

Madhavan, Vinod; George, Simon; Kidiyoor, Gururaj

**Article**

## Perceived intrusiveness of rich media ads in online advertising: Evidences from young Indian travellers

Cogent Economics & Finance

**Provided in Cooperation with:**

Taylor & Francis Group

*Suggested Citation:* Madhavan, Vinod; George, Simon; Kidiyoor, Gururaj (2019) : Perceived intrusiveness of rich media ads in online advertising: Evidences from young Indian travellers, Cogent Economics & Finance, ISSN 2332-2039, Taylor & Francis, Abingdon, Vol. 7, Iss. 1, pp. 1-13, <https://doi.org/10.1080/23322039.2019.1645631>

This Version is available at:

<https://hdl.handle.net/10419/270672>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

# Perceived intrusiveness of rich media ads in online advertising: Evidences from young Indian travellers

Vinod Madhavan, Simon George & Gururaj Kidiyoor |

To cite this article: Vinod Madhavan, Simon George & Gururaj Kidiyoor | (2019) Perceived intrusiveness of rich media ads in online advertising: Evidences from young Indian travellers, Cogent Economics & Finance, 7:1, 1645631, DOI: [10.1080/23322039.2019.1645631](https://doi.org/10.1080/23322039.2019.1645631)

To link to this article: <https://doi.org/10.1080/23322039.2019.1645631>



© 2019 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



Published online: 12 Aug 2019.



Submit your article to this journal [↗](#)



Article views: 2450



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 5 View citing articles [↗](#)



Received: 29 December 2018  
Accepted: 16 July 2019  
First Published: 12 August 2019

\*Corresponding author: Vinod Madhavan, Marketing, T A Pai Management Institute, TAPMI Campus, 80, Manipal, Karnataka 576104, India  
E-mail: [vinod.madhavan@tapmi.edu.in](mailto:vinod.madhavan@tapmi.edu.in)

Reviewing editor:  
Yogesh P Pai, Manipal Institute of Management, Manipal Academy of Higher Education, Manipal, India

Additional information is available at the end of the article

## GENERAL & APPLIED ECONOMICS | RESEARCH ARTICLE

# Perceived intrusiveness of rich media ads in online advertising: Evidences from young Indian travellers

Vinod Madhavan<sup>1\*</sup>, Simon George<sup>1</sup> and Gururaj Kidiyoor<sup>1</sup>

**Abstract:** This paper examines the interrelated effects of perceived ad intrusiveness of rich media ads in online advertisements with respect to attitudes towards brands, online advertisement and the publisher's website on young Indian travellers. Despite the widespread use of the term in marketing literature, ad intrusiveness has received almost no attention in the destination marketing literature especially in the context of rich media ads. Data have been collected from 304 young Indian travellers using a structured questionnaire in an experimental design setting. Results indicate that perceived ad intrusiveness has direct and negative relationship on attitude towards brand, online advertisement and the publisher's website. Results suggest strategies that advertisers may adopt to minimize the negative influence of intrusiveness in case of direct response when compared to branding objectives. Various theoretical and managerial implications are discussed with directions for future research.

**Subjects:** Brand Management; Consumer Behaviour; Destination Marketing; Marketing Communications; Tourism Behaviour

**Keywords:** perceived intrusiveness; rich media ads; young Indian travellers; brand image; brand attitude; attitude towards website; reactance theory

**JEL Classification:** M31; M37; Z31; Z33



Vinod Madhavan

### ABOUT THE AUTHORS

Vinod Madhavan is an Associate Professor in marketing, T A Pai Management Institute (TAPMI), Manipal, India. He has over 17 years of experience in the industry and academics.

Dr. Simon George is a Professor in marketing, T A Pai Management Institute (TAPMI), Manipal, India. With over 32 years of experience in academics, he is also a reviewer of articles for the prestigious American Marketing Association (AMA) conferences.

Dr. Gururaj Kidiyoor is a Professor in marketing, T A Pai Management Institute (TAPMI), Manipal, India. He has nearly 10 years of experience in industry and 20 years in academics. He is researching about Consumer risk and buying behaviour.

