"Please place your ads in the appropriate containers"

The effect of ad placement, product involvement and motives on Facebook ad avoidance.

Abstract

Facebook users do not visit the social networking site to see advertising. They are either just surfing the platform or searching for information. Therefore, advertising content is vulnerable to ad avoidance. In this study, the effect of two Facebook ad placements, sidebar ads and message stream ads, on ad avoidance intention was investigated through an online experiment. Sidebar placements are put next to the content stream, while message stream advertising is interwoven with the original Facebook content. 253 Respondents (M_{age} = 39.4, SD = 8.7, 50.2% female) were given either a searching or surfing task. The intention of respondents to avoid ads placed in the message stream was significantly higher than to avoid ads placed in the sidebar. Through multiple moderation analysis, we found that Facebook motivations and product involvement were significant moderators of the effect of ad placement on ad avoidance intent. Our results point to the crucial role of the degree of product involvement when targeting Facebook ads to the right audience and choosing the appropriate ad placement. We discussed implications for research and the professional field.

Keywords: Facebook, ad effectiveness, ad placement, ad avoidance, product involvement, Facebook motives

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1   Introduction

Advertising is one of the most important revenue streams of media companies. When new media

are introduced, it never takes long for companies to find a way to place commercial messages in

the novel outlet. Advertising, however, is not the principal reason people use a certain medium

(Sãvulescu, 2011; Wilson, Gosling, & Graham, 2012). Therefore, finding the optimal way to

place these ads, in order to minimize advertising avoidance and maximize ad effectiveness has

always been a challenge (Speck & Elliott, 1997; Van den Broeck, Poels, & Walrave, 2017).

Researchers and professionals have consequently searched for the optimal placement and

positioning of newspaper and magazine ads (Speck & Elliott, 1997), the most effective timing

and scheduling of television and radio ads (Abernethy, 1991; Speck & Elliott, 1997), and the

optimal placement of online advertising (Cho & Cheon, 2004). Yet, the latter form of advertising

has evolved spectacularly over the course of the last decennium. Social networking sites (SNS),

and Facebook in particular, provide a unique online environment where seemingly never ending

streams of content are inter-woven with options for social interactions. Due to this unique

environment and Facebook's capabilities to target specific audiences with personalized ads,

Facebook turned into one of the biggest advertising platforms in the world (eMarketer, 2015).

Traditional online advertising formats such as skyscraper ads and other banner ads are not

adapted to this environment anymore. Facebook currently provides a variety of different ad

formats on their (desktop) website, ranging from image ads over video ads to newer formats as

carrousel ads and canvas ads (Facebook, s.d.; Lafferty, 2015). Yet, irrespective of the format,

there are only two options of placement of the ads in the Facebook webpage: message stream

placement and sidebar placement (Van den Broeck et al., 2017). The first is characterized by being served "in-stream" in the Facebook content flow. This type of advertising is also known as 'native advertising' (Campbell & Marks, 2015). The sidebar placement option is positioned out-stream, next to the main Facebook content. The choice for the optimal Facebook ad placement was found to be an important predictor of the degree to which users accept the Facebook ad, meaning the extent to which they perceive the ad to be appropriate and a fair practice (Van den Broeck et al., 2017).

The evolution towards more varied and more personalized online ads ran parallel with criticism and more defensive attitudes toward 'unethical' persuasive attempts among internet users, as well as an increased interest towards principles of ad avoidance in popular and scientific literature (Bang & Lee, 2016; Strong, 2013). Ad avoidance became one of the biggest online marketing challenges in years (Bang & Lee, 2016; Cho & Cheon, 2004; Interactive Advertising Bureau, 2017; A.-R. Jung, 2017). Next to avoiding ads on a cognitive and behavioral level, by ignoring or scrolling past ads, the internet has facilitated avoiding even more by providing mechanical means in the form of ad blockers (A.-R. Jung, 2017; Kelly, Kerr, & Drennan, 2010; Strong, 2013). As prior negative ad experiences may lead to ad avoidance (Cho & Cheon, 2004), the accumulation of negative experiences with advertising could trigger the internet user to automate ad avoidance by installing an ad blocker and avoid future ads all together. Providing the best possible ad experience, that can counter ad blocking and other forms of avoidance, became a key concern for the advertiser (Interactive Advertising Bureau, 2016, 2017).

