Blurred borders - Effects of website credibility and product involvement on the effectiveness of online native advertising

Goetz Greve
HSBA Hamburg School of Business Administration
Vanessa Löffler
Performance Media Deutschland GmbH

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Abstract:

Due to growing consumer scepticism towards advertising, marketing managers have turned to native advertising – a format that intendedly aims at blurring the lines between editorial and commercial website components. However, source credibility effects, i.e. website credibility, are expected to influence the effectiveness of native advertising. This study investigates consumer perceptions of native advertising in terms of ad attitude and ad credibility. Data retrieved from 134 respondents in an online experiment, analysed with partial least squares path modelling, shows that consumers' perceptions of ad credibility and ad attitude are influenced by website credibility and persuasion knowledge. Interestingly, product involvement significantly moderates the relations between website credibility and ad credibility. These results provide important insights for brand managers, ad agencies, and publishers that can increase the effectiveness of planning and executing online native advertising.

Keywords: Native advertising, website credibility, advertising effectiveness

Track: Digital Marketing & Social Media

1. Introduction

In today's advertising-cluttered world, consumers are becoming increasingly skeptical towards advertising. Thus, advertisers have turned to less conventional advertising formats, such as native advertising (Sahni & Nair, 2019; Wang, Xiong, and Yang, 2019), which mirrors non-commercial content and thereby masks its persuasive nature. Online native advertising accounted for a third of online advertising expenditure outside of social networks in 2019 (Benes, 2019), making it one of the prevalent forms of online advertising.

Online native advertising intendedly aims at blurring the lines between editorial and commercial website components (Tutaj & van Reijmersdal, 2012). Hence, native advertising will be more or less effective depending on where it is placed (Rieh & Danielson, 2007). Interestingly, the majority of existing examinations take a critical look at disclosure practices related to online native advertising and the way it allegedly deceives consumers (e.g. Krouwer, Poels, and Paulussen, 2019; van Reijmersdal, Lammers, Rozendaal, and Buijzen, 2015; Wojdynski & Evans, 2016). However, based on the embedding of online native advertising into its non-commercial surroundings, source credibility effects of the presenting website should not be neglected. Thus, the purpose of this study is to determine the impact of website credibility and product involvement on advertising effectiveness of online native advertising. Against this background, our research contributes to the understanding of online native advertising. First, it supports managerial decision-making through determining the effects of source credibility and product involvement on a website by running an experiment. Second, beyond the theoretical implications, these results provide important insights for advertisers, agencies, and publishers, and contribute to the effective planning and execution of online native advertising.

2. Theoretical Background and hypotheses development

Native advertising can be defined as an inconspicuous form of digital advertising which imitates the form and appearance of editorial content on the publishing website (Wojdynski & Evans, 2016). Consumers' perceptions of native advertising can be measured by e.g. ad attitude (Tutaj & Van Reijmersdal, 2012; Harms, Bijmolt, and Hoekstra, 2019). In addition, ad credibility is a key determinant of behavior in online contexts (Jin & Villegas, 2007).

Based on dual processing models, e.g. Elaboration Likelihood Model (Petty & Cacioppo 1986) and Heuristic-Systematic Model (Chaiken, Libermann, and Eagly, 1989), native advertising has been suggested to induce higher levels of cognitive elaboration and deeper processing than conventional advertising formats. More specifically, native advertising has

the potential to make consumers read and process its content more elaborately, which in turn is supposed to increase its persuasive power and ad effectiveness (Becker-Olsen, 2003). However, persuasion knowledge theory assumes that individuals develop a certain level of knowledge about persuasion tactics over time, which affects their response to persuasion attempts such as advertising (Friestad & Wright, 1994). Accordingly, higher levels of persuasion knowledge are suggested to decrease advertising effectiveness (van Reijmersdal et al., 2015; Wojdinsky, 2016).

With consumers becoming increasingly skeptical towards advertising, source credibility represents a factor that can potentially be utilized when assessing the quality of advertising (Eisend, 2004; Hoofnagle & Meleshinsky, 2015; van Reijmersdal, Neijens, and Smit, 2005). In a way, this source-based characteristic serves as a heuristic cue in the absence of additional information (Choi & Rifon, 2002). Hence, a high-credibility source can be regarded as generally more effective than a low-credibility source in terms of inducing attitudinal changes (Wu et al., 2016). In traditional advertising studies it was revealed that the credibility of the media outlet was positively related to individuals' attitudinal and behavioral evaluations of the advertisement (e.g. Choi and Rifon, 2002). Evidently, a research gap exists regarding the effects of vehicle source credibility in the form of website credibility on online native advertising performance. Therefore, in the context of native advertising, the current study proposes:

H1a: The higher the website credibility, the higher the ad credibility.

