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Disclosing product placement in audiovisual media services: a practical and scientific perspective on the implementation of disclosures across the European Union

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ABSTRACT

According to the law of the European Union (EU), broadcasters are obligated to inform consumers about the presence of product placements (PP) through disclosures. To ascertain whether disclosures are able to improve consumers' understanding of persuasive intent, researchers have examined the impact of multiple disclosure presentations. This can be attributed to the fact that all EU Member States currently apply a variety of different disclosures. No study so far, however, has assessed how PP disclosures are implemented across the EU and whether PP disclosures investigated in advertising research relate to disclosures used in practice. In the present study, we thus conducted both a systematic assessment of practical disclosures of leading EU broadcasters and a comparison of the current practical disclosure presentations with the empirically tested versions. Results revealed that especially brand-unspecific and repetitive disclosures are under-investigated forms of disclosures although commonly used in practice. Implications for both science and policy, and future research are discussed.

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Product placement; disclosures; television program; AVMSD; research; practice

Introduction

The integration of advertising into media content has been a key issue for both policy makers and researchers (Cain 2011). One of the most widespread examples of integrated persuasive communications in audiovisual content is 'product placement.' Product or brand placements (PP) describe an advertising technique in which branded products or brand identifiers are deliberately embedded within entertaining content such as movies or television shows (Balasubramanian, Karrh, and Patwardhan 2006; van Reijmersdal, Neijens, and Smit 2009). Through the partial fusion of editorial and commercial content, research so far suggests that viewers' ability to recognize

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and reflect the persuasive intent of integrated messages is not assured (Nebenzhal and Jaffe 1998). In addition, there appears to be a trend toward a proliferation of PP in television programs since embedded brands have now been accorded the same importance as traditional advertisements (Newell, Blevins, and Bugeja 2009; Smit, van Reijmersdal, and Neijens 2009). From the advertiser's perspective, one key interest in embedded advertising such as PP is that consumers who are exposed to this advertising technique are not able to avoid this advertising content while for instance on-demand audiovisual media services enable viewers to avoid television commercials.

Policy makers, researchers, and consumer organizations have raised concerns because consumers' right to know that a message is advertising may be violated when being exposed to this 'hidden' and subtle advertising message (e.g., Cain 2011; Kuhn, Hume, and Love 2010). To guarantee fair communication and therefore to help consumers be more aware of PP, awareness-raising measures are legally required in certain parts of the world (Cain 2011; Ginosar and Levi-Faur 2010). In the European Union (EU) for instance, these legal conditions are determined by the Audiovisual Media Services Directive (AVMSD 2018). One regulatory requirement of the Directive is that Member States of the EU are obligated to appropriately identify television programs containing PP through disclosures. In the United States, similar regulations are discussed (Cain 2011).

With the present study, we consider the regulation of PP in terms of the EU situation. In other words, the AVMSD (2018) constitutes the legal framework of our study. We therefore refer to the television program that is aired on television broadcasters that currently underlie the legal requirements of the Directive. In this context, it is worthy to mention that television broadcasters of EU countries currently use a variety of different PP disclosures presentations (Angelopoulos 2010). This is based on the circumstance that the present EU regulation for PP does not specify *how* disclosures have to be implemented. This leaves the actual implementation to the individual Member States. To our knowledge there is no existing empirical research on how practical disclosures are implemented by leading EU broadcasters. Hence, the first aim of this paper is to contribute to existing research (An, Kang, and Koo 2019; Boerman et al. 2018) by conducting a systematic assessment of practical PP disclosures of leading EU broadcasters with highest audience shares.

Regarding the effectiveness of PP disclosures, a great number of empirical studies have been published. To ascertain whether disclosures of PP are able to improve consumers' understanding of persuasive intent (i.e., their level of persuasion knowledge), several authors examined the impact of disclosures on viewers (e.g., Boerman, van Reijmersdal, and Neijens 2012, 2013, 2014, 2015a, 2015b; De Jans et al. 2018; De Pauw, Hudders, and Cauberghe 2018; Matthes and Naderer 2016). With respect to the circumstances under which PP disclosures in television programs achieve their primary goal (i.e., enhancing viewers' awareness of PP), findings to date are mixed. That is, under some conditions, disclosures foster persuasion knowledge, while in other cases there is no such effect (for a detailed review on disclosure effects, see Boerman and van Reijmersdal 2016). Based on different theoretical assumptions, prior studies on disclosures have already pointed out that how a disclosure is presented might affect its potential to adequately inform viewers about the presence of persuasive content

(Boerman and van Reijmersdal 2016). Despite this, research lacks scientific evidence about whether current advertising research actually covers those disclosures practically employed across the EU. However, in order for advertising scholars to contribute to a societal debate, building on the existing practices and examining which practice is most successful is indispensable. Therefore, the second aim of our paper is to compare the existing practical implementations of PP disclosures with the empirically tested versions.

In our paper, we present a twofold perspective: We start from a legislative perspective on the current EU regulation for television broadcasters regarding PP. Afterwards, we adopt a scientific perspective discussing the empirical evidence with respect to PP disclosures within television programs and the accompanying theoretical explanations.

Legislative perspective: EU regulation for television broadcasters regarding PP

We especially draw on the regulation of PP in the EU. Compared to other countries, the framing of PP in the EU during the policy process was more problem-based: “The EU’s ‘problem’ is a new technological and economic reality against which the viewers and creators should be protected by responsible regulators” (Ginosar and Levi-Faur 2010, p. 481). In 2018, the AVMSD was updated due to developments of the market for television broadcasting¹ (revised not codified version: AVMSD 2018). This development includes new well-established players such as providers of video-sharing platform services and new content types (i.e., video clips, user-generated content). Changes of the Directive regarding PP were quite radical (Cabrera Blázquez et al. 2017): While PP so far was prohibited, the current ban was reverted and replaced by a permit of PP with a positive list of television programs that still shall not include PP. According to article 11 of the updated AVMSD (2018), PP in television programs produced after 19 December 2009 “shall be allowed in all audiovisual media services, except in news and current affairs programmes, religious programmes and children’s programs” (AVMSD 2018, p. 17). However, PP for specific products such as cigarettes or tobacco products are strictly prohibited.