Research has uncovered several predictors of ad avoidance, first in traditional media (Speck & Elliott, 1997), later online on websites (Baek & Morimoto, 2012; Cho & Cheon, 2004) and on social media (Bang & Lee, 2016). As personalization is a defining characteristic of the

Facebook platform not only in terms of advertising incomes but also in terms of user experience, it cannot surprise that privacy-related variables are frequently studied and have proven to be important predictors of Facebook ad avoidance (Boerman, Kruikemeier, & Borgesius, 2017; A.-R. Jung, 2017; Kelly et al., 2010; Smit, Van Noort, & Voorveld, 2014). However, studies on newspaper (Smit, Neijens, & Heath, 2013; Speck & Elliott, 1997) and web page ad effectiveness (Cho & Cheon, 2004; Duff & Faber, 2011; Ying, Korneliussen, & Grønhaug, 2009) have shown that a second factor, the placement of an advertisement, also has a significant effect on ad exposure, brand evaluations, perceived intrusiveness and ad avoidance, among others. Since the crucial role of ad placement in ad effectiveness on traditional advertising platforms has been proven, it is striking that research on the influence of ad placement on SNS ad evaluations and ad avoidance is still limited (Bang & Lee, 2016; Yu, 2014). Interestingly, in a recent study of Van den Broeck and colleagues (2017), the role of ad placement in determining ad acceptance on SNS was even greater than that of more widely studied privacy-related factors in the context of SNS.

The present study seeks to build on these findings by studying the effects of Facebook ad placement on ad avoidance intent. Moreover, we look at how these effects are influenced by the degree of product involvement, and two frequently studied Facebook motives: a surfing motive and a goal-oriented or searching motive (Bang & Lee, 2016; Joinson, 2008; Taylor, Lewin, & Strutton, 2011). Two ad placements were implemented in an experimental design: ads shown in the Facebook message stream and ads shown in the right sidebar. These variables were measured and manipulations were performed to answer the central question of this study: "What is the impact of the two main options of Facebook ad placement (message stream and sidebar) on ad

avoidance intent and how does product involvement and Facebook motives moderate this relationship?" (CRQ)

2   Theory

2.1   Online ad avoidance

Ad avoidance is defined by Speck and Elliot (1997, p. 61) as "all actions by media users that differentially reduce their exposure to ad content". Ad avoidance can take place in three possible manners: 1) cognitive avoidance: by ignoring the ad (for example not paying attention to posts labeled as 'sponsored'), 2) physical avoidance: by not looking at the ad (for example avoiding to look at the right sidebar), and 3) mechanical avoidance: by using mechanical aids to not see the ad (for example ad blockers) (Speck & Elliott, 1997). The avoidance of advertising messages is a strategy that fits within the wider framework of advertising coping strategies identified in the classic work of Friestad and Wright (1994), which was later confirmed by Fransen and colleagues (2015) as a major strategy for resisting persuasion attempts. Kirmani and Campbell (2004) coined ad avoidance a "persuasion sentry" coping strategy, as opposed to a goal-seeking approach towards persuasion attempts, for resisting the advertiser's argumentation.

Bang and Lee (2016) found that ad avoidance of SNS ads is more triggered by attributes related to the habitual appearance of SNS ads, such as the placements on the right sidebar, than by processing of the information in the ad. As mentioned, a similar outcome was found with regard to acceptance of advertising (Van den Broeck et al., 2017). When investigating the importance of the effect of ad appearance characteristics on online ad avoidance, characteristics of the ad including size, timing, location and placement, have been found to be key predictors, and are often described with the umbrella term 'ad clutter' (Bang & Lee, 2016; Cho & Cheon, 2004). A study from Ying and colleagues (2009) confirms the finding that ads can be avoided on

basis of placement. Yet, they remark that ads first will be evaluated on the degree that they impeded the goals of the viewer. Placement itself is not a sufficient reason to turn to ad avoidance. In this regard, recent literature indicates that native ad placements, such as the message stream placement in this case, lead to less persuasion knowledge, under the condition that the advertisement reflects the interests of the user (Fan, Lu, & Gupta, 2017). When ads are served in-stream, but are inconsistent to the message stream content, ads were found to hinder users in their activities, spark persuasion knowledge and, subsequently, lead to ad avoidance (Cowley & Barron, 2008; Fan et al., 2017). Since the internet is generally a goal-oriented medium, the hindrance of the internet task is an important variable to consider (Ham, 2016; Kelly et al., 2010; Ying et al., 2009).

2.2 Ad placement

The term "ad placement" is used by Facebook to indicate the combination of possible positions and the corresponding appearance of ads on the SNS (Facebook, s.d.). The most important ad placements on the desktop website are the message stream placement and the sidebar placement. Message stream ads, labeled "sponsored stories" or "suggested post', are categorized as 'native advertising'. These in-stream served ads are visually consistent with the reading experience on the Facebook website and resemble the posts from friends and pages (Campbell & Marks, 2015; Interactive Advertising Bureau, 2013). The visual resemblance with the Facebook content and the capabilities Facebook possesses to target advertisements to interested audiences, make Facebook message stream ads a popular advertising format (eMarketer, 2016). Sidebar ads are smaller ads, served on the right side of the Facebook website, in an area dedicated to advertising messages and outside the stream of content.

