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Here we go again! The impact of website ad repetition on recall, intrusiveness, attitudes, and site revisit intentions

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ABSTRACT

Internet advertising represents the United States' second-highest advertising expenditure. From the separate perspectives of advertiser and host site, we propose antecedents to online ad recognition and site revisit intentions. Intervening variables include ad intrusiveness and attitudes when faced with repeated ads. Using the reactance theory, we tested our theoretical model on a simulated website in Chile with advertisements collected from real websites. All except one of the hypotheses were supported. Repetition degraded perceptions except for subjects who started with positive perceptions of the ad. Negative perceptions of the ads degraded website-related attitudes and intentions when the number of adimpressions rose.

1. Introduction

Internet advertising revenues in the United States (where statistics are most readily available) rose to a record $59.6 billion in 2015, up from $49.5 billion in 2014, $42.8 billion in 2013 [4] and $37 billion for 2012 [44], representing an annual increase close to 15%. The trend appears to be on the rise, as the last two years have seen annual increases that exceed 20% [45,46]. This strong growth follows many years of highly consistent year-over-year increases in spending since Internet advertising began. eMarketer [27] expects growth to continue substantially through 2017, when it is expected to reach $61.4 billion, out of a total of $197 billion spent on all advertising media. As the second-largest category of media ad spending, online advertising already exceeds that of newspapers and magazines *combined,* and by 2017, eMarketer projects that online advertising will exceed spending in *all* advertising categories besides television, combined, including newspapers, magazines, radio, outdoor, and directories. By 2017, the total for online advertising will be 81.5% of the total for television advertising. The promising growth rates and positive performance of interactive advertising are strong indicators that online advertising is perceived to deliver tangible results to those who invest in it.

It is important, however, to recognize that online advertising is still in its infancy, only beginning its ascent in the mid-1990s to late 1990s [43], while advertising in other media has decades of seniority over Internet advertising. Over the years, there have been complaints about television advertisements; however, these advertisements have not only persisted but also increased, over the years. Simmons [65] reports that in the 1960s television shows occupied 51 min per hour, whereas, today, programming fills only 42 min per hour. The number of minutes per hour devoted to ads has therefore doubled over the last 50 years.

Previous research (reviewed by [57] discussed the unique nature of online advertising compared with advertising in other media, such as print ads or TV ads. Some of the most enlightening early studies by Li et al. [53] and Edwards et al. [26] made use of the reactance theory [12], reporting that Internet users are "goal-directed" and find advertisements to stand in the way of those goals. Whether the goal is shopping, education, or entertainment, a user must navigate to reach that goal, but he or she often encounters advertising along the way. Li et al. [53] and Edwards et al. [26] concluded that anything blocking or slowing progress toward the goal is likely to cause strong feelings of ad intrusiveness.

Most people view advertisements several times even during a single online session. Surprisingly, the online advertising literature does not mention the extent of repeated exposure. Belch and Belch [9] found that, averaging across different TV ad types, both irritation and memory of the ad message grew significantly when

the number of ad repeats increased from one to three to five. Because research into repeated measures of online ads is in its infancy, and because we do not have a similar study in the area of online advertising, this research is the next important step.

This study builds on previous studies in online advertising by raising a similar question about how repetition affects outcomes in an online environment. Does repeated exposure to an online ad affect attitudes toward it? Does repetition lead to feelings of ad intrusiveness? Does it lead to higher performance in recognizing previously viewed advertisements? What are the effects of repeated exposure on ad intrusiveness, user intentions, and ad recognition?

The next section reviews the relevant literature and develops the model that we test; the third and fourth sections outline the methodology used in this research and the analysis conducted, respectively. The penultimate section includes the discussion of our analysis and results, and the final section provides conclusions and avenues for future research.

2. Literature review and model development

Like McCoy et al. [57], this study does not take the single perspective of only the advertiser or the web host site. Our aim is twofold: to propose and test a causal model that predicts both intentions to return to the host site and ad recognition performance while completing information-seeking tasks on websites. Several antecedents in turn predict these two dependent variables. The model is presented in Fig. 1.