### PUBLIC INTEREST STATEMENT

To know the perception of travellers, seeking destination online, towards advertisement, brand and host website is of utmost interest to advertisement agency, advertiser, publishers and public related to tourism industry. Website publishing these ads earns revenue, but it also threatens the prospect of return of their users, which in our case is tourist and hence a balanced view is desirable to counter this issue. Our findings indicate that tourist finds advertisement as intrusion in their goal of finding destination. Also, intrusion forms negative views about online advertising, brands being advertised, and the host website in the minds of tourist. Measures to overcome such negative views are also suggested to advertisers, ads should provide value to viewers; ads should be skippable and should be avoided in the middle of the content.

## 1. Introduction

Tourism is rapidly increasing and so is relative importance of tourism industry as a contributor to the economy (UNWTO, 2016). According to World Travel & Tourism Council, direct contribution of travel and tourism sector in year 2017 was INR 5,943 billion or 3.7% of Indian GDP. In the next decade, India is expected to be ranked as the fourth-largest travel and tourism economy after China, USA and Germany. Domestic travel spending generated 87.2% of direct Travel & Tourism GDP in 2017 compared with 12.8% for visitor exports (i.e. foreign visitor spending or international tourism receipts) which mean “Indians are exploring India”. Tourism is usually related to international travel, but it could also refer to domestic travel, which includes travel for the purpose of recreation, leisure, religious visit, family or business (Baggio, Milano, & Piattellib, 2011). Traditionally, travel destination is decided by searching for the details of the place, traveller’s feedback or enquiring the travel/tour agents and so on. People now have become less motivated to read and prefer digital/audio-visual sources to get the information of the place (Tessitore, Pandelaere, & Van Kerckhove, 2014). According to Pan, Tsai, and Lee (2011) tourism advertisement videos are a ready reckoner of crucial information for tourists in deciding a place for visit. The destination’s audio-video advertisement especially the online advertisement has direct impact on the travellers visit intentions and attitude formulation.

Every traveller has something to say about their experience, but we captured it to find ad strategies to suit the young travellers. Young travellers are experience-seekers, ready to experiment new things, they are independent decision-makers with high-spending capacity. Words spread faster on social media, where they influence, advocate and lure new buyers in case of good experience or alternatively they decry, oppose and deter potential buyers in case of bad experience. Would you like to be in loggerheads with such buyers or catch them young! In the context of tourism, we tried to unlock ad strategies that should be employed for young Indian travellers in the context of rich media online advertisement.

Online advertisement is gaining lot of importance and acceptability as the power of internet is growing (Padmanabhan, 2018). According to UNWTO (2016), majority of travellers conduct an extensive online research of the destination before visiting the place. Observing this trend, travel brands across the globe are attempting to maximize millennial eyeballs in the online space (Olenski, 2017). Advertisement expenditure in digital media exceeds other media categories (Mackey, Cuomo, & Liang, 2015), albeit with criticism that advertisers and publishers in digital media landscape are forcing advertisement on their audience (Chandrasekaran, Srinivasan, & Sihi, 2018; McCoy, Everard, Polak, & Galletta, 2008; Varnali, 2014). In particular, nature of online advertisement has been criticized as distinctly intrusive (e.g. Goodrich, Schiller, & Galletta, 2015; Li, Edwards, & Lee, 2002). Ad intrusiveness may be understood as the degree to which person thinks presence of ad is hindering his/her goal attainment (Belanche, Flavián, & Pérez-Rueda, 2017a; Li et al., 2002). Therefore, with enormous expenditure, firms need to closely monitor the effects of their advertising efforts especially in the context of ad intrusiveness and its effect on attitude towards brand and publisher’s site (Frennea, Han, & Mittal, 2019; Li, Palma, Hall, Khachatryan, & Capps, 2019; McCoy, Everard, Galletta, & Moody, 2017).