EU broadcasters have to meet four legal requirements for television programs containing PP. The first requirement indicates that “their content and organisation within a schedule, in the case of television broadcasting, or within a catalogue in the case of on-demand audiovisual media services, shall under no circumstances be influenced in such a way as to affect the responsibility and editorial independence of the media service provider” (AVMSD 2018, p. 18). Second, EU broadcasters shall refrain from directly encouraging the purchase or rental of services or goods. Third, the embedded product must not be too prominent. And fourth, EU broadcasters are obligated to disclose PP at the beginning and at the end of the television program, as well as each time a program resumes after a commercial break in order to avoid any confusion on the part of the viewer. Compared to the radical changes of the Directive in terms of PP, the Directive is not subject to any changes regarding the PP disclosure.

This disclosure obligation, however, refers only to in-house media productions (i.e., media content either produced by the media provider itself or by a company that is

affiliated with that provider) and not to media content produced abroad. Against this background, a great part of EU Member States chose to use the waiver and not apply an identification requirement for foreign or rather purchased productions (European Commission 2016). Consequently, these EU broadcasters can freely screen foreign-made productions without a PP disclosure. Furthermore, EU countries have the opportunity to impose stricter regulations or even a full ban of PP in their national media productions (Angelopoulos 2010; Cabrera Blázquez et al. 2017). As these guidelines leave quite a bit of leeway for the individual Member States there are great differences between EU countries regarding how the practical regulation of PP is implemented (see European Commission 2016). Hence, as already addressed by several studies (e.g., Boerman, van Reijmersdal, and Neijens 2015a; Tessitore and Geuens 2013; Matthes and Naderer 2016; van Reijmersdal et al. 2017), this circumstance led to different disclosure presentations across the EU. Despite this fact, to our knowledge there exists no empirical research on how practical disclosures are implemented by leading EU broadcasters. Due to the missing empirical evidence, we refrain from formulating hypotheses and pose a research question instead:

RQ1: How do television broadcasters disclose PP across the EU?

Scientific perspective: disclosures of PP within television programs

The main goal of a disclosure is to inform the audience about the presence of advertising (Cain 2011) and thus to help viewers cope with persuasive attempts by activating their *persuasion knowledge* (Friestad and Wright 1994). According to the Persuasion Knowledge Model (PKM), persuasion knowledge refers to consumers' cognitive knowledge and beliefs about specific advertising techniques as well as to their ability to cope with persuasive attempts by making judgments of the appropriateness of persuasion tactics (Friestad and Wright 1994). This knowledge develops over a life span, indicating that consumers more easily understand the intentions of persuasive messages the more practical experience they have gained (Friestad and Wright 1994; Wright, Friestad, and Boush 2005). However, due to the subtle and hidden nature of PP, the activation of persuasion knowledge is impaired (Buijzen, van Reijmersdal, and Owen 2010). When being exposed to a prior disclosure, viewers might better realize that a branded product was intentionally embedded by an advertiser and that the advertiser's goal was to persuade them (Wright, Friestad, and Boush 2005; Wei, Fischer, and Main 2008).

Previous advertising research on the effects of disclosures on consumers' persuasion knowledge is abundant and has examined several media types including news articles (e.g., Wojdyski et al. 2017), television shows (e.g., Boerman, van Reijmersdal, and Neijens 2012; Campbell, Mohr, and Verlegh 2013), radio content (e.g., Wei, Fischer, and Main 2008), online blogs (e.g., van Reijmersdal et al. 2016), advergames (e.g., An and Stern 2011; Evans and Hoy 2016; van Reijmersdal et al. 2015), and user generated content on social media (e.g., De Veirman and Hudders 2020). Based on the results of a literature review by Boerman and van Reijmersdal (2016), a great part of empirical disclosure studies focused on PP in television programs such as TV series or movies.

Whether a PP disclosure within television programs can convey its message effectively depends to a large extent on the presentation of the disclosure. In this light, a great part of empirical studies on disclosures has already pointed out that how a PP disclosure is presented might affect its potential to adequately inform viewers about the presence of persuasive content (see Boerman and van Reijmersdal 2016). With that in mind, literature on persuasion knowledge provides different theoretical assumptions to predict the effectiveness of *disclosure content* (Dekker and van Reijmersdal 2013; van Reijmersdal 2016). Previous research indicates that disclosures which make the ulterior motive of PP more evident by explicitly stating the persuasive nature of PP through add-ons like “this advertising is created to influence your buying behavior” can lead to higher critical processing in viewers (van Reijmersdal 2016). Hence, disclosures appear to positively affect consumers’ persuasion knowledge if their content is more detailed (Boerman, van Reijmersdal, and Neijens 2015a; De Jans et al. 2018; Tessitore and Geuens 2013). Prior studies also revealed that existing PP *disclosure types* in the form of a symbol (the abbreviation “PP” for product placement) are hardly noticed or understood by viewers (Boerman, van Reijmersdal, and Neijens 2015a; De Jans et al. 2018; Tessitore and Geuens 2013). The “PP”-symbol is expected not to be effective because it may go unnoticed and hence the symbols’ subject matter may not become clear to consumers. This assumption is based on stages of information processing put forth by warning label research (Wogalter and Laughery 1996). This research indicates that successful warning cues must both capture attention and be understood by the target audience to be deemed effective. A combination of a symbol and a text (“PP – This program contains product placement”), in contrast, not only increases awareness as well as understandability in viewers but also positively influences persuasion knowledge (Boerman, van Reijmersdal, and Neijens 2015a; Tessitore and Geuens 2013).