The model centers on repeated exposure to ads on a website. We theorize that repetition of ads can lead to poor ad attitudes and ad intrusiveness, but that the relationship of repetition to intrusiveness is also moderated by ad attitude. That is, a liked ad is not expected to become intrusive within a reasonable range, whereas excessive repetition will cause the liked ad to become disliked. Conversely, a disliked ad will become intrusive very quickly if it is repeated. Intrusiveness will contribute to ad recognition, along with the amount of repeated exposure, and ad intrusiveness will influence website attitude, which in turn will predict intentions to return to the website.

An alternative theoretical but statistically similar treatment would be to use ad attitude as a main predictor of ad intrusiveness, with the number of repeated exposures as both a determinant of ad attitude and a moderator of that relationship. We chose the current model because (1) our focus is on repetition of ads and (2) generating significant ad intrusiveness with a small number of viewings of even a disliked ad is likely to be rare. People have come to expect ads and have accepted them as a part of life, a means toward receiving free content.
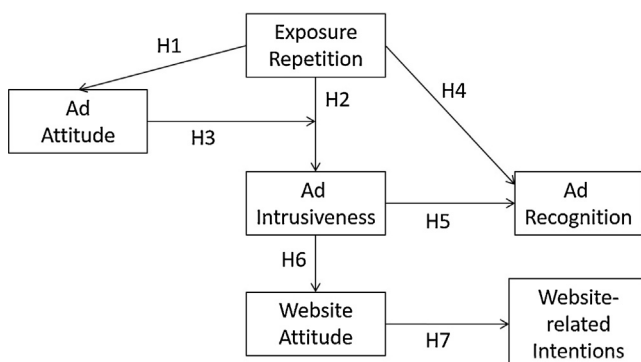

Fig. 1. Theoretical model.

Some relationships in this model have been covered in previous studies [53,57], and the theory behind those relationships has been established. The reactance theory serves as the underlying framework for our model. This theory accounts for users' emotional reactions, including their formation of attitudes and the resultant behaviors when they are interrupted by persuasive ad messages [62] while working toward a goal.

3. Reactance theory

The reactance theory was developed by Brehm [12] and focuses on how individuals react when they feel that their freedom to engage in a behavior is being restricted or threatened [52]. The theory states that when a freedom is threatened, it becomes more attractive to the party losing that freedom Lessne et al., 1989. In order for reactance to occur, the individual must expect freedom of choice and must value that freedom [23]. To illustrate this, a user may have an expectation of free choice to access website content or to perform a task without interruption. An online advertisement may be perceived as a barrier either to access the web content or to perform the task, and the content or task becomes more attractive, motivating the individual to remove that barrier.

The theory has been used by Edwards et al. [26] to explain several different reactions of users to advertising. One concept is that an action (like an ad) results in a reaction (on the part of the users). The reaction depends on several contextual and task-related factors. In other words, exposure to a persuasive message will cause the recipient of the message to form some belief or attitude as a result of the persuasive attempt. When reactance to a persuasive attempt is created, it usually results in the recipient of the message forming an attitude or belief that is contrary to the espoused belief that was portrayed by the advertisement [10]. The reactance against the persuasive attempt is usually due to a perceived loss of freedom on the part of the message recipient [63]; [13].

When the recipient of the persuasive message perceives a loss of freedom during the exposure to an ad perceived as unpleasant, this will require the web user to work to restore the lost freedom. One common way that the online ad recipient may perceive a loss of freedom is the advertiser attempting to tell the individual what to believe. Some individuals are more prone to reactance [41], and this attempt appears to limit their ability to think and reason for themselves, which results in the individuals perceiving a challenge to their freedom. This attempt by the advertiser can then be construed as coercion.

When faced with coercion, users react (change their behavior contrary to the persuasive element of the ad), ignore the message or messenger, or acquiesce. This individual response to the perceived coercion that challenges their freedom will most likely be determined by the extent of the persuasive attempt, the rationale or facts supporting the statement, and the individuals' amount of reactance proneness [63]. More blatant attempts to persuade, or attempts with little rational support, are often seen as coercive, resulting in either reactance to or avoidance of the advertisement's message.

Finally, it is possible that frequent repetition of ads can cause overstimulation on the part of the viewer [8]. This overstimulation will make it more likely for the viewer to perceive a coercive attempt to challenge the viewer's freedom, which will increase the likelihood of the user responding negatively to the persuasive attempt inherent within the advertisement.

4. Model development

From the perspective of the advertiser, the purpose of online advertisements is to attract the attention of web users [36]. Ads