The body of research on the influence of SNS ad placement on advertising effectiveness is limited (Bang & Lee, 2016; Van den Broeck et al., 2017; Yu, 2014). Nevertheless, the position of ads on websites has been proven to be a predictor of users' response to ads in terms of ad processing, attention, attitudes, clicks and nuisance (Agarwal, Hosanagar, & Smith, 2011; Doyle, Minor, & Weyrich, 1997; Lin & Chen, 2009; Smit et al., 2013). Ad avoidance is closely related to feelings of intrusiveness (Ying et al., 2009). Website advertisements shown central in the screen are perceived as intrusive, since they often impede the goal for which users browse a website (Cho & Cheon, 2004). When an ad is interrupting the flow of the editorial unit, the ad is more likely to elicit ad avoidance (Duff & Faber, 2011; Ying et al., 2009). This latter is more likely to take place in message stream advertising, since this ad placement is situated in the content flow of the Facebook homepage (Van den Broeck et al., 2017). Moreover, the fact that Facebook has various price models for the two ad placements, and professionals report a higher cost per conversion for the message stream ad, is an indication that a difference in effectiveness can be assumed (Facebook, s.d.; Loomer, 2013).

The first hypothesis of our study is: "Ad avoidance intent towards message stream ads will be higher than towards sidebar ads." (H1)

2.3   Product involvement

Product involvement, or the degree of "[…] perceived relevance of the object based on inherent needs, values, and interests" (Zaichkowsky, 1985, p. 342), has been repeatedly linked to ad avoidance (A.-R. Jung, 2017; Kelly et al., 2010). Over the years, independent of the advertising medium, researchers consistently found that higher product involvement leads to higher degrees of advertising effectiveness and lower ad avoidance (Cho, 2003; Rejón-Guardia & Martínez-López, 2014; Speck & Elliott, 1997). Product involvement, perceived relevance and usefulness,

all similar concepts, have been found on multiple occasions and in different settings to increase attention towards the ad and decrease ad avoidance intent (Aaker & Bruzzone, 1985; A.-R. Jung, 2017; Lee & Lumpkin, 1992; Pasadeos, 1990). This leads us to the second hypothesis: "Product involvement is negatively related to ad avoidance intent. The lower the involvement with the product, the higher the ad avoidance intent." (H2)

Moreover, Becker-Olsen (2003) found that, when the ad has a high product fit with the audience, advertisers can benefit more from an in-stream ad placement compared to a banner ad placement due to an increased cognitive effort. Website visitors will most likely not be motivated to process low-involvement brands on a cognitive level, yet effectiveness can possibly be high in terms of simple attention and recognition. Therefore, it pays off to reduce ad avoidance intent also for low-involved subjects. Whereas Becker-Olsen (2003) uses 'fit', the current study uses today's more common concept of product involvement. Cowley and Barron (2008) reported similar findings, yet relate their results to persuasion knowledge literature. A prominent ad activates persuasion knowledge more easily. When ads are inconsistent with the message stream content, in this case because the user is not involved with the product, users will find it less entertaining, brand attitude decreases and ad avoidance increases (Cowley & Barron, 2008). An interaction effect of product involvement and peripheral cues was found in a study of Cho (1999). In low involvement conditions, peripheral cues as ad size, which is closely related to ad placement, were found to have a significant impact on the effectiveness of the ad in terms of click intention. Moreover, in a study of Van den Broeck and colleagues (2017), ad placement was shown to have an impact on user acceptance of Facebook ads. The influence of ad placement was found to be highly dependent on the degree of involvement the user showed with the advertised product. High product involvement was related to higher acceptance of ads in a more

prominent position, like the message stream. Under low product involvement, ads were better accepted when shown in the sidebar.

The third hypothesis of this study is: "Product involvement will have a moderating impact on the relationship between ad placement and ad avoidance intent." (H3)

"When product involvement is low, ad avoidance intent will be significantly higher for ads shown in the message stream than for ads shown in the sidebar." (H3a)

"When product involvement is high, ad avoidance intent will be significantly lower for ads shown in the message stream than for ads shown in the sidebar." (H3b)