Furthermore, when following priming theory, consumers’ information processing and judgments are affected by activated concepts put forth by primes (Roskos-Ewoldsen, Roskos-Ewoldsen, and Carpentier 2002). Based on this theory it is assumed that disclosures may work as primes for upcoming advertising-related concepts (Bennett, Pecotich, and Putrevu 1999). In order to test these theoretical considerations, empirical studies examined the role of *disclosure timing within the television program* (Boerman, van Reijmersdal, and Neijens 2014, 2015b; De Pauw, Hudders, and Cauberghe 2018; van Reijmersdal, Tutaj, and Boerman 2013). More specifically, these studies investigated the extended time between disclosure and PP (e.g., at the beginning of the program, concurrently with the PP, after the branded content). The findings of these studies lend support to the conjecture that PP disclosures displayed prior to (Boerman, van Reijmersdal, and Neijens 2014) or during the PP (van Reijmersdal, Tutaj, and Boerman 2013) can work as primes compared to disclosures shown at the end of the program. A priming effect of PP disclosures is also derived when children are the audience (De Pauw, Hudders, and Cauberghe 2018). However, compared to the US legal requirements that call for disclosures during each scene that contains PP (Cain 2011), the AVMSD (2018) does not decree PP disclosures during each scene. Instead, the EU legislation requires television broadcasters to show PP disclosures at the beginning of the television program, after each commercial break, and

at the end of the program. Based on these legal requirements, the most recent studies published investigated how the *repetition* of a disclosure affects children (Spielvogel, Naderer, and Matthes 2020; Uribe and Fuentes-García 2019). On the one hand, findings of the eye-tracking study of the authors Spielvogel, Naderer, and Matthes (2020) revealed that a repeated disclosure decreased children's visual attention toward the subsequent PP to a higher extent than in the case of a one-time disclosure and no disclosure. The authors interpret this result as brand avoidance that only appeared if children are repetitively primed by a prior disclosure cue. On the other hand, the results of the study of Uribe and Fuentes-García (2019) indicated that disclosures (both one-time disclosure and repeated disclosure) increased children's level of persuasion knowledge to a higher extent than no disclosure. Furthermore, the authors concluded that children who were exposed to a repeated disclosure showed higher scores of persuasion knowledge than children exposed to a one-time disclosure. In sum, disclosure repetition needs to be considered as it seems to affect the understanding of embedded persuasive messages.

Moreover, limited capacity models of information processing postulate that consumers have limited cognitive resources to process information and also allocate their cognitive resources selectively (Buijzen, van Reijmersdal, and Owen 2010; Lang 2000). In line with this reasoning, first empirical results indicate that PP disclosure effects on consumers' persuasion knowledge increased when *disclosure duration* was extended (Boerman, van Reijmersdal, and Neijens 2012). This effect, however, could not be supported for younger viewers like adolescents (van Reijmersdal et al. 2017), and hence the role of disclosure duration should be examined further.

Based on the dual-code theory of Paivio (1971), other research in this area also addressed *disclosure modality* (De Pauw, Hudders, and Cauberghe 2018; Evans and Hoy 2016). Dual modality describes the simultaneous presentation of sound and image (audiovisual; Russell 2002; van Reijmersdal, Neijens, and Smit 2009) that increases the depth of processing of consumers compared to the sole presentation of audio or visual cues (Paivio 1971). Recipients in this case tend to encode both visual cues as mental pictures and audio cues as verbal codes increasing cognitive elaboration (van Reijmersdal, Neijens, and Smit 2009). While research on dual modality so far only exists in the context of advergames (An and Stern 2011; Evans and Hoy 2016), a study by De Pauw, Hudders, and Cauberghe (2018) demonstrated that perceptual modality also matters for PP disclosure effects. The authors concluded that a visual disclosure improved the knowledge about persuasion in children more effectively than an auditory cue compared to no disclosure.

Although several studies investigated different PP disclosure presentations and their effects, it is not clear nowadays whether empirical research on PP disclosures within television programs is in line with the practical implementation of this regulation across the EU. That is, empirical studies may predominantly focus on PP disclosures used in their respective country and neglect what other disclosure presentations are out there, and what might be the most effective way to inform consumers about PP (Boerman, van Reijmersdal, and Neijens 2012). Moreover, some disclosure presentations may be examined in advertising research, but have no practical counterpart. By contrast, some forms of disclosures may be frequently used by audiovisual media

services of the EU but ignored by advertising scholarship. In order for advertising scholarship to contribute to a societal debate, building on the existing practices and examining their effects is valuable (An, Kang, and Koo 2019; Boerman et al. 2018). Since the comparison between the practical and empirical implementation of disclosures has not been investigated, we pose our second research question:

RQ2: How do PP disclosures examined in advertising research relate to PP disclosures used in practice by leading television broadcasters across the EU?

Method

Our methodological approach is twofold. On the one hand, we investigate the practical implementation of PP disclosures across the EU (RQ1). On the other hand, we examine the gaps between the practical PP disclosure presentations across the EU and the examined versions in empirical research (RQ2). By doing so, future research can take up our results of practical PP disclosure presentations and can investigate disclosure characteristics that have been neglected by scholars so far but are actually used in EU practice. In both methodological approaches, the AVMSD (2018) of the EU constitutes our legal framework. This procedure allows us a reasonable comparison of practical and empirical PP disclosure presentations.

Practical implementation of PP disclosures

To assess the practical implementation of PP disclosures, we conducted a content analysis of PP disclosures in television channels of leading EU broadcasters. In other words, we looked at the most popular television broadcasters of EU countries so that we were able to investigate PP disclosures to which the majority of EU viewers are exposed. Since the AVMSD (2018) of the EU constitutes our legal framework, we pursue a full coverage of the EU and therefore included television broadcasters of all 28 EU member states.²

Sampling procedure and data collection

To sample television programs of leading EU broadcasters, the selection of the EU broadcasters was based on the highest audience shares on a national level (European Audiovisual Observatory 2016) and the broadcasting type (i.e., both public and private). If a respective television broadcaster was not accessible, the television broadcaster with the second highest audience shares was selected. The selection procedure led to $N=56$ television broadcasters (i.e., two for each country; one public and one private television channel; see [Online Appendix 1](#)). For several public television channels, however, PP are completely prohibited on a national level. We retrieved information on PP prohibition by $n=8$ public television broadcasters.