Limited studies have examined the role of ad intrusiveness as perceived by young travellers on attitude towards brand and attitude towards site in destination marketing literature (Chiou, Wan, & Lee, 2008; Clarke, 2000; Kim, Hwang, & Fesenmaier, 2005; Kong, Huang, Scott, Zhang, & Shen, 2019). This study is an attempt to fulfil this gap in the literature and contribute in formulating ad strategies to target young Indian travellers. In this study the perceived ad intrusiveness in all the stages of travel- dreaming, planning, booking, experiencing and sharing as experienced by young Indian travellers are analysed. The rest of the paper is organised in different sections. Section 2 deals with conceptual background, Section 3 details the research methodology, Section 4 provides the result, Section 5 outlines the discussion and implication, and finally Section 6 concludes the research.

## 2. Conceptual background

### 2.1. Perceived ad intrusiveness

Web users have specific task or search for specific information while visiting a website (Bang, Kim, & Choi, 2018; McCoy et al., 2017). Because of this goal seeking behaviour of web users, any ad placed in the content is perceived as intrusive by the user. As per Li et al. (2002), ads may be perceived as irritating or even avoided based on their content, placement over the screen or length of execution but these ads are first evaluated on their intensity of intrusion or perceived intrusiveness. Ads as such are not considered intrusive but their act of interrupting the goal of the user is considered as intrusive.

Ha (1996, p. 77), defined intrusiveness as, “*the degree to which advertisements in a media vehicle interrupt the flow of an editorial unit*”. Reactance theory could be used to understand the fundamental behaviour of the user. Torrance and Brehm (1968), draws that consumer’s response to persuasion or coercion is determined by the degree to which persuasion or coercion attempts to intrude on user’s freedom. Ideally, a web user should have expected uninterrupted access to website content or perform the desired task and if user’s freedom to web content or task is curtailed then the user is motivated to remove the barrier, which is at best perceived as intrusive advertisement or in the worst situation avoided completely (Jagan, Mehta, & Panda, 2018; McCoy et al., 2017; Riedel, Weeks, & Beatson, 2018).

Li et al. (2002), have developed a scale to measure consumers’ perceptions of the intrusiveness of advertisements. This scale has been tested empirically with a study on antecedents and consequences of perceived intrusiveness of pop-up ads. McCoy et al. (2008), studied the antecedents and consequences with other ad formats and he argued that intrusiveness impacts the attitude formation. Perceived ad intrusiveness continues to be researched for different ad formats- pop-up ads, in-line ad and other online advertisement formats (e.g. McCoy, Everard, Galletta, & Polak, 2004; Morimoto & Chang, 2006) with focus on better choice of advertising media. Very few studies were focused around the brand image, intention to revisit the site, brand memory, brand recall, irritation along with perception of ad intrusiveness (Morimoto & Chang, 2006; Shavitt, Vargas, & Lowrey, 2004; Van Doorn & Hoekstra, 2013). Recent studies have explored multiple facets of ad intrusiveness such as effect of ad value, ad placement, ad execution and ad repetition on perceived ad intrusiveness (Goodrich et al., 2015; McCoy et al., 2017; Wang & Calder, 2006; Ying, Korneliusson, & Grønhaug, 2009).

In comparison to traditional media, online environment is perceived more intrusive (Belanche, Flavián, & Pérez-Rueda, 2017b). The ad intrusiveness causes irritation and avoidance (Li et al., 2002) and we end up ill-treating the consumer whom we are supposed to serve. Though Advertisement is intrusive in nature, but its unintended effects can be minimized by exploring Perceived ad intrusiveness and taking suitable measures.

### 2.2. Attitude towards site

Goodrich et al. (2015) acknowledges that if an ad is perceived to be intrusive, the user also experiences a hurdle in the exploration of website content or any defined task. The goal distraction caused by the ad elicits negative reactions such as denial, anger, irritation, frustration ultimately leading to unfavourable attitude towards publisher. McCoy et al. (2008) argued that irritation is a direct antecedent of attitude towards website. Van Doorn and Hoekstra (2013), opined that frustrated users create a bad word of mouth and discourage their peers to visit the website. Moreover, Truong and Simmons (2010) proved that many ad formats are negatively viewed by audience and has direct impact on their behavioural intentions for future transactions. Attitude towards website is seen as behavioural intention towards revisiting the website. McCoy, Everard, Galletta, and Moody (2012) proposed a model to predict user’s revisiting intention and the user’s ability to complete the goal.