2.4   Facebook motives

Facebook users can have various motivations for accessing the social network. Facebook motive is therefore an important factor to consider when studying SNS advertising effects (Bleier & Eisenbeiss, 2015; Chi, 2011; Rodgers & Thorson, 2000; Taylor et al., 2011). Smock and colleagues (2011) identified nine motivations, ranging from low-cognitive activities like "relaxing entertainment" to activities that require some mental effort as "expressive information sharing". Although accessing Facebook is already a conscious choice and a goal in its own, these latter motivations are considered more goal-directed behavior and are coined "searching motives", in contrast to the more "playful" motives, which are described as "surfing motives" (Fan et al., 2017; Li & Bukovac, 1999; Rodgers & Thorson, 2000). Searching motives lead to activities as searching for news or information about a person, brand or event, surfing motives lead to browsing, or killing time on the platform (Fan et al., 2017). In case of searching motives, advertisements can be perceived as irritating, motivation-interrupting and goal-impeding, and lead to ad avoidance (Bang & Lee, 2016; Cho & Cheon, 2004; Edwards, Li, & Lee, 2002; J. Jung, Shim, Jin, & Khang, 2015). It has been found that when users are focused on a task,

interruptions are perceived as more severe and lead to lower attitude towards the ad (Duff & Faber, 2011; Edwards et al., 2002). Speck and Elliot (1997) found for newspaper advertising that search hindrance was the principle predictor of ad avoidance. A similar conclusion can be drawn for internet advertising (Cho & Cheon, 2004; Li, Edwards, & Lee, 2002).

The fourth hypothesis of our study is: "Facebook motives are predictors of ad avoidance intent. Ads served when the respondent has a searching motive will lead to higher ad avoidance intent compared to ads served when the respondent has a surfing motive." (H4)

Depending on their placement, ads can be a source of noise, distracting the user from searching the desired information (Cho & Cheon, 2004; Speck & Elliott, 1997). We therefore hypothesize that goal impediment will have less influence on ad avoidance intent when the goal requires less cognitive effort. An ad served when the user is conducting a surfing task will be perceived as less interrupting than when the user is performing a searching task on Facebook. Sidebar ads are easier to avoid than message ads. Given that they are not interfering with the content stream, they are less likely to hinder the users' goals. Message stream ads are served in-stream, in between the website content, and can therefore disrupt the interaction with the desired content.

The fifth hypothesis of our study is: "Facebook motives will act as a moderator in the relationship between ad placement and ad avoidance intent. A searching motive will lead to significantly more ad avoidance intent for message stream ads compared to sidebar ads than is the case for a surfing motive." (H5)

Figure 1

Hypothesized Model
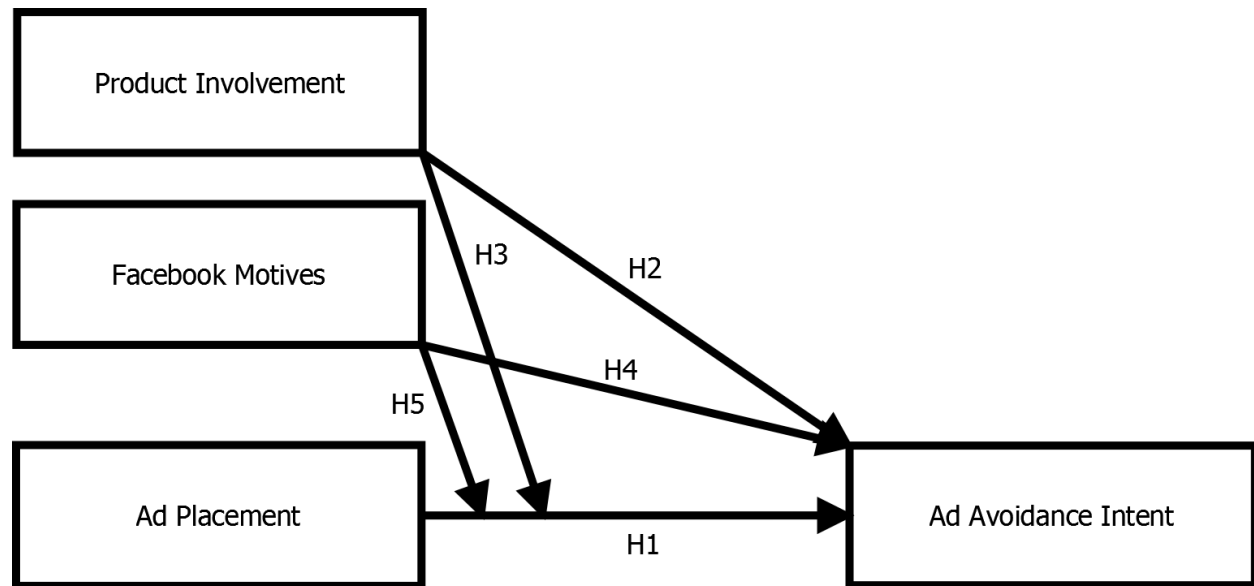
3 Material and methods

3.1 Participants and material

An online 2x2 between-subjects experiment was carried out among 308 Facebook users

recruited from an online consumer panel, aged 25- to 55-years old. A control question was

included in the ad avoidance intent scale ("This is a control question, please tick the box next to

'I agree'"). Respondents who answered wrongly were redirected to the end of the survey (N=30).