H1b: The higher the website credibility, the higher the attitude towards the ad.

In addition, we assume that persuasion knowledge related to native advertising will decrease advertising effectiveness (Harms et al., 2019) such as:

H2a: The higher the persuasion knowledge, the lower the ad credibility

H2b: The higher the persuasion knowledge, the lower the attitude towards the ad

While the above literature review indicates a static positive relationship between credibility and advertising effectiveness, dispositional and situational, individual differences between individual consumers influence whether, and when, advertising recognition occurs (Wojdynski & Evans, 2016). One of the most prominent factors considered in the context of credibility-persuasion research is involvement (Eisend, 2004). The most frequently examined target of involvement is a specific product or product category and referred to as product involvement (Day, Stafford, and Camacho, 1985), since individual consumers tend to have relatively stable and sustainable involvement levels with certain products or product categories over time (Kim, Haley, and Koo, 2009; Suh & Yi, 2006). Based on the level of

involvement, the cognitive processing of advertising, including native advertising, will differ. Again, this assumption is based on dual processing models and suggests that in low involvement contexts, cognitive elaboration is low, which in turn means that cues such as source credibility will have a strong influence on advertising effectiveness. In high involvement conditions, source credibility will be evaluated alongside all other available information in a more critical process (Petty and Cacioppo, 1983; Tormala & Petty, 2004). Thus, from a theoretical point of view, the positive effect of source credibility on advertising effectiveness should be stronger in low involvement conditions as compared to high involvement conditions. Simultaneously, high levels of involvement can be the cause for a lack of a credibility main effect in empirical research. Hence, we propose the following moderating effect of product involvement:

H3a: The higher the product involvement, the weaker the effect of website credibility on ad credibility.

H3b: The higher the product involvement, the weaker the effect of website credibility on attitude toward the ad.

Eventually, based on dual mediation hypothesis (MacKenzie, Lutz, and Bech, 1986), we hypothesize:

H4: The higher the ad credibility, the higher the ad attitude.

Figure 1 depicts our conceptual framework and hypotheses.

