integration of the cue into awareness campaigns and broader educational programs is needed to guarantee that minors

recognize and understand their meaning. In addition, research regarding the effectiveness of an advertising cue is needed in order to formulate recommendations regarding (self) regulation.

4.2 The integration of advertising literacy in educational practices

When it comes to social education programs and other behavior-change interventions targeted at children, a large portion of the education is provided through the school system. Schools are important outlets to reach millions of children, and school-based education programs make it possible to teach children and youngsters how to deal with negative consequences of risky situations. For example, there is traffic education, drugs prevention, environmental education, etc. Advertising literacy also belongs to this kind of prevention education (Van Ouytsel, Meeus, Walrave, & Driesen, 2014), but little is known about the role of education in the context of advertising literacy, or the ability of children to understand and recognize commercial messages (Šramová, 2014). Wollslager (2009) believes that the ultimate goal of advertising education is not to 'inoculate' children against the effects of advertising, but to give children the critical skills to assess the media. Critical skills are necessary, because the undesired effects of advertising (e.g. unhealthy eating patterns) are mainly driven by the fact that minors are not yet experienced or critical consumers who reflect upon the content and purpose of advertising (Oates, Blades, Gunter, & Don, 2003). In order to foster advertising literacy among students, teachers need high-quality educational resources (Meeus, Walrave, Van Ouytsel, & Driesen, 2014). According to Wollslager (2009), media literacy education, even a brief 10-minute intervention, can have a positive impact on children's understanding of commercial messages.

Therefore, the next aim of the AdLit project is to examine how educational packages can be developed to improve advertising literacy among minors, and how these packages can be integrated in the existing school programs. In order to do so, the educational researchers will first investigate which educational approaches are effective to improve minors' advertising literacy, and which design guidelines are necessary to develop an educational program targeting children and youngsters. Finally, the AdLit project aims to shed a light on the conditions under which these educational programs can be implemented. In order to do so, an in-depth analysis is made of the current (inter)national educational situation related to advertising literacy. Based on a checklist, it is possible to discover strengths and weaknesses of existing educational material about advertisements. For instance, a recent analysis of educational material, performed by Meeus et al. (2014) shows that many educational packages discuss traditional forms of advertising. There is a need for up to date educational material that encompass the new forms of advertising (Meeus et al., 2014). Therefore, based on the previously mentioned analysis, educational material (e.g. a serious game about advertisements, an app for mobile devices, ...) will be developed for both primary and secondary education, and implemented into the educational program. In addition, instructional manuals will be developed for teachers, to enable them to use the use the educational material in an optimal way. This product will be created by using a design-based research approach, a methodology which tries to bridge theoretical research and educational practice. By using design-based research, it is possible to refute the criticism that there is a small amount of empirical research assessing interventions about advertising literacy. Current research about this is mainly experimental or observational, what means that it is somewhat problematic in terms of reliability and validity (Eagle, 2007).

4.3 Raising awareness among advertising literacy

Next to the educational approach and the use of advertising disclaimers, the AdLit project also aims to develop awareness campaigns in order to increase the awareness of different target audiences regarding advertising literacy. These campaigns are regarded as complementary to the previous strategies, in such a way that they will contain information about the advertising cue, as well as the educational material. The main research question is how awareness can be raised in society to improve minors' advertising literacy and to make advertising professionals more aware of their practices.

The main objective is to develop and test awareness messages and campaigns to improve advertising literacy and to raise awareness about this topic in society. To improve minors' advertising literacy it is not enough to focus solely on children and youngsters themselves, but other groups need to be involved as well and must be aware of children's and teenagers' rights regarding advertising literacy development. Therefore, the awareness campaigns will be directed at five different target groups: children (under the age of twelve), teenagers (from the age of thirteen till the age of eighteen), parents, the educational field and advertising professionals. It is important to adjust these campaigns to the specifics of the target groups and to make sure that these awareness campaigns are in line with the educational programs.

The campaigns will relate to new (digital) commercial communication formats such as brand placements, advergames, social media and integrated formats on websites, because the focus of the AdLit-project is on these new advertising formats. The design and testing of the campaigns will be built on and will be integrated in the insights developed in the other work packages of the project. For example, the overview of different advertising formats targeted at children and youngsters is provided and a survey is carried out on the perceptions of advertising professionals towards advertising aimed at minors. The campaigns will also communicate new legal policies and information about the advertising cue that will be implemented.

Based on the insights developed in the first work package a concept of an information brochure will be developed providing information about new advertising formats that are used to target minors and the risks they pose for this group. Because parents and teachers play an important role when it comes to the level of advertising literacy among children and youngsters, next to children and teenagers, the brochure will be aimed at parents and teachers too.

A television commercial will be developed in co-creation with children based on a qualitative study. The commercials will be tested with the target groups by means of classroom sessions in which children will be exposed to the various campaign spots. In the end the most appropriate television campaign will be selected. This will be a commercial that develops advertising literacy and defense mechanisms among children and that will inform children about advertising cues.

Teenagers are distinct from children in that, with teenagers, peer influence, the Internet and social media become more impactful than the influence of parents and the school environment. To reach and activate this target group an online campaign will be developed to improve their advertising literacy. A qualitative study will involve teenagers in the co-creation of a live online and social media campaign.

By means of in-depth interviews it will be investigated how the advertising industry and the self-regulatory bodies can be best informed about children's and teenagers' levels of advertising literacy.

An online campaign about the risks of new advertising formats for minors will be designed and tested. During the last months of the project a conference will be prepared to inform the advertising industry about the results of the studies conducted within the scope of this project.