Respondents in the searching task condition (see infra) who did not answer, or answered

wrongly, on the manipulation control question (N=25) were removed from further analysis. In

total, 253 respondents were included in the analysis (N = 253, M_{age} = 39.4, SD = 8.7, 50.2%

female). Facebook experience in the final sample was high, 95,7% had a Facebook account for

longer than two years. Facebook use was also high with 79,4% visiting Facebook at least daily.

First, respondents were asked to fill in basic demographic information, Facebook

experience and frequency of Facebook use. Users were then shown a Facebook news feed with a

manipulated advertisement implemented in either the sidebar or the message stream and were

given either a searching task or a surfing task, in order to manipulate the Facebook motives

(searching or surfing motive) of the respondents. The surfing task consisted of "browsing the

newsfeed as you would normally do", the searching task consisted of searching the newsfeed for

the name and gender of a newborn child someone posted about, and the present it received from

her godmother at birth. The placement of the ad (sidebar or message stream) and task that was

given to the respondents (surfing task or searching task) were assigned at random. The newsfeed

was a static image, yet large enough so that it covered nearly the entire width of the screen and

scrolling was needed to reach the bottom posts, as it would be the case on a normal Facebook

newsfeed. The posts and other content apart from the manipulated ad on the Facebook news feed

were constant in both conditions and sufficient attention was given to variation and emotional

'neutrality' of the messages (e.g. a location check-in in a local city, a status update of someone

searching for respondents for their master thesis). After the exposure to the Facebook newsfeed,

respondents were asked if they had seen and recognized the ad. Also, the respondents in the

searching task category were asked the name of the newborn child, in order to control for the

manipulation. On the following page, respondents had to assess the ad in terms of ad avoidance

intent. After, respondent-level characteristics as product involvement and attitude towards the

brand were measured.

The choice of the advertised product was based on a pre-test. The product was only

represented in the ad by a word-logo (black & white) and a general statement "Check out our

new offering!", to avoid influence of visual or textual attractiveness of the ad.

3.2   Pretest

A pretest was carried out among a convenience sample of 25 to 55 year olds consisting of

79 students and other adults (56% female) contacted mainly through social media. Different

product categories were assessed by means of a non-existing product in terms of product involvement, relevance and product interest. Moreover, perceived realism of the experimental material and fatigue of the task of scanning the Facebook news feed were assessed, as was tested if the respondents did in fact see the advertisement on the news feed. We chose the product with the highest variance in product involvement within the age group 25 – 55 years old. Moreover, no variance in relevance or product interest had to be found for gender or age. A "TV-provider" was chosen as the product in our experiment. The name of the brand, "BroadCast" was chosen, as it sounded neutral and different from any existing TV-provider in the country of the study.

3.3   Measures

Demographics. Age, gender and level of education were assessed.

Ad avoidance intent. A 3-item scale, adapted from Speck & Elliott (1997), based on the three avoidance behaviors, cognitive, mechanical, and physical ad avoidance, was used (*Cronbach's α* = .773). Items were "I would ignore this ad", "I would immediately scroll past this ad to avoid it" and "I would avoid looking at this ad" and were answered on a 7-point Likert scale ranging from 1 = *"Totally agreed"* to 7 = *"Not at all agreed"*.

Product involvement. The scale of Maheswaran and Meyers-Levy (1990), based on the involvement scale of Zaichkowsky (1985) was used (*Cronbach's α* = .902). Three 7-point semantic differentials measured how "interesting", "involving", and personally "relevant" the respondent evaluated the product.

Frequency of Facebook use. The respondents were asked "How often do you visit Facebook?" Seven answering options ranged from 1 = *"Never"* to 7 = *"Several times a day"*.

Facebook experience. A single question "For how long do you already have a Facebook account?" was implemented in the survey. Four answering options ranged from 1 = *"Less than six months"* to 4 = *"More than two years"*.

4   Results

A regression analysis was performed on the final sample of 253 respondents (M_{age} = 39.4, SD = 8.7, 50.2% female) with the ad placement condition as independent variable, ad avoidance intent as dependent and a multiple moderation of product involvement and the task condition. All variables were mean-centered ahead of the analysis. Our overall prediction model proved to be significant ($F(5,246)$ = 9.40, p < .0001, R^2 = .14, see table 1). In general, ad avoidance intent was rather high in our study (range = 1-7, M = 5.32, SD = 1.25), whereas product involvement was rather low (range = 1-7, M = 2.79, SD = 1.26).