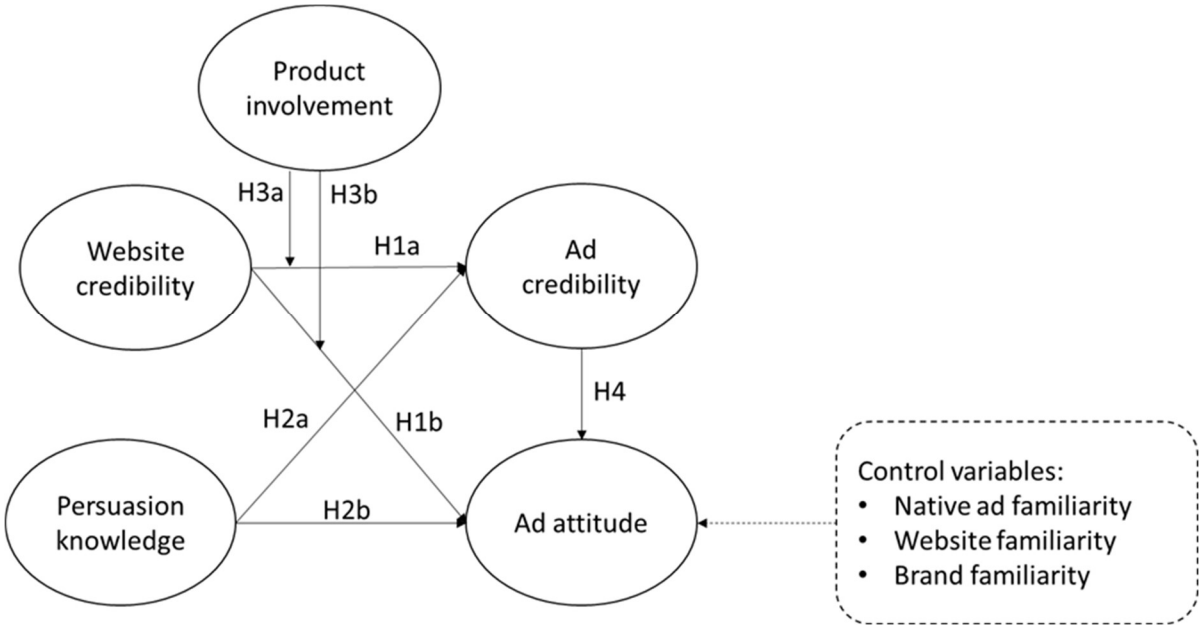

Figure 1. Conceptual framework

3. Data collection and model specification

To empirically assess the hypotheses, we recruited N = 134 respondents through a German online panel. We randomly assigned each respondent to one condition in a 2 (website credibility high/low) x 2 (product involvement high/low) between-subjects design.

To carefully select stimuli for the experiment, a pre-test was designed to determine which websites scored high or low in perceived credibility and which product categories induced high or low levels of involvement. Respondents were initially asked to indicate their brand knowledge of the five websites with the highest weekly reach among the German online population (Gesellschaft für Integrierte Kommunikationsforschung, 2019). Regarding website credibility, Bild.de and Spiegel.de received the lowest (Bild.de) and highest (Spiegel.de) average mean. In terms of product involvement, consumer packaged goods obtained the lowest average scores and technology the highest. Website credibility and product involvement were manipulated based on these pre-test results. To control for context effects, screenshots from the entertainment columns on both Spiegel.de (high credibility) and Bild.de (low credibility) were taken on the same day. Both screenshots included In-Feed Native Ads, which were replaced as described below. To stabilize intrinsic factors relating to product involvement across subjects, two products per category were selected. Mineral water and candy bar were selected for the low involvement condition, whereas laptop and mobile phone represented high involvement. For an overview of the stimuli combinations within each treatment group, please refer to table 1.

		Website Credibility	
		LOW	HIGH
Product Involvement	LOW	Bild.de Mineral water Candy bar (1)	SPIEGEL ONLINE Mineral water Candy bar a
	HIGH	Bild.de Mobile phone Laptop b	SPIEGEL ONLINE Mobile phone Laptop ab

Table 1. Overview of stimuli within treatment groups

For all products, real In-Feed Native Ads in the form of images and ad copy were researched in the Nielsen WizzAd database (The Nielsen Company Germany GmbH, 2019). To reduce ad and brand familiarity effects, ads last used before 2018 were selected and the brand names were replaced by brands not available for purchase in Germany. Multivariate

measurements were employed for most variables to improve the responses' accuracy (Hair, Black, Babin, and Anderson, 2014). All measures relied on existing scales from the literature.

4. Results

The data confirmed the intended manipulation with respect to website credibility and product involvement. Manipulation checks revealed a statistically significant difference in mean website credibility between the high and low treatment groups, respectively. Concludingly, the manipulation of website credibility can be considered successful.

This study used partial least squares structural equation modelling (using the path weighting scheme) through SmartPLS 3.0 to test the proposed model (Ringle, Wende, and Becker, 2015). For evaluating the measurement model, we applied Dijkstra-Henseler's rho for discriminant validity and assessed the factor loadings estimates, resulting in values for all reflective measures above the suggested threshold for rho > .707 and factor loadings > .707, with a significance level of 5% (Benitez, Castillo, and Schuberth, 2020). Convergent validity was assessed by evaluating the share of variance in the indicators that is explained by the underlying latent variable. Here, the average variance extracted (AVE) was above 0.5. Lastly, discriminant validity was assessed by employing the heterotrait–monotrait (HTMT) ratio of correlations (Henseler, Ringle, and Sarstedt, 2015). All HTMT values were below .85, indicating that the factors are statistically different and thus have discriminant validity. Table 2 presents the results of the structural model evaluation.

Latent variables (Constructs)	**Ad credibility**				**Ad attitude**			
	Hyp.	Est.	T-value	f_2	Hyp.	Est.	T-value	f_2
Direct effects								
Website credibility	H1a	.320	4.390***	.140	H1b	.129	1.893*	.033
Persuasion knowledge	H2a	-.254	3.632***	.087	H2b	.026	.475	.001
Product involvement		.222	1.469	.069		.011	.136	.000
Ad credibility					H4	.700	11.222***	.891
Moderating effects								
Product involvement	H3a	.195	2.246*	.058	H3b	.141	1.727*	.053
Control variables								
Native ad familiarity						.094	1.390	.020
Website familiarity						-.042	.540	.004
Brand familiarity						.062	1.428	.010
R^2adj (R^2)	.287 (.309)				.597 (.621)			
Overall fit	**Value**				**HI_{95}**			
SRMR	.071				.071			
d_{uls}	1.756				1.823			
d_g	.870				.820			

* significant at p<0.05; ** significant at p<0.01; *** significant at p<0.001; one-tailed significance levels; N = 134.