According to both theory of reasoned action (Ajzen & Fishbein, 2000) and theory of planned behaviour (Ajzen, 2002), intention is mostly driven by attitude. This paper explores whether attitude towards website will influence the decision of the user to revisit the website or not.

Website publishing these ads not only earns revenue, but it also threatens the prospect of return of their users and hence a balanced view is desirable to counter this issue. Hence, its intriguing to know from destination seeking young travellers about their attitude towards website when encountered with ad which is perceived as intrusive.

Unlike TV commercials where viewers may ignore the ad (Krugman & Johnson, 1991) or change the channel, online advertising provide no such alternative, so consumers perceive online ads more intrusive compared to other media (Li et al., 2002). So, the consumer either watches the full ad or skips after certain time given the option and then only continues pursuing his goal with discontent. Specifically, we hypothesize:

*H1: Perceived ad intrusiveness is negatively associated with Attitude towards Website*

To put it in a nutshell, a shop selling a product could be partially held responsible for curtailing the customer's freedom of choice. The feeling of the denial or irritation a customer had to go through might affect its foot-fall. Similarly, a website serving ad which is perceived as intrusiveness might cause a negative attitude towards website and hence the risk of lower number of visitors to the website.

### **2.3. Attitude towards brand and online advertisement**

Online advertising is argued to be associated with brand perception of advertised products or services by linking it with relevant website (Choi & Rifon, 2002; Shamdasani, Stanaland, & Tan, 2001). Intrusiveness is a key characteristic of advertisement and it appears to happen when the user's experience is hampered. Several studies have compared ad formats to identify the best fit for the brand (Cho, Lee, & Tharp, 2001; Diao & Sundar, 2004). However hampering of smooth experience is observed most of the time. The research on goal pursuit proved that ad intrusiveness is negatively perceived leading to unfavourable intentions (Hühn et al., 2017; Zhu & Chang, 2016).

As per the reactance theory, when an advertisement is perceived as intrusive, it will challenge the user's freedom or goal attainment, and they will try their best to remove the advertisement (Clee & Wicklund, 1980; Verlegh, Franssen, & Kirmani, 2015). This removal of barrier will lead to unfavourable intentions towards the advertisement and the brand being advertised (Lessne & Notarantonio, 1988). Morimoto and Macias (2009) showed that greater perceived intrusiveness will increase consumer's reactance level, which causes ad avoidance and negative attitude formation. Therefore, we hypothesize:

*H2: Perceived ad intrusiveness is negatively associated with Attitude towards Brand*

Consumers' attitude towards advertising is a key measure of advertising effectiveness (Mehta, 2000). In online environment, users are goal oriented (Cho & Cheon, 2004), and online advertisement will keep users away from content, increasing level of intrusiveness and forming negative attitude towards online advertisement (MacKenzie & Lutz, 1989). Therefore, we hypothesize:

*H3: Perceived ad intrusiveness is negatively associated with Attitude towards online advertisement*

To summarize, the powerlessness felt by the consumer to not to return to content will lead to an attitude, which is negative towards the brand shown in the advertisement and eventually, online advertisement will be deemed meaningless.

## **3. Methods and data**

### **3.1. Design and procedure**

This study was conducted in a lab setting and explored the relationship between perceived ad intrusiveness (the independent variable) and attitude towards website, brand and online advertisement (the dependent variable). The study uses an experimental research design. Data were

collected twice - a pilot study of 44 participants and a main study of 304 participants randomly sampled. The pilot study tested appropriateness of the ad stimuli and checked dimensionality, reliability of scales used in the main study for construct measurement.

A website containing tourism videos was created. Tourism videos contained general information like nearest airport, places of interest, best time to visit the place and so on. Rich-media advertisement ingrained alongside tourism video content was used for both the studies. Brands used in the advertisement were based on the ad spent by industry, distribution of digital advertisement spending in India in FY 2018 (Diwanji, 2019). Top spending industries are e-commerce, FMCG and telecom and corresponding brands are Flipkart, Airtel, and ITC, respectively. These three brands appear in the report published by Kantar and WPP, 2018 as one of the Top 75 most valued Indian brands and their likelihood to appear as rich media ad on such a website is high (KANTER, 2019).