A significant direct effect of ad placement on ad avoidance intent was found (b = .44, $t(246)$ = 2.90, p < .01). The intention of respondents to avoid ads placed in the message stream was significantly higher than to avoid ads placed in the sidebar. Hypothesis H1 is confirmed. Yet, as expected, the influence of the moderators "task condition" and "product involvement" nuanced this finding. Both moderators had a significant direct effect on ad avoidance intent, confirming our hypotheses H2 and H4. In general, higher degrees of product involvement lead to lower ad avoidance intent (b = -.29, $t(246)$ = -4.86, p < .001). Further, respondents who were given a searching task indicated more ad avoidance intent, although this finding was only marginally significant (b = .25, $t(246)$ = 1.65, p = .099). Moreover, a significant negative effect of the interaction term of product involvement and ad placement was found (b = -.25, $t(246)$ = -2.01, p = .05). The addition of task as a moderator did not lead to a significant increase in explanatory power of the model (ΔR^2 = .00, p = .25). This finding leads to the rejection of

hypothesis H5. The effect of the interaction term of task and ad placement on ad avoidance intent was not significant ($b = .35$, $t(246) = 1.16$, $p = .25$). Yet, multiple conditional effects were discovered that gave more insight into the effects of the moderators in our model (see table 2).

Table 1

Linear Regression. Ad Placement, Product Involvement and Facebook Motive Predicting Ad Avoidance Intent.

	B	SE B	ΔR^2
Constant	5.312	.075	
Message Stream Ad	.44**	.15	
Product Involvement	-.29***	.06	
Searching Task	.25^x	.15	
Message Stream Ad x Product Involvement	-.25*	.12	.02*
Message Stream Ad x Searching Task	.35	.31	.00

Note: $F(7,244) = 7.72$, $p < .001$, $R^2 = .14$.

$^x p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Message Stream Ad is a dichotomous variable, compared to Sidebar Ad.

Searching Task is a dichotomous variable, compared to Surfing Task.

In the surfing task condition, only a significant relation between ad avoidance intent of message stream ads versus sidebar ads was found when product involvement was relatively low ($b = .59$, $t(246) = 2.34$, $p = .02$). For conditional effects in higher product involvement situations, no differences in ad avoidance intent were found. While users are simply surfing Facebook, they will not avoid message stream ads more than sidebar ads as long as they are involved with the product, confirming hypotheses H3, H3a and H3b. In the searching task condition however, the

conditional effect of ad placement on ad avoidance intent was larger and stayed significant not only in the case of low product involvement ($b = .95$, $t(246) = 3.79$, $p < .001$), but also for average product involvement ($b = .63$, $t(246) = 2.87$, $p < .01$). When searching Facebook for certain information, avoidance intent will be triggered sooner for message stream ads compared to sidebar ads. This difference only disappears when product involvement with the shown product is relatively high.
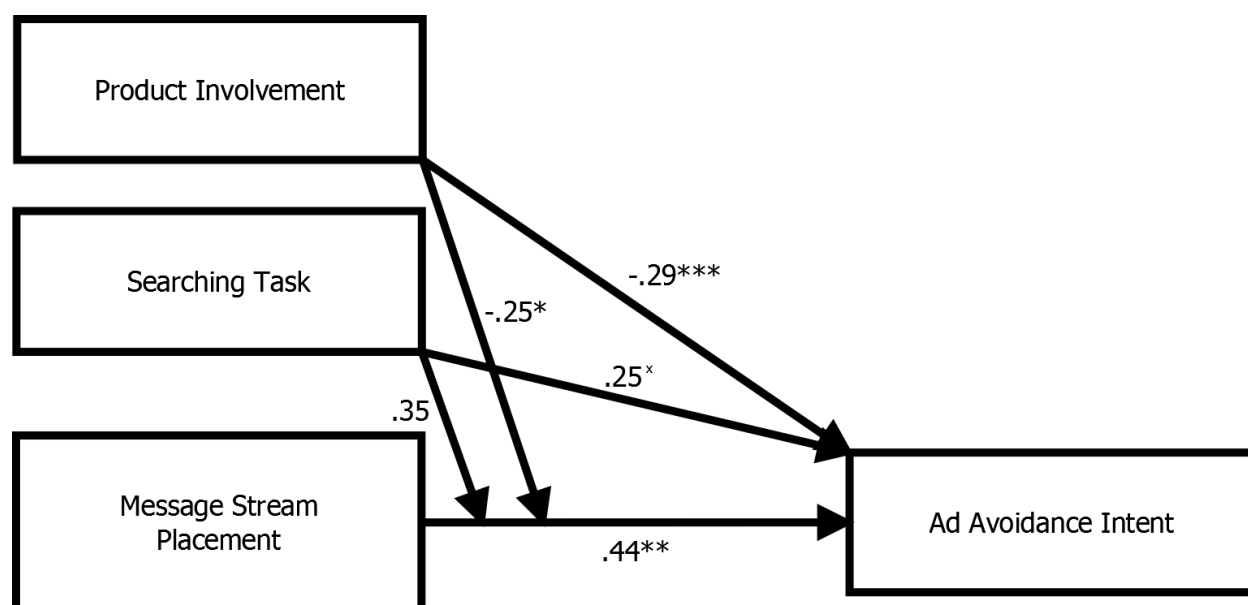
Figure 2

