

INVESTIGATING THE EFFECTS OF AN EDUCATIONAL ANIMATION FILM ON ADVERTISING LITERACY

A report within the framework of the AdLit SBO research project



This document forms part of the 'AdLit' (Advertising Literacy) research project.

AdLit is a four-year interdisciplinary research project on advertising literacy, which is funded by VLAIO (Flanders Innovation & Entrepreneurship). The main goal of the AdLit project is to investigate how we can empower children and youth to cope with advertising, so that they can grow up to be critical, informed consumers who make their own conscious choices in today's new media environment.

The AdLit consortium comprises of the following partners:

University of Ghent: Research group CEPEC and Department Education

University of Antwerp: Research group MIOS and Department Marketing

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

Free University Brussels: Research group CEMESO

This report was written by Sharon Hallmanns and Brahim Zarouali

Under supervision of Prof. Dr. Karolien Poels, Prof. Dr. Michel Walrave and Prof. Dr. Koen Ponnet

In cooperation with the AdLit consortium

Please cite as follows: Hallmanns, S. & Zarouali, B. (2018) – Investigating the effects of an educational animation film on advertising literacy - A report in the framework of the AdLit research project. Document accessible at www.AdLit.be.

TABLE OF CONTENTS

Abstract	4
Introduction	5
Method	5
1. Design and participants	5
2. Animation film	6
3. Procedure	6
4. Measures	6
4.1. Moral advertising literacy and privacy concern	6
Results	7
Discussion	7
Concluding words: film reception.....	8
References	9

INVESTIGATING THE EFFECTS OF AN EDUCATIONAL ANIMATION FILM ON ADVERTISING LITERACY

Abstract

The aim of this research was to investigate whether the educational animation film as developed by AdLit could be used to increase the advertising literacy of adolescents in the context of targeted advertising, both immediately as well as when there was a delay of approximately two weeks. Additionally, we also aimed to test the impact of this film on adolescents' privacy concerns on social networking sites. As a measure of advertising literacy, we focused on *moral* advertising literacy, or, adolescents' ability to develop thoughts about the moral appropriateness of targeted ads. Results showed that the animation film triggered the adolescents to morally reflect on targeted advertising, as well as think about the consequences of personalisation on their privacy.

INTRODUCTION

On Safer Internet Day, 6 February 2018, AdLit released an animation film intended to educate adolescents about targeted advertising on social networking sites (SNSs) ([Link: http://www.adlit.be/nieuws/animatiefilm-reclame-op-sociale-netwerken](http://www.adlit.be/nieuws/animatiefilm-reclame-op-sociale-netwerken)). Targeted advertising refers to online advertising that is based on personal information the advertiser has about the recipient (Schumann, von Wangenheim, & Groene, 2013). It includes information such as demographics, preferences and interests, social connections, browsing and purchase behavior and geographic location (Schumann et al., 2013; Zarouali, Ponnet, Walrave, & Poels, 2017).

The aim of this deliverable is to discuss whether the animation film is effective in triggering adolescents to critically reflect on the moral appropriateness of targeted advertising, which is also referred to as *moral* advertising literacy (Hudders et al., 2017). As argued by Friestad and Wright (1994), once consumers are informed about an advertising tactic (in this case targeted advertising by means of a film), it is important to assess how they think about the appropriateness of the marketer's motive and tactic use. In addition, since targeted ads rely on continuous data collection and monitoring of informational patterns, advertising and privacy have become inextricably intertwined (Zarouali, Poels, Walrave, & Ponnet, 2018). Therefore, we also aimed to shed light into adolescents' privacy concerns toward targeted advertising, and how this is affected by the educational film. This was done by testing adolescents' advertising literacy and privacy concerns right after being exposed to the film, as well as with a delay of two weeks, and compare these findings to those that had not been exposed to such film.

METHOD

1. Design and participants

A between-subjects design was applied. It tested a single factor with two conditions (film vs. no film). Participants were found by contacting the (head) teachers of various schools in Flanders and the Netherlands. Of the 146 schools that were contacted, 3 responded, 2 of which were located in Flanders. Classes were kept intact or placed together, but were never split up. This was done to make sure the students from different conditions were less likely to interact and as such influence the outcome. This data collection yielded 106 completed response sets in total. Of these 106 participants, 12 (11%) were of Dutch nationality, and 94 (89%) were Flemish. All 12 Dutch students were following an MBO track (11%). 57 (54%) Studied at BSO level and 37 (35%) studied at ASO level. In total, 19% of the participants was male. The mean age of the sample was 17.1.