Socio-economically disadvantaged families may not be forgotten when raising awareness about advertising literacy, because this target group may be even more vulnerable when it comes to new advertising formats in a new media environment. Consequently, workshops will be organized to target this vulnerable group and to investigate whether workshops are an effective way for improving advertising literacy of those minors and their parents.

The developed knowledge in this work package will result in different valorization tools that will be developed in close cooperation with the stakeholders within this project.

5. Analyzing laws and regulations

The main objective of the legal research is to carry out an in-depth analysis of the current legislative framework and existing self- and co-regulatory initiatives in the domain of commercial communication aimed at minors and to identify gaps and regulatory challenges. A second objective is to formulate recommendations for a future-proof regulatory framework that protects and empowers minors as consumers. In particular, the proposed framework should enable minors to (1) distinguish and critically process the commercial, persuasive nature of commercial messages and (2) critically process the requests for collection and processing of their personal data.

Three research questions underpin this objective: (1) which legislative and self-regulatory initiatives currently exist with regard to commercial communication aimed at minors at national, European and International level; (2) can the existing rules (both legislative and self-regulatory) be applied to new advertising formats, and are there any gaps or overlaps? and (3) how can a future-proof regulatory framework that aims to empower minors be constructed? In respect to these research questions, a number of tasks will be performed.

First, the legislative and self- and co-regulatory initiatives will be mapped. Commercial communication in general is regulated through legislation, across various law domains, on the one hand, and through self- and co-regulation, on the other hand. Given the vulnerability of children, commercial communication towards children is often embedded in stricter legislative rules than those aimed at adults and in self- and co-regulatory initiatives at national, European and international level which contain specific, children-oriented elements. From a legislative perspective, in Belgium, the Flemish and French Media Decree potentially apply together with provisions in various other law domains (such as human rights legislation, consumer protection law, criminal law and data protection legislation) across various sectors (food, toys, alcohol, gambling). Similarly, the traditionally active participation of the industry in advertising regulation has led to various self- and co-regulative initiatives (such as code of conducts and self-regulating body monitoring compliance) in specific sectors, such as food and alcohol, both at national and international level. Internationally, the Consolidated ICC Code of Advertising and Marketing Communication Practice, issued in 1937 by the International Chamber of Commerce, served as a basis for most self-regulatory codes worldwide, such as the one developed by EASA, the European Advertising Standards Alliance. A patchwork of

various, potentially conflicting rules thus exists across sectors and across law domains, requiring a structured overview. This overview will be undertaken on the basis of a literature review, focusing on legislation, policy documents, case-law and doctrine.

Second, the legal research within the project will evaluate whether, to what extent and how the current regulatory framework applies to new advertising formats, taking into account the specific characteristics of these formats. This analysis will be performed from a children's rights perspective with a focus on fundamental children's rights, such as the right to privacy, the right to freedom of expression and the right to participation. Specific attention will be paid to issues related to data protection. The increase of children's personal data collection and further processing by means of advanced technologies raises a fundamental question with regard to the protection of children's privacy in a broad sense and the protection of their personal data, in a more narrow sense. It is recognized that (especially young) children have little or no understanding of and knowledge about the extent and sensitivity of the data to which advertisers may gain access, or the extent of data sharing with third parties for advertising purposes. This is in particular relevant for mobile apps. These services can, even when children do not explicitly type personal details into the device, by means of sophisticated technologies, such as cookies or other tracking mechanisms, capture a broad range of user information automatically stored on smart phones, such as the user's precise geolocation, phone number. These data may then be further used and/or shared by advertisers, without even alerting the user. Additionally, information on the data collected, purpose and sharing practices at the moment of the data collection is often lacking, unclear or incorrect, as revealed by an extensive study performed in 2011 by the Federal Trade Commission in the United States. These findings raise significant concerns as to the proper collection as well as further use, sharing and invisible transmission of the child's collected data to a wider variety of entities.

Third, a blueprint for a future-proof regulatory framework for commercial communication aimed at minors will be established, with an emphasis on empowerment. This analysis will build on the legal research as well as the research carried out in other work packages. An interdisciplinary approach is crucial to complete this task. Legal research is strongly dependent on input from social sciences to develop efficient regulation (e.g. with regard to differentiation in regulation according to age). At the same time, results from research into the applicability of and gaps in the existing legal and self-regulatory framework can feed into recommendations on the legal or regulatory feasibility of certain strategies (such as for instance the use of cues). Four questions will be examined in detail to establish the criteria such as framework should meet, i.e. (1) the object and subject of the regulation (e.g. which types of advertising formats should be covered, which age categories should be used), (2) the types of rules are the most appropriate with regard to new advertising formats, (3) the most appropriate type of oversight and enforcement and (4) whether and if so, how regulatory tools such as labeling, advertising cues or transparency-enhancing mechanisms can be incorporated in the framework.

6. Conclusion

When looking at the media environment children and youngsters grow up in today, it cannot be denied that this landscape is fundamentally different from the traditional one, with new media playing a prominent role in minors' lives. In order to empower, educate and protect this young target

group, the AdLit research project aims to shed a light on the concept of advertising literacy, and to investigate how this literacy can be increased among minors with regard to new advertising formats. By using an interdisciplinary approach, different topics are discussed and the concept of advertising literacy is looked at from different angles and disciplines. By doing so, the main aim of the AdLit project is to contribute to the scientific literature on advertising literature but also, or even more so, to develop a set of valorization tools which can contribute to the activation or increase of minors' knowledge and understanding of advertising in today's media environment. For this, the AdLit project closely cooperates with different stakeholders in the field, which can be grouped into four groups: 1) the educational field, 2) societal organisations, 3) legal stakeholders and 4) the commercial stakeholders and media industry. These stakeholders will be closely involved with the research conducted within this project and will help with the development and implementation of valorization tools.

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