Table 2. Structural model evaluation

4. Implications and conclusion

This study shows that native ads are perceived as being more credible when they are placed on highly credible websites. The same positive effect can be assumed for attitude toward native ads. This positive influence of website credibility on both cognitive and affective measures of advertising effectiveness is in line with findings generated in the context of more conventional online advertising formats such as banner ads (Choi & Rifon, 2002) and one of the few comparable studies examining different forms of online native advertising (Interactive Advertising Bureau and Edelman Berland, 2014).

While these findings on the direct effects of website credibility on advertising effectiveness are consistent with prior research, the discoveries related to interactions with product involvement are only partially congruent with previous examinations. The study further suggests that persuasion knowledge affects ad credibility in a negative way, which is consistent with the majority of existing studies (Lee, Kim, and Ham, 2016; van Reijmersdal, et al., 2015; Wei, Fischer, and Main, 2008; Wojdynski & Evans, 2016). Interestingly, the results on the interaction effects of product involvement on website credibility and ad credibility / ad attitude are contrary to the literature's prevalent proposition (Homer & Kahle, 1990; Nan, 2013; Petty, Cacioppo, and Schumann, 1983). More specifically, the results of the study propose an intensification of the positive effect of website credibility on ad credibility and ad attitude for high involvement products. Based on dual processing models we believe that source characteristics such as website credibility might serve as a central cue in the processing of native advertising. While explicit advertising formats benefit from source credibility as a peripheral cue in low involvement conditions, native advertising seems to benefit from source credibility as a central cue in high involvement conditions.

As every empirical research, this paper also has limitations that provide opportunities for further research. First, the study uses a lab experiment that offers high internal validity but suffers from low external validity. It would be therefore interesting to validate the results regarding the three moderators with adequate field data.

References.

Becker-Olsen, K. L. (2003). And now, a word from our sponsor - a look at the effects of sponsored content and banner advertising. *Journal of Advertising*, 32(2), 17–32.

Benes, R. (Apr. 16, 2019). *Driven by social, Native accounts for nearly two-thirds of display ad spend.* Retrieved from https://www.emarketer.com/content/driven-by-social-native-accounts-for-nearly-two-thirds-of-display-ad-spend. (Last accessed: September 15, 2019).

Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information & Management*, 57(2), 103168.

Chaiken, S.,Liberman, A., & Eagly, A. (1989). Heuristic and systematic processing within and beyond the persuasion context. In J. S. Uleman, and J. A. Bargh (eds.), *Unintended thought* (pp. 212–52). New York: Guilford.

Choi, S. M., & Rifon, N. J. (2002). Antecedents and consequences of web advertising credibility: A study of consumer responses to banner ads. *Journal of Interactive Advertising*, 3(1), 12–24.

Day, E., Stafford, M. R., & Camacho, A. (1995). Research note: Opportunities for involvement research: A scale-development approach. *Journal of Advertising*, 24(3), 69–75.

Eisend, M. (2004). Is it still worth to be credible? A meta-analysis of temporal patterns of source credibility effects in marketing. *Advances in Consumer Research*, 31, 352–58.

Friestad, M., & Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. *Journal of Consumer Research*, 21, 1–31.

Gesellschaft für Integrierte Kommunikationsforschung mbH & Co. KG. (2019). *Best 4 planning 2019 III*. Retrieved from https://mds.mds-mediaplanung.de. (Last accessed: October 30, 2019).

Hair, J. F. Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis.* 7th ed. Essex: Pearson.

Harms, B., Bijmolt, T. H.A., & Hoekstra, J. C. (2019). You don't fool me! Consumer perceptions of digital native advertising and banner advertising. *Journal of Media Business Studies*, 1640517.

Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.

Homer, P. M., & Kahle, L. R. (1990). Source expertise, Time of source identification, and involvement in persuasion: An elaborative processing perspective. *Journal of Advertising*, 19(1), 30–39.