2. Animation film

The aforementioned animation film was the independent variable. Its goal was to shape adolescents into critical and reflective consumers. It was aimed to be entertaining and fitting the interests of the target group, but it had to make the adolescents aware of how targeted ads work, and which data are being collected, processed and used to generate these ads. It was specifically not meant to (negatively) influence the viewers' attitude, but merely to educate them on the topic.

The film lasted for 7 minutes and 47 seconds and consisted of three parts; the **first part** gives a broad introduction to targeted advertising (mainly by explaining the difference with traditional advertising); the **second part** then discusses how companies gather the data they use and how they use it to target ads; Finally, **the third part** emphasises some ethical considerations, as well as the future possibilities of targeted advertising. The voice-over is a clear and steady-paced male voice. The visuals and animation in the film illustrated and underlined the audio and helped to keep the overall message pleasant and easy to digest.

3. Procedure

First, the students were asked for their informed consent, as well as whether they were granted their parental consent to participate. Then, half of the adolescents watched an animation film, whereas the other half did not. After this exposure, participants filled in the questionnaire. Importantly, at this point, the adolescents were not told that there would be a follow-up session.

Two weeks later, the second session (delayed measurement) took place. This consisted of questionnaires for both conditions. By the end of this session, students were told that the experiment was completed and that all questions were allowed to be answered. The responses of both sessions were merged into one dataset for statistical analyses.

4. Measures

4.1. MORAL ADVERTISING LITERACY AND PRIVACY CONCERN

Table 1

Overview of the Cronbach's α

Measures	Original study	First session	Second session
Appropriateness of sponsored content	0.95	0.89	0.90
Online privacy concerns	0.74	0.84	0.83

To assess moral advertising literacy, we used the “*appropriateness of sponsored content*” measure of Boerman, Van Reijmersdal, Rozendaal, and Dima (2017). This instrument consisted of seven bipolar items on a seven-point semantic difference scale (e.g. *acceptable – unacceptable; right – wrong; etc.*). To measure privacy concern, we used a measure

from Smit, Van Noort, and Voorveld (2014). It consisted of five items to be rated on a seven-point Likert scale (ranging from 1= *strongly disagree* to 7= *strongly agree*). Table 1 presents the reliability of both measures in the first and second session of this study.

RESULTS

A Mann-Whitney U test checked whether the two conditions differed significantly from each other in terms of moral advertising literacy and privacy concerns. The test indicated that in the first session (right after seeing the animation film), no differences could be found in terms of moral advertising literacy nor privacy concerns (see Table 2). For the second session (which consisted of a delayed measurement two weeks after seeing the film), we did find a significant difference for both our dependent variables (at the $p < .05$ level) (see Table 3). More precisely, adolescents had a significantly lower moral advertising literacy in the video condition, indicating that they found targeted advertising to be less appropriate and acceptable compared to the control condition two weeks after. In addition, adolescents also had less privacy concerns in the context of targeted ads, as compared to the control condition. These results will be discussed in the next section.

Table 2

Results first session

Measures	Control condition	Video condition	U-value	Significance
Appropriateness of sponsored content	4.7	4.6	1088.0	$p = 0.155$
Online privacy concerns	5.4	5.0	1183.0	$p = 0.328$

*Significant at $p < 0.05$ level

Table 3

Results second session

Measures	Control condition	Video condition	U-value	Significance
Appropriateness of sponsored content	4.6	4.1	995.5	$p = 0.032$ *
Online privacy concerns	5.0	4.4	1016.5	$p = 0.039$ *

*Significant at $p < 0.05$ level

DISCUSSION

The aim of the current research was to see if the AdLit educational animation film could be used to encourage adolescents' to critically evaluate targeted advertising from a moral perspective, i.e. their moral advertising literacy. Right after being exposed to the animation film, we found no differences between those who watched it, and those who did not. However, when we questioned the same

adolescents two weeks later, things had changed. At this point, those who had watched the animation film believed targeted ads to be less appropriate, acceptable and fair. This might suggest that the message of the film needed some time to “get through” and truly sink in and generate a profound influence on their moral reasoning about personalised ads. This could indicate that the film has triggered adolescents to think about personalisation in the course of those two weeks, which influenced their judgments as to whether this tactic is deemed appropriate or not. This finding shows a promising sign that an animation film might encourage adolescents to adopt a critical mindset about personalised advertising, but still, more research is needed to provide a solid empirical base for this conclusion.

In addition, the same pattern of result also emerged for privacy concern: in the first session no difference was found, whereas in the two-weeks-after session, adolescents who had watched the animation film had considerably less concerns about their privacy. This might be the result of the fact that the movie offers hands-on information on how to deal with targeted ads in responsible privacy-protective way. This could have informed and reassured adolescents that they have –to a certain degree- control over personalized ads. Therefore, the message of the film decreased their concerns about the possible misuse or safety of their personal data once it truly sets in. This shows that adolescents did (critically) reflect on their online privacy at a certain point, likely as a result of the film exposure.