Of the remaining television broadcasters ($n=48$), a total of $n=38$ (79.2%) television channels actually provided PP disclosures. The majority, 63.2% ($n=24$) of our sample, were private broadcasting channels. The 38 television channels provided a total of $N=95$ disclosures (including disclosure appearances at the beginning of the television program $n=37$, after the commercial break $n=26$, and at the end of the program

$n = 32$). Our sample size is comparable to other similar content analyses done in this research area (An, Kang, and Koo 2019; Boerman et al. 2018).

The media content of one of the selected television channels was recorded on one randomly chosen day between 9th December 2017 and 9th May 2018. After each recording, the first author examined the material for the inclusion of a PP disclosure. If the recording did not include any PP disclosure, two more recordings were made of the respective television channel. If a television channel did not include a disclosure after three recordings, the television channel with the second highest audience shares within an EU country was selected³ (see [Online Appendix 1](#)).

We recorded media content of the television broadcasters that aired between 5 PM and 9 PM. We chose this specific time frame for two reasons. First, television programs which constitute our content of interest (i.e., TV series and films including PP) are predominantly shown in the late evening and at primetime, increasing the chance that PP disclosures appear. Second, breakfast television includes several television programs that are excluded from PP such as news programs or children's programs when following legal requirements of the AVMSD (2018). Yet, it has to be stressed that PP disclosures shown at a different time of day than between 5 PM and 9 PM do not differ, because broadcasters usually use their particular type of disclosure throughout the entire television program.

Coding procedure

Coding units represented all PP disclosure appearances. Thus, disclosures at the beginning, after the commercial break, and at the end of the television program were individually coded. We particularly focused on the PP disclosure and operationalized a disclosure as an explicit declaration of the presence of PP. Therefore, disclosures related to other commercial communications were excluded. For instance, sponsorship disclosures are regulated independently by law as they shall include the sponsor name, logo, or any other symbol (Angelopoulos 2010; AVMSD 2018).

The identification of PP disclosures was tested with two coders. Krippendorff's Alpha revealed adequate values (0.79). Afterwards, the relevant variables were coded (see Measures below). For this purpose, the same two coders coded PP disclosures from 12 different channels and countries. For this inter-coder reliability test, disclosure appearances were summarized for each variable (i.e., at the beginning, after the commercial break, at the end), leading to 36 potential PP disclosures and cases. For disclosure modality and the mention of specific brands, the two coders had to make a second coding procedure so that scores of Krippendorff's Alpha fulfilled adequate values. For disclosure content, the wording of 14 separate disclosures was examined. Krippendorff's Alpha values are included in the following subchapter.

Measures

We focused on disclosure characteristics that are considered theoretically relevant conditions for disclosure effects (Boerman and van Reijmersdal 2016). Based on previous studies (Boerman, van Reijmersdal, and Neijens 2015a), *disclosure type* describes whether the disclosure comprises solely a 'PP'-symbol (solely symbol), a phrase (textual disclosure), or a combined version (combination of text and symbol, Alpha = 1).

With *disclosure content*, we aim to investigate whether the content of the disclosure exceeds the sole use of a PP abbreviation (only abbreviation of PP) by referring to the presence of advertising (only or additional reference to presence of PP/advertising) or by particularly referring to the commercial or promotional purpose (only or additional reference to the purpose of PP/advertising, Alpha = .86). In order to assess the specific content of the practical disclosures, native speakers of the respective countries translated the disclosures. Regarding disclosure content, we also intended to engage in an important ongoing debate on whether or not disclosures of PP need to mention the specific brand (Angelopoulos 2010) Regarding *the mention of specific brands*, we differentiated between brand-specific and brand-unspecific (Alpha = 1).

In line with current research (e.g., Boerman, van Reijmersdal, and Neijens 2014; Spielvogel, Naderer, and Matthes 2020) and the legal requirements of the AVMSD (2018), we also assessed *disclosure timing within the television program* (at the beginning of the television program, after the commercial break, at the end of the television program) and *repetition* (repetitive, not repetitive). PP disclosures were repetitive if television broadcasters showed a disclosure more than once. One-time disclosures, in contrast, only appeared once during the television program (Alpha = 1).

Based on previous research (e.g., Boerman, van Reijmersdal, and Neijens 2012), we also investigated *disclosure duration*. We assessed the duration of the disclosure in seconds ($M = 8.81$; $SD = 9.97$, Alpha = .96). Based on Naderer, Matthes and Spielvogel (2020) who performed a content analysis in the research area of PP presentations, we coded disclosure duration in segments of 1-3 sec; 4-6 sec; 7-13 sec; and more than 14 sec (Alpha = .61).

Furthermore, *disclosure modality* was deemed as relevant. Since the AVMSD (2018) only refers to audiovisual media services and not to radio as well as on-demand audio services, we assessed whether the disclosure appeared visually or audio visually (Alpha = 1). An audiovisual disclosure can both be voiced or be accompanied by background audio. Furthermore, since moving visuals behind a disclosure may distract consumers' attention from the disclosure cue (see Hoy and Andrews 2004), we also noted whether the disclosure was integrated or not integrated into the television program. Regarding *disclosure program integration* (Alpha = 1), a disclosure not integrated into the television program was coded if the disclosure appeared before the television program started and thus was not part of the program itself. An integrated disclosure, in contrast, appeared within the program.

Moreover, current research might lack an investigation of other disclosure characteristics also relevant for informing consumers effectively about PP. Based on warning label research (Wogalter and Laughery 1996), a large font size and the use of flashy colors might increase the noticeability of disclosures and in turn affect if viewers are aware of the presence of advertising (Tessitore and Geuens 2013). Especially in the case of television programs, it has to be stressed that moving visuals behind the disclosures exist. Hence, disclosures with extremely small font sizes and no flashy colors might fall under the radar of viewers. The authors Tessitore and Geuens (2013) therefore advised policy makers to use flashy colors (e.g., red) and large font sizes so that disclosures stand out better. It is also assumed that the visual arrangement of PP

disclosures is especially important for young consumers since they have more difficulty detecting PP as advertising than adults (De Jans et al. 2018).