Moderation Model

Table 2

Conditional effects of Ad Placement on Ad Avoidance Intent at values of the moderator

Task Condition	Product Involvement	B	SE B
Surfing Task	Mean – 1 SD	.59*	.25
Surfing Task	Mean	.28	.21
Surfing Task	Mean + 1 SD	-.03	.27
Searching Task	Mean – 1 SD	.95***	.25
Searching Task	Mean	.63**	.22
Searching Task	Mean + 1 SD	.32	.29

Note: ^{x} *p* < .1, * *p* < .05, ** *p* < .01, *** *p* < .001.

$SD_{\text{product involvement}}$ = 1.2727

5   Discussion and conclusion

This study investigated the effect of two different ad placements on Facebook, message stream ads and sidebar ads, on the intention to avoid Facebook advertising. The central research question of this study was: "What is the impact of the two main options of Facebook ad placement (message stream and sidebar) on ad avoidance intent and how does product involvement and the task influence this relationship?" This study provides a significant addition to the literature, because it is the first experimental study in the influence of ad placement on ad avoidance intent in SNS that considers the moderating effects of two highly relevant influencing variables: "Facebook motives" and "product involvement". Results of our multiple moderation analysis provided support for most of our hypotheses. One hypothesis about the role of Facebook motives on ad avoidance intent was rejected, but there was an interesting interplay between involvement and motives on ad avoidance intent. These are further discussed below.

It should be noted that both message stream ads as sidebar ads scored high on ad avoidance intent. This is not surprising, since Facebook users will not access the SNS with the goal of seeing advertising (Sãvulescu, 2011; Wilson et al., 2012). Therefore, all forms of advertising can be assumed to give rise to a considerable level of ad avoidance. Evidence for confirming the first hypothesis (H1) was found in the main effect of ad placement on ad avoidance intent. Message stream ads scored significantly higher on ad avoidance intent than sidebar ads. This is in line with the literature on advertising in website editorial content (Duff & Faber, 2011; Ying et al., 2009). When ads are perceived as a distractor, they will have a higher chance of being avoided and negative attitudes toward the brand can be developed (Duff &

Faber, 2011). In this regard, our results confirm earlier findings, that state that message stream ads are perceived as a greater interruption of the Facebook content than sidebar ads (Van den Broeck et al., 2017). The evidence for the confirmation of our fourth hypothesis (H4) can be found along the same thread of reasoning. Facebook users are not consciously looking for advertising when accessing the platform. The degree of interruption that advertising creates, depends on how goal-directed a user is at the moment of contact with the ad. Our results complement the literature on search hindrance in newspapers (Speck & Elliott, 1997) and websites (Li et al., 2002) by confirming that SNS advertising users with a searching motivation exhibit higher ad avoidance intent compared to users with a surfing motivation. Yet, when controlling for product involvement, the found relationships proved to be more complex.

The confirmation of the second hypothesis (H2) proved again that the role of product involvement is crucial to consider when studying advertising effectiveness. Our study uncovered a relationship between product involvement and advertising effectiveness, which has been found earlier in different media and channels (Aaker & Bruzzone, 1985; A.-R. Jung, 2017; Lee & Lumpkin, 1992). Further, the addition of product involvement as a moderator to the previously described model increased the explanatory power of the model significantly. The main effects showed that message stream ads scored significantly higher on ad avoidance intent than sidebar ads, yet when moderated by product involvement this relationship was nuanced. This finding confirmed our third hypotheses (H3a & H3b). When highly involved with the product, the relationship between ad placement and ad avoidance intent inverts. In this case, sidebar ad placement led to more avoidance intent than message stream ads. This is in line with the findings of in-stream website advertising (Becker-Olsen, 2003), persuasion knowledge (Cowley & Barron, 2008; Isaac & Grayson, 2017) and user acceptance of SNS advertising (Van den Broeck

et al., 2017). The increased cognitive effort for in-stream ads lead to positive advertising effects

as long as the product 'fits' with the user (Becker-Olsen, 2003). Since product involvement is

high, users may perceive the ad as entertaining (Cowley & Barron, 2008) or as helping the users

to find out more information on the topics they like (Kirmani & Campbell, 2004). It is possible

that in this case the SNS user is more interested in the ad content and will process it in the same

way as any other piece of message stream content. This finding adds to the recent literature that

challenges the long-held belief that persuasion knowledge would necessarily lead to coping

strategies that are negative for the advertiser (Evans & Park, 2015; Isaac & Grayson, 2017). In

this regard, the higher credibility of the source (in this case the high involvement product)

influences the credibility of the persuasion tactic (in this case the 'native' message stream

placement) thus benefiting trust and belief and decreasing ad avoidance (Isaac & Grayson,