CONCLUDING WORDS: FILM RECEPTION

Finally, we want to end with briefly discussing the reception of the animation film. While conducting the current research, most participants seemed to enjoy the watching experience. They laughed at the funny examples and the jokes, and certainly showcased an interested attitude. On their part, the teachers believed the film to be an interesting and useful addition to their teaching materials. Some mentioned there was currently a lack of attention towards privacy-related issues on SNSs in education. Some of them even explicitly stated they were interested in introducing the topic in their lesson plans.

In terms of media coverage, the animation movie was quickly picked up after its release by several media stations, including ATV, VRT, and Radio 2, either by highlighting the film with an online article, interviewing one of the involved researchers, or both (ATV, 2018a, ATV, 2018b, De Maeseneer, 2018, Radio 2, 2018). Furthermore, it was also made part of the new teaching package ‘AdWise’, developed to make minors more aware of new advertising strategies and to make them more critical in the same regard (Adams, Schellens, and Valcke, 2018). It was also integrated into a website which collects educational resources (Departement van Onderwijs en Vorming, 2018).

REFERENCES

- Adams, B., Schellens, T., & Valcke, M. (2018). AdWise. Universiteit Gent, Vakgroep, Onderwijskunde.
- ATV. (2018a, 05 February). "Jongeren geven zich nog te vaak bloot op internet". ATV. Retrieved from <https://atv.be/nieuws/studiogesprek-jongeren-geven-zich-nog-te-vaak-bloot-op-internet-55220>
- ATV. (2018b, 05 February). Jongeren moeten meer nadenken over hun surfgedrag. ATV. Retrieved from <https://atv.be/nieuws/video-jongeren-moeten-meer-nadenken-over-hun-surfgedrag-55236>
- Boerman, S. C., van Reijmersdal, E. A., Rozendaal, E., & Dima, A. L. (2017). The development of the persuasion knowledge scale (PKS): a measure of consumers' knowledge of sponsored content. Paper presented at *International Conference of Research in Advertising (ICORIA)*. Ghent, Belgium.
- De Maeseneer, W. (2018, 05 February). "Slechts 1 op de 4 jongeren beseft dat zijn persoonlijke gegevens verkocht worden" VRT NWS. Retrieved from <https://www.vrt.be/vrtnws/nl/2018/02/05/slechts-1-op-de-4-jongeren-beseft-dat-zijn-persoonlijke-gegevens->
- Departement van Onderwijs en Vorming. (2018, 02 February). Reclame op sociale netwerken : Sensibiliseringsfilmpje. *KlasCement, Leermiddelennetwerk*. Retrieved from <https://www.klascement.net/video/79916/reclame-op-sociale-netwerken-sensibiliseringsfilmpje/?previous>
- Friestad, M., & Wright, P. (1994). The persuasion knowledge model - How people cope with persuasion attempts. *Journal of Consumer Research*, 21(1), 1–31.
- Hudders, L., Pauw, P. D., Cauberghe, V., Panic, K., Zarouali, B., & Rozendaal, E. (2017). Shedding new light on how advertising literacy can affect children's processing of embedded advertising formats: A future research agenda. *Journal of Advertising*, 46(2), 333–349.
- Radio 2. (2018, 05 February). *Nieuws*. Retrieved from: <http://radioplus.be/#/radio2-antwerpen/herbeluister/697f6c8f-8e90-11e3-b45a-00163edf75b7/>
- Schumann, J. H., von Wangenheim, F., & Groene, N. (2013). Targeted Online Advertising: Using Reciprocity Appeals to Increase Acceptance Among Users of Free Web Services. *Journal of Marketing*, 78(1), 59–75.
- Smit, E. G., Van Noort, G., & Voorveld, H. A. (2014). Understanding online behavioural advertising: User knowledge, privacy concerns and online coping behaviour in Europe. *Computers in Human Behavior*, 32, 15-22.
- Zarouali, B., Ponnet, K., Walrave, M., & Poels, K. (2017). "Do you like cookies?" Adolescents' skeptical processing of retargeted Facebook-ads and the moderating role of privacy concern and a textual debriefing. *Computers in Human Behavior*, 69, 157–165.
- Zarouali, B., Poels, K., Walrave, M., & Ponnet, K. (2018). The impact of regulatory focus on adolescents' evaluation of targeted advertising on social networking sites. *International Journal of Advertising*, 0(0), 1–20.