In addition to that, the time of disclosure appearance might be a crucial context for the potential of PP disclosures. This concept describes at what time of the television program the disclosure actually appears. Once recipients engage with the plot of the TV series or the film (Boerman, van Reijmersdal, and Neijens 2015b; van Reijmersdal 2016), disclosures may fall under the radar of most viewers and hence might be less effective. This might be especially true if disclosures appear very late (i.e., several minutes after the television program has started) as well as very early before the plot has ended and thus throughout the program.

We assessed *disclosure size* by the percentage of the disclosure in relation to the total screen size ($M = 2.02$; $SD = 3.02$, $\text{Alpha} = .87$). As with disclosure duration, we also coded disclosure size in segments of less than 1%; 1-3%; 4-6%; and more than 7% ($\text{Alpha} = .96$). *Disclosure color* ($\text{Alpha} = .85$) was coded as the use of flashy colors (signal colors such as red, blue, orange, or yellow) compared to the use of no flashy colors (black, white, grey, and transparent disclosures). *Time of disclosure appearance* was measured in both seconds ($M = 18.38$; $SD = 22.55$, $\text{Alpha} = .84$) and segments of 0-3 sec; 4-14 sec; 15-30 sec; 31-60 sec; and more than 60 sec ($\text{Alpha} = .96$). The time of disclosure appearance was measured from the time the television program started. More specifically, for disclosure appearances at the beginning of the program and disclosure appearances after a commercial break, how many seconds it took for the disclosure to appear was counted. For disclosure appearances at the end of the program, how many seconds the television program lasted after the disclosure appeared was counted. If a disclosure was not integrated into the television program or if a disclosure was integrated into the program but also appeared simultaneously with the program, then 0 seconds for that disclosure was counted.

Table 1 includes the operationalization of all variables.

Scientific implementation of PP disclosures

To examine how previous studies empirically tested PP disclosures, we build on an existing literature review on disclosure effects (Boerman and van Reijmersdal 2016). In our analysis, however, we focus particularly on what the empirically tested disclosures looked like with regard to different disclosure characteristics. We also concentrate on empirical disclosure studies that were investigated in the context of television programs. Furthermore, we offer an overview on the effects of PP disclosures on persuasion knowledge. By doing so, we can summarize which kind of disclosure characteristics received less attention so far and yielded inconsistent results. We only included PP disclosure effects on components of conceptual persuasion knowledge (including recognition of PP as advertising, understanding of persuasive intent, and understanding the commercial source; see Rozendaal et al. 2011) and attitudinal persuasion knowledge (critical feelings toward the PP; Boerman, van Reijmersdal, and Neijens 2012) because the PKM constitute our theoretical framework (Friestad and

Table 1. Results for disclosure characteristics of all disclosure appearances.

Characteristics	Number	Percent	
Disclosure Type	Symbol	50	52.6
	Text	24	25.3
	Combination	21	22.1
	$\chi^2 = 16.06, df = 2, p < .001$		
Disclosure Content	Only abbreviation	50	52.6
	Reference to the presence of PP/advertising	38	40.0
	Reference to the purpose of PP/advertising	7	7.4
		$\chi^2 = 31.10, df = 2, p < .001$	
Mention of Specific Brands	Brand-specific	2	2.1
	Brand-unspecific	93	97.9
	<i>Constant variable</i>		
	$M = 8.81; SD = 9.97$		
	Minimum = 2; Maximum = 60		
Disclosure Duration in seconds	1–3 sec	10	10.5
Disclosure Duration in segments	4–6 sec	51	53.7
	7–13 sec	23	24.2
	More than 14 sec	11	11.6
		$\chi^2 = 46.10, df = 3, p < .001$	
Disclosure Modality	Visual	84	88.4
	Audiovisual	11	11.6
	$\chi^2 = 56.10, df = 1, p < .001$		
Disclosure Program Integration	Integrated into the television program	87	91.6
	Not integrated into the television program	8	8.4
	$\chi^2 = 65.70, df = 1, p < .001$		
	$M = 2.02; SD = 3.02$		
	Minimum = 0.1; Maximum = 16.0		
Disclosure Size in percent	Less than 1 percent of the screen	43	45.3
Disclosure Size in segments	1–3 percent	33	34.7
	4–6 percent	12	12.6
	More than 7 percent	7	7.4
		$\chi^2 = 13.16, df = 3, p < .01$	
Disclosure Color	Flashy colors	21	22.1
	No flashy colors (black, grey, white, transparent)	74	77.9
	$\chi^2 = 29.57, df = 1, p < .001$		
	$M = 18.38; SD = 22.55$		
	Minimum = 0; Maximum = 113		
Time of Disclosure Appearance in seconds	0–3 sec	30	31.6
Time of Disclosure Appearance in segments	4–14 sec	21	22.1
	15–30 sec	25	26.3
	31–60 sec	12	12.6
	More than 60 sec	7	7.4
		$\chi^2 = 18.63, df = 4, p = .001$	
Total		95	100.0
Disclosure Timing Within TV Program and Repetition	At the beginning (not repetitive)	2	5.3
	At the beginning, after commercial break (repetitive)	3	7.9
	At the beginning, at the end (repetitive)	10	26.3
	After commercial break (not repetitive)	1	2.6
	Beginning, after commercial break, end (repetitive)	22	57.9
Total		38	100.0

Wright 1994). Hence, PP disclosure effects on brand-related outcomes such as brand memory, brand attitude, or purchase intention of the promoted brand were excluded.

Sample

We included empirical studies in our analysis if (1) they were published from 2010⁴ until now⁵ and if (2) they referred to both PP and content of television program (e.g., television series, films). Hence, disclosure research in other types of publications such

as advergames or on social media were not examined. Furthermore, since the AVMSD (2018) constitutes our legal framework, studies were only included if (3) the origin of their sample originated in an EU country. In the case of another origin of the sample, studies were only included if they referred to the EU regulation (AVMSD 2018). In total, 19 studies were examined in more detail (see [Online Appendix 2](#)). The sample size of our literature review of empirical research is comparable to other similar literature reviews that have been conducted in this research area (Boerman and van Reijmersdal 2016).