Hoofnagle, C. J., & Meleshinsky, E. (2015). Native advertising and endorsement: Schema, source-based misleadingness, and omission of material facts. *Technology Science*, December, 1–23.

Interactive Advertising Bureau, and Berland, E. (2014). *Getting in-feed sponsored content right: The consumer view - a research study of the consumer's point of view*. Retrieved from https://www.iab.com/wp-content/uploads/2015/07/IAB_Edelman_Berland_Study.pdf. (Last accessed: September 1, 2019).

Jin, C. H., & Villegas, J. (2007). Consumer responses to advertising on the internet: The effect of individual difference on ambivalence and avoidance. *Cyberpsychology & Behavior*, 10(2), 258–266.

Kim, S., Haley, E., & Koo, G. Y. (2009). Comparison of the paths from consumer involvement types to ad Responses between corporate advertising and product advertising. *Journal of Advertising*, 38(3), 67–80.

Krouwer, S., Poels, K., & Paulussen, S. (2020). Moving towards transparency for native advertisements on news websites: A test of more detailed disclosures. *International Journal of Advertising*, 39(1), 51-73.

Lee, J., Kim, S., & Ham, C. D. (2016). A double-edged sword? Predicting consumers' attitudes toward and sharing intention of native advertising on social media. *American Behavioral Scientist*, 60(12), 1425–41.

MacKenzie, S. B., Lutz, R. J., & Belch, G. E. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations. *Journal of Marketing Research*, 23(May), 130–43.

Nan, X. (2013). Perceived source credibility and advertising persuasiveness: An investigation of moderators and psychological processes. *Journal of Current Issues and Research in Advertising*, 34(2), 195–211.

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, 123–205.

Petty, R. E., Cacioppo, J. T, & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10(September), 135–46.

Ringle, C.M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3, SmartPLS, Bönningstedt.

Sahni, N. S., & Nair, H. S. (2019). Sponsorship disclosure and consumer deception: Experimental evidence from native advertising in mobile search. *Marketing Science*, 39(1), 5–32.

Suh, J.-C., & Yi, Y. (2006). When brand attitudes affect the customer satisfaction-loyalty relation: The moderating role of involvement. *Journal of Consumer Psychology*, 16(2), 145–55.

The Nielsen Company (Germany) GmbH (2019). *WizzAd Plus*. Retrieved from https://wizzadplus.de.nielsen.com/wizzadplus/login. (Last accessed: October 30, 2019).

Tormala, Z. L., & Petty, R. E. (2004). Source credibility and attitude certainty: A metacognitive analysis of resistance to persuasion. *Journal of Consumer Psychology*, 14(4), 427–42.

Tutaj, K., & Van Reijmersdal, E. A. (2012). Effects of online advertising format and persuasion knowledge on audience reactions. *Journal of Marketing Communications*, 18(1), 5–18.

Van Reijmersdal, E. A., Lammers, N., Rozendaal, E., & Buijzen B. (2015). Disclosing the persuasive nature of advergames: Moderation effects of mood on brand responses via persuasion knowledge. *International Journal of Advertising*, 34(1), 70–84.

Van Reijmersdal, E. A., Neijens, P., & Smit, E. (2005). Readers' reactions to mixtures of advertising and editorial content in magazines. *Journal of Current Issues and Research in Advertising*, 27(2), 39–53.

Wang, P., Xiong, G., & Yang, J. (2019). Serial position effects on native advertising effectiveness: Differential results across publishers and advertiser metrics. *Journal of Marketing*, 83(2), 82–97.

Wei, M.-L, Fischer, E., & Main, K. J. (2008). An examination of the effects of activating persuasion knowledge on consumer response to brands engaging in covert marketing. *Journal of Public Policy & Marketing*, 27(1), 34–44.

Wojdynski, B. W., & Evans, N. J. (2016). Going native: Effects of disclosure position and language on the recognition and evaluation of online native advertising. *Journal of Advertising*, 45(2), 157–68.

Wojdynski, B. W. (2016). The deceptiveness of sponsored news articles: How readers recognize and perceive native advertising. *American Behavioral Scientist*, 60(12), 1475–91.

Wu, M., Huang, Y., Li, R., Bortree, D. S., Yang, F., Xiao, A., & Wang, R. (2016). A tale of two sources in native advertising: Examining the effects of source credibility and priming on content, organizations, and media evaluations. *American Behavioral Scientist*, 60(12), 1492–1509.