2017). It should be noted that, in general, product involvement scores were rather low. This was

expected, since product involvement assessment was most probably influenced by the non-

existent brand we chose, in order to control for possible former experiences with the shown

brand. It is expected that the found relationship will be more explicit when users are confronted

with a real brand they use in their daily lives.

The fifth hypothesis (H5) was rejected. Facebook motives as a moderator did not provide

a significant contribution to the explaining power of the model. Yet, the results on the

conditional effects of ad placement on ad avoidance intent prove that differences do exist

between the evaluation of ad placement in searching versus surfing motivations. It is particularly

interesting to see that both for users with search motives as for users with surfing motives, the

moderating effect of product involvement on the effect of ad placement on ad avoidance intent

shows the same pattern. For higher levels of product involvement, the difference of ad avoidance

intent between message stream and sidebar placement turn insignificant. Yet, the threshold level of product involvement is higher for users with search motives than for users with surfing motives. When motivated to search, only in the relatively high product involved group of respondents no differences in ad avoidance intent between message stream placement and sidebar placement were observed. Whereas, when users are surfing the newsfeed, both mean as high product involvement leads to no differences in ad avoidance intent in terms of ad placement. We know from literature (Bang & Lee, 2016; Edwards et al., 2002) that goal impediment effects can be high in searching task conditions, since Facebook users are actively searching for a certain piece of information. In this case, our results indicate that the shown product should be exceptionally relevant and interesting to lower ad avoidance intent towards in-stream ads that hinder the searching task. For surfing motivations, behaviour is less goal-directed and only when exceptionally uninterested in the product, ad avoidance intent will be higher for in-stream ads.

We can conclude that ad placement is an important factor to consider when advertising on Facebook. Advertisers and the advertising platform should strive to keep ad avoidance as low as possible. When Facebook ads are a source of nuisance, for example by positioning them in an inappropriate place, they can hinder the consumer in their user experience (Cho & Cheon, 2004). Yet, when users are involved with the shown product, the message can be perceived as interesting and as part of the valuable content that can be found on the platform. In this case, users seem to appreciate the content even more when it is placed in the message stream instead of the sidebar. An optimal advertising strategy can be achieved by choosing the appropriate ad placement given the knowledge they can get on the degree of product involvement of the user with the shown product (e.g. derived from click behavior, page likes) and the Facebook motives

that brought the user to the platform in a specific moment (e.g. derived from time of the day, historical behavior).

5.1 Recommendations for future research

Minimizing Facebook ad avoidance should always be a first step for online marketers in reaching marketing goals. In this work, we started with investigating this first step. Yet, ad avoidance is a conservative effectiveness measure. It is a necessary condition for cognitive, affective and behavioral advertising outcomes. Therefore, it could be interesting to further investigate the effects of ad placement on these latter categories of effectiveness measures. Moreover, although Facebook is the largest SNS in the world, and the ad placements are comparable to those of other SNSs, each SNS has its own content stream dynamics and ad specifications. It could thus be interesting to apply the insights we gained from this study into a research design that uses a different SNS.

5.2 Managerial implications

Ad avoidance is a danger for the media industry and online advertising industry in particular. By designing highly disruptive ads, short-term gains can possibly be achieved in terms of attention, yet they can lead to long-term losses when users install ad blockers as a reaction. This study proves more granular targeting and data analysis on the part of the advertiser and the advertising platform could lead to less ad avoidance. It is key for the advertiser to have a thorough understanding of the degree of product involvement of their targeted audience with their product. First, ad placement should be decided according to the degree of product involvement; when ads are shown to highly involved consumers, for example the fans of your Facebook brand page, ads placed in the message stream were found to be the better option. When targeting a low product involved audience, for example when launching a product to a new audience, sidebar ads could

be more beneficial than the, often expensive, message stream ads. Second, our results show that

it could be interesting for the SNS to real-time analyze motives of the Facebook users to provide

better targeting options to the advertisers. Further, this finding can also hold learnings for native

advertising. This popular advertising format shapes advertising to resemble original website

content and is served in-stream by default. Based on our findings, we advise websites to first

investigate if the motives of the website visitor align with the product content that is provided by

the native ad and to make sure only high-involvement products for your specific content

consumers are advertised.

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