Measures

We coded the same disclosure characteristics as for the content analysis of practical PP disclosures. That is, *disclosure type* (solely symbol, textual disclosure, combination of text and symbol), *disclosure content* (with reference to the exact wording of the disclosure), *mention of specific brands* (brand-specific, brand-unspecific), *disclosure timing within television program* (at the beginning of the television program, after the commercial break, at the end of the television program) and *repetition* (repetitive, not repetitive), *disclosure duration* (in seconds), *disclosure modality* (visual, audiovisual), and *disclosure program integration* (integrated into television program, not integrated into television program).

Disclosures characteristics that were only mentioned for a small number of studies (i.e., disclosure size, disclosure color, time of disclosure appearance) were excluded. We also noted the type of television program (TV series or movie), origin of sample (EU country), type of sample (adults, students, adolescents, children), whether authors manipulated disclosure presentations, and the effects on persuasion knowledge triggered by the respective disclosure presentation.

Findings

In the following, findings of both empirical and practical PP disclosures are reported by disclosure characteristics. With respect to the results of the empirical PP disclosures, the examined studies are in the following signified by superscript numbers. All examined studies and the corresponding numbers are provided in [Online Appendix 2](#). Regarding the results of the practical disclosure implementation, we analyzed all disclosure appearances (i.e., at the beginning of the television program, after the commercial break, at the end of the television program) that represent our coding units. The inclusion of repetitive disclosure appearances into the analysis has also been made in similar content analyses (Boerman et al. 2018).

Type of PP disclosures, content of PP disclosures, and mention of specific brands

All empirical studies were transparent on which type of disclosure they employed. The majority of studies investigated the impact of textual disclosures^{1-8,11,14-19}, followed by a combination of symbol and text^{4,9,10,12,13,16} and solely symbols^{4,7,14}. Furthermore, disclosures which were empirically investigated so far demonstrated a

balanced distribution regarding brand-specific^{1-3,5,6,8,16,18} and brand-unspecific^{4,7,9-15,17} disclosures. Regarding the specific content of disclosures, i.e., without any special consideration to the mentioning of a brand, a great part of the disclosures made a reference to the presence of PP^{1-7,8,9,10,12,13,18,19}, followed by disclosures with solely an abbreviation of PP^{4,7,10,12-14,16} and disclosures including a reference to the purpose of pp^{11,14-17}.

In contrast, almost all practical implementations of disclosures at the beginning of or during a television program were brand-unspecific (97.9%, $n = 93$; see [Table 1](#)). Interestingly, compared to the balanced examination of brand-specific and brand-unspecific disclosures in research, only two television channels showed a brand-specific disclosure, but only at the end of the program and three practical disclosures at the end also varied from previous disclosure appearances regarding their tense (e.g., “The product BRAND was included into the program for promotional purposes”). Practical disclosures also predominantly just presented a symbol (52.6%, $n = 50$), followed by textual disclosures (25.3%, $n = 24$), and lastly disclosures with a combination of symbol and text (22.1%, $n = 21$). Hence, the practical disclosures predominantly only mentioned the abbreviation “P” or “PP” for product placement (52.6%; $n = 50$); in contrast, the abbreviation of a disclosure of a private broadcaster in Finland comprised a “€”-symbol (see [Traficom 2019](#)). Several of the remaining practical disclosures informed viewers about the presence of PP or advertising (40%; $n = 38$; e.g., “Sponsored by PP”; “This program contains PP”; “This program contains embedded content”); in contrast, only a minor part of practical disclosures further referred to the commercial or rather promotional purpose of PP/advertising (7.4%; $n = 7$; e.g., “P – Program with PP for commercial purposes”; “Commercial products featured in this program”). Additionally, in two cases the type of the disclosure (symbol, text, combination) changed at the end of the program in relation to the disclosure shown at the beginning.

Timing within television program, repetition, and duration of PP disclosures

Disclosure timing within the television program was a focal point of several empirical disclosure studies.^{3,5,9,18} Yet if disclosure timing was not manipulated the majority of disclosures were shown only once at the beginning of the program or before the program started and thus were not repetitive^{4,6,10-12,14,15}. Two of the latest disclosure studies published in particular referred to disclosure repetition^{13,16}. Previous empirical research also examined the impact of disclosure duration. Most empirical research used disclosures that lasted 6 seconds^{1,3,4,5,7,9,12,13,16,19} followed by disclosures with a duration of 3 seconds^{1,3,5,10,19}. The duration of the disclosures of the remaining studies ranged from 2 to 14 seconds (see [Online Appendix 2](#)).

With respect to disclosure timing within the television program, slightly more than half of the 38 television broadcasters showed practical disclosures three times (i.e., at the beginning, after the commercial break, and at the end of the program) (57.9%, $n = 22$). Therefore, most of the television programs included a commercial break (71.1%; $n = 27$) and were shown repetitively.

Since disclosure duration is not legally determined by the AVMSD (2018), practical disclosures had various durations. However, approximately half of them were similar to the examples tested in empirical studies and thus lasted between 4 and 6 seconds

(53.7%, $n = 51$), followed by disclosures with a duration between 7 and 13 seconds (24.2%; $n = 23$). Practical disclosures on average lasted 8.81 seconds ($SD = 9.97$) and lasted minimum 2 seconds and maximum 60 seconds.

Modality and program integration of PP disclosures

Regarding disclosure modality, researchers primarily looked at the effects of visual disclosures and to our knowledge only one recently published study investigated PP disclosures in television programs with dual modality¹⁶. A small amount of empirical studies used disclosures before the program started, or in other words disclosures not integrated into the television program^{6,8,9,11,15}. However, practical disclosures not integrated into the program also constituted exceptions (8.4%, $n = 8$). Also, in line with the scientific implementation the vast majority of disclosures in practice were only visual (88.4%, $n = 84$) and thus hardly had dual modality.