Respondents willing to participate were asked to browse tourism website to research about one travel destination. There were total 10 destinations available and were zeroed down based on the popularity among the young Indian travellers (Ministry of Tourism, 2018). The study was conducted from July 2018 to October 2018 in a natural setting computer lab. The lab was designed to resemble to a typical computer centre in any academic institution. This allowed us to minimize the respondents' bias that may come from unnatural settings. This study was conducted in the southern part of India. The population for the study was infinite and researchers have taken utmost care in selection of the appropriate sample. This study has used the simple random sampling to select the appropriate sample. Popular education institutes and few reputed corporate houses have been selected, and samples were drawn at random. The control variables used in this study are age, gender, income and education of the respondents. The study was conducted on 304 respondents.

All respondents were technology savvy, and proper briefing on the task was provided. The total time devoted for task was 15 min, and each respondent received INR 150 coupon to be spent on popular hangout outlets. While the respondents were collecting information via browsing videos, un-skippable rich high definition video advertisements streamed randomly. The ads used were like the ones on YouTube and all participants were exposed to one advertisement at random. The ad disrupted their activity and blocked their view to the original video. Participants had no control over the ad and the tourism content could be viewed only after ad has been streamed. After all the participants completed watching tourism videos, they were asked to fill an online survey.

### **3.2. Measures**

Established scales in the field of advertising have been employed to measure the constructs used in this study and adapted to the current context without major modification.

#### **3.2.1. Perceived intrusiveness of the ads**

Perceived ad intrusiveness (PI) was measured using scale given by Edwards, Li, and Lee (2002). The 7-point Likert scale measured respondents' attitude from "Strongly Disagree-Strongly Agree". Participants responded to the statement "When I saw the ad, I thought it was:" 1. Distracting 2. Disturbing 3. Forced 4. Interfering 5. Intrusive 6. Invasive 7. Obtrusive. This scale proved reliable in both main study ( $\alpha = 0.93$ ) and pilot study ( $\alpha = 0.96$ ). Exploratory factor analysis of pilot study data exhibited that all items were able to load into single factor with all loadings  $> 0.7$  with Cronbach alpha coefficient of 0.89 implied scale is reliable.

#### **3.2.2. Attitude towards site**

Attitude towards site (ATS) ( $\alpha = 0.83$ ) was measured using scale given by Wu (1999) and implemented as a 7-point scale and participants responded to the statement "Overall reaction to the site:" with following end labels—Terrible to Wonderful, Frustrating to Satisfying, Dull to Stimulating, Difficult to Easy, Inadequate design to Adequate design, Rigid to Flexible, Difficult to exposure to Easy to exposure. (Main study:  $\alpha = 0.91$ ; pilot reliability test:  $\alpha = 0.81$ )

### 3.2.3. Attitude towards brand

Attitude towards Brand (ATB) ( $\alpha = 0.81$ ) of advertisement was measured using scale given by Lee (2000) and implemented as five item scale (Pilot study:  $\alpha = 0.83$ )

### 3.2.4. Attitude towards online advertising

Attitude towards online advertising (ATOA) ( $\alpha = 0.85$ ) of advertisement was measured using scale given by Cho (1999) and implemented as five item scale (Pilot study:  $\alpha = 0.85$ )