Explorative analysis: size, color, and time of appearance of PP disclosures

Lastly, we looked into three aspects that were not discussed in previous empirical research on PP disclosures: size, color and time of appearance. The size of disclosures in practice was rather small: 45.3% ($n = 43$) of the disclosures only accounted for less than one percent of the screen compared to disclosures greater than one percent of the screen. The average size of practical disclosures was 2.02% ($SD = 3.02$) with a maximum size of 16%. Television channels of the EU also predominantly relied on neutral colors such as black or white (77.9%; $n = 74$) and thus hardly used flashy colors. With respect to time of disclosure appearance, there was no clear consensus in practice: while some disclosures appeared just at the beginning of the program after maximum three seconds or rather very late before the program ended (31.6%: $n = 30$), others appeared substantially later at the beginning of the program or rather substantially earlier before the program ended (4-30 sec: 48.4%: $n = 46$; more than 30 sec: 20%: $n = 19$). Practical disclosures on average appeared after 18.38 seconds ($SD = 22.55$) and not later than after 113 seconds.

An empirical examination of these characteristics is so far missing, even though arguably size and no flashy colors are important characteristics to consider when wanting to create an effective PP disclosure (Tessitore and Geuens 2013; Wogalter and Laughery 1996). In this light, the latest empirical research on sponsored news articles revealed that higher levels of visual prominence (assessed by size and color contrast) can increase persuasion knowledge (Wojdynski et al. 2017). Furthermore, time of disclosure appearance might be relevant for effects since PP disclosures may blend into the content once recipients engage with the plot (Boerman, van Reijmersdal, and Neijens 2015b; van Reijmersdal 2016).

Discussion

When comparing the scientific examination and practical implementation of PP disclosures in television programs, we detected both overlaps and gaps. This comparison is

indispensable so that advertising scholars can contribute to a societal debate by building on the existing practices and examining which practice is most successful. Hence, future empirical research on PP disclosure effects can take up our results of practical PP disclosure presentations and can investigate disclosure characteristics that have been so far neglected by scholars but are used by leading EU broadcasters.

When starting with the overlaps, the scientific and practical implementation of PP disclosures especially go together regarding the modality and the program integration of the disclosures. Hence, for these categories, empirically tested disclosure presentations represented disclosures that are commonly used across the EU. That is, the vast majority of practical disclosures were categorized as visual disclosures which are integrated into television programs. Regarding disclosure duration, both empirically tested and practical PP disclosures are also presented in a quite similar way.

However, we also identified four major gaps that need to be addressed further. First, one of the most important gaps between the scientific and practical implementation referred to the type of PP disclosures. Even though all theorized types were employed in practice, approximately half of the most popular EU broadcasters provided solely symbols. This circumstance should raise discussions in legal practice to establish more effective disclosures (i.e., a combination of symbols and text; see Boerman, van Reijmersdal, and Neijens 2015a) as existing studies are very clear on the limited effectiveness of sole symbol disclosures of PP (Boerman, van Reijmersdal, and Neijens 2015a; De Jans et al. 2018; Tessitore and Geuens 2013). Based on the results of our explorative analysis, it also has to be stressed that the majority of practical PP disclosures was rather small and hardly noticeable. The small average proportion of the disclosure in contrast to the main screen is also in line with previous findings, e.g., on ad breaks of food brand websites targeting children (An and Kang 2013).

Second, major differences are related to the content of the disclosures. That is, brand-unspecific disclosures were very common in practice, but have been studied by only approximately half of the existing empirical studies. Hence, most insights on an effective disclosure practice build on brand-specific disclosures. One explanation for this imbalance between research and practice might be that the explicit mention of specific brands refers to the regulation proposals in the United States (Cain 2011). Additionally, EU regulation prescribes that a reference to a respective sponsor shall be made within the frame of a sponsorship disclosure, yet this legal requirement does not extend to PP disclosures (AVMSD 2018). Against this background, the specific mention of a brand name might be an additional cue that inflates the existing results about the effectiveness of disclosures. In this case, viewers may search the television program more accurately for the specific brand that is mentioned by the disclosure.

A third significant gap referred to disclosure timing within the television program and its repetition. The AVMSD (2018) states that disclosures have to be shown at the beginning of the television program, at the end of the program, as well as after each commercial break and are thus repetitive. Most of the empirical studies, however, showed a one-time disclosure. This circumstance can be traced back to the fact that experimental settings often only allow us to use an excerpt of a television program and not a complete program as it is actually shown on television. Right now, a disclosure in an experimental setting therefore seems to be effective when it is only shown

once, but this is built on studies working with shorter stimuli or excerpts of movies and/or series. Hence, recent studies tried to improve external validity by investigating disclosure repetition (Spielvogel, Naderer, and Matthes 2020; Uribe and Fuentes-García 2019), using complete media content (Dens, Pelsmacker, and Verhellen 2018; Matthes and Naderer 2016), or by making use of more natural settings (Dens, Pelsmacker, and Verhellen 2018). As suggested by Boerman and van Reijmersdal (2016), this can contribute to the generalization of experimental findings.

Fourth, our explorative analysis of practical PP disclosures also revealed a disconnect in practice regarding the time of disclosure appearance. While disclosures of various EU television channels appeared very early on at the beginning of the program or rather very late before the program ended, others appeared rather late after the program had started or very early before the program ended. However, when considering recipients' engagement with the plot (Boerman, van Reijmersdal, and Neijens 2015b; van Reijmersdal 2016), the time of disclosure appearance might be of key importance for PP disclosure effects that need to be examined more thoroughly in empirical research.

In terms of specific disclosure characteristics (disclosure duration, disclosure size, and time of disclosure appearance), the findings of the explorative analysis also demonstrate a great diversity of disclosure presentations among leading EU broadcasters. This finding is in line with recent results on blog advertising disclosures of the Netherlands and the US (Boerman et al. 2018). However, the existing variety as well as lack of standardized PP disclosures may confuse viewers (Boerman et al. 2018). It can also be concluded that the characteristics of practical PP disclosures across the EU are rather unnoticeable in comparison with the engaging plot and diverting moving visuals of television programs.

Limitations and future research

The present study provides a first overview for the practical implementation of PP disclosures within television broadcasters with highest audience shares and different broadcasting types across the EU. With this selection, we attached great importance to the investigation of practical PP disclosures to which EU citizens are predominantly exposed. However, our study also faces some limitations. Most importantly, our results are limited to the legislative perspective on EU regulations regarding PP in television programs. This circumstance, however, also opens new interesting and crucial research fields.

First, since the AVMSD (2018) constitutes our legal framework, our sampling method pursued a full coverage of PP disclosures across the EU. We therefore focused on practical PP disclosures to which EU citizens are predominantly exposed. However, our empirical knowledge of PP disclosure presentations could be expanded if cross-national research would be carried out in the future. Future research is therefore highly encouraged to undertake a content analysis with multiple television channels per EU country or other channels outside the EU. However, when conducting cross-national research, cultural aspects that exist at a national level might also come into play (e.g., different understanding of and differences in dealing with advertising between EU countries). Indeed, the challenges of achieving a 'cultural belonging' of

EU countries through media policy has become an important issue for public policy (Ginosar and Levi-Faur 2010).

Second, the present study refers to data collected in 2018 of television broadcasters which currently underlie the legal requirements of the AVMSD (2018). However, since the market for television broadcasting has evolved, the legal framework of the AVMSD (2018) has been updated and EU Member States shall transpose the updated Directive until 19 September 2020. In the course of the revision, the Directive is not subject to any changes regarding the disclosure of PP. However, video-sharing platform services and social media services will be included in the future. An updated examination for these new players as well as of the disclosure practices of television broadcasters in the EU after the updated Directive in fall 2020 may be therefore an important scientific contribution for the future and should be investigated in detail.

Third, our study refers to one form of audiovisual commercial communication. However, since a clear distinction between PP and sponsorship appears to be a challenge for both practice (Angelopoulos 2010) and science (due to the use of both terms as a synonym), we would benefit particularly from an additional investigation of practical sponsorship disclosures.

Fourth, our study also identified several disclosure characteristics that might require a closer scientific investigation in the future. First, in present disclosure research we currently lack an extensive empirical investigation of a potential key characteristic that is prescribed by EU law: disclosure repetition (Spielvogel, Naderer, and Matthes 2020; Uribe and Fuentes-García 2019). Second, an investigation of the effects of time of disclosure appearance could expand our knowledge on what kind of further disclosure characteristics constitute conditions for PP disclosure effects. This also pertains to other disclosure characteristics such as the color and size that may affect the understanding of the persuasive intent of PP in viewers (Tessitore and Geuens 2013). The effects of these disclosure characteristics on consumers' persuasion knowledge require further validation.

Lastly, our literature review of the scientific examination uncovers great research potential by pointing out that scholars need to replicate or perform future empirical PP disclosure studies in other EU countries. This is based on the fact that the majority of the sampled studies have so far been done in a limited number of countries. More specifically, the sample largely centers on the Netherlands and Belgium. Moreover, although our sample size is comparable to other similar disclosure literature reviews (Boerman and van Reijmersdal 2016), it becomes obvious that this research area is still a developing field. Even though the AVMSD with the disclosure obligation has entered into force in 2010, only $N = 19$ studies so far especially referred to the AVMSD (2018) and investigated the media content of television broadcasters which underlie the disclosure obligation of the Directive. Furthermore, the disclosure literature is an evolving field of research, and hence the scientific examination of this topic is ongoing. In other words, the rather small sample size of our literature review and the focus of studies published between 2010 and 2019 must be noted.

Conclusion

Our study provides several insights. First, with our in-depth examination of the actual disclosure practice across the EU our paper contributes to recent research on blog

advertising (Boerman et al. 2018) and native advertising (An, Kang, and Koo 2019) by filling the missing empirical evidence for a systematic assessment of PP disclosures within television programs. Second, we for the first time in extant research demonstrate the gaps between legal practice and empirical research regarding the implementation of PP disclosures. Even though both are commonly used in practice and prescribed by EU law (AVMSD 2018), especially brand-unspecific and repetitive disclosures are under-investigated forms of disclosures. Moreover, one of the most important gaps in the practical implementation referred to the type of disclosure. That is, even though repeatedly proven ineffective (Boerman, van Reijmersdal, and Neijens 2015a; De Jans et al. 2018; Tessitore and Geuens 2013), the vast majority of EU broadcasters used solely symbols as a form of disclosure.

Theoretically, the present study contributes to our understanding about PP disclosure effects in terms of activating consumers' persuasion knowledge. However, our findings lead us to conclude that practical PP disclosures as implemented by leading EU television broadcasters may not help viewers to use their knowledge about persuasion. This may be especially true as approximately half of practical PP disclosures did not refer to the presence or the purpose of PP. In other words, the majority of leading television broadcasters do not put much effort into creating a prominent and informative PP disclosure. However, this stated assumption of limited effect requires empirical validation. Moreover, additional empirical investigations of different disclosure presentations will continue to make a major contribution to the development of more specific guidelines for effective disclosure presentations. As an important implication for policy, we would recommend an adaptation of existing legal practices regarding the creation of effective disclosures. We argue that policy makers should provide EU broadcasters with guidelines for effective disclosure presentations based on existing empirical evidence.

Notes

1. EU Member States shall transpose the updated Directive until 19 September 2020.
2. We included Great Britain in our sample because during our practical investigation of PP disclosures Great Britain was only on the course of leaving the EU and was obliged to follow the AVMSD during the time of data collection.
3. For instance, Nova TV has the highest audience shares among private television in Croatia. If after three recordings this channel did not include a PP disclosure, the channel with the second highest audience shares (RTL Croatia) was selected to be recorded three times.
4. From this time the codified version of the AVMSD including the current disclosure obligation was available. Additionally, during our practical investigation of PP disclosures, not the updated AVMSD (2018) but the AVMSD (2010) was in force.
5. Note: The literature review was concluded in August 2019 and updated due to the revision process in March 2020.

Disclosure statement

No potential conflict of interest was reported by the authors.

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