## 4. Results

A total of 326 completed questionnaires were filled for the main study. Out of these, 18 responses were incomplete or had no variance, hence these were removed from analysis. Using Pallant (2016), four responses were identified as outliers and removed from further analysis. Therefore, the final usable sample size was reduced to 304 (207 males and 97 females; ages 18–26 with 88% and rest were between 26–40). As per the (<https://www.iamai.in>), 73% of internet users fall within the 18–40 age bracket. This validates two things namely, one the study has captured majority of the internet users and two the sampling method used in this study. To examine differences in response to the independent and dependent variables among the age cohort, ANOVA test SPSS 22.0 was conducted with age group as the fixed factor. Results indicated that responses did not methodically fluctuate by age cohort [ $F(4, 301) = 1.37$ , Pillai Trace = 0.10,  $p > 0.05$ ]. Exploratory factor analysis was conducted to study the structures of the factors and enhance the precision of the composite variables. Results showed that all factors were unidimensional and no anomalies were observed. The initial measurement model, analysed using SMART PLS 3.0, displayed good fit (Bagozzi & Yi, 1988), and this established the sturdiness of the model. The chi-square value was significant, and measures of goodness-of-fit highlighted the data fit with the model (CFI = 0.92, RMSEA = 0.05, TLI = 0.96, SRMR = 0.059). Please refer to Appendix 1 for items used in this study.

### 4.1. Reliability and validity of measures

Fornell and Larcker (1981) endorsed calculating composite reliability (CR) scores for measuring the internal consistency of all indicators. CR is an important measure that highlights the extent of representation of common latent constructs. As per Bagozzi and Yi (1988), CR scores greater than 0.60 is accepted for social science research. In this study, all the constructs exceeded 0.70 CR score. Next, convergent and discriminant validity were checked to get the support for construct validity. Results indicated accepted level of convergent validity, as all factor loadings exceed 0.64 and were significant in nature. Moreover, the average variance extracted (AVE) for all the constructs was higher than 0.5 signifying that the measurement items converge on all distinct construct (Bagozzi & Yi, 1988). Table 1 provides the Summary result of the measurement model and convergent validity. Discriminant validity (Table 2) as the square root of the AVE scores are more than the inter-construct correlation estimates for all the latent dimensions (Fornell & Larcker, 1981). The issue of multicollinearity was not observed in the data as per the variance inflation factor (VIF) values (Refer Table 3). All the VIF values were less than 10 and as per hair, the problem of collinearity is not present. Thus, the data collected are suitable for further investigation and analysis.

### 4.2. Model and hypothesis tests

For estimating the structural relationships, bootstrapping method (on 500 re-samples) was carried out to generate t-statistics and standard errors using PLS 3.0 software package. The structural model revealed that the PI and ATB have a direct and significant relationship, resulting in supporting for H1. So consistent with the literature, this study also confirms that PI directly and negatively influences the ATB. In addition, the direct path between PI and ATW; PI and ATOA was also found to be significant, supporting H2 and H3. We can conclude that PI directly and negatively influences ATB and ATOA. Table 4 shows the summary of the statistical tests and indicators of hypothesis H1, H2 and H3.



**Table 1. Summary result of the measurement model and convergent validity**

Construct	Items	Mean	SD	CR	AVE
Attitude towards publisher site	7	6.17	1.02	0.89	0.66
Perceived ad intrusiveness	7	5.21	0.99	0.92	0.65
Attitude towards brand	3	5.85	1.09	0.88	0.65
Attitude towards web advertising	5	5	1.02	0.9	0.77

Note. CR = composite reliability; M = mean; SD = standard deviation; CFI = 0.92, RMSEA = 0.05, TLI = 0.96, SRMR = 0.059.

Source: Developed by authors

**Table 2. Discriminant validity**

	ATS	PI	ATB	ATWA
Attitude towards publisher site	<b>0.78</b>			
Perceived ad intrusiveness	0.47	<b>0.77</b>		
Attitude towards brand	0.52	0.56	<b>0.87</b>	
Attitude towards web advertising	0.45	0.46	0.6	<b>0.87</b>

Note: Highlighted diagonal numbers are the square root of the AVE. All correlations significant at  $p < 0.01$ . CFI = 0.92, RMSEA = 0.05, TLI = 0.96, SRMR = 0.059.

Source: Developed by authors

**Table 3. VIF  $a_{CDOM}(\lambda_3) + a_{TSS}(\lambda_3) + a_{chl-a}(\lambda_3) \ll a_w(\lambda_3)$**

	ATS	PI	ATB	ATWA
Attitude towards publisher site				
Perceived ad intrusiveness	1.000		1.105	1.100
Attitude towards brand				
Attitude towards web advertising				

Source: Developed by authors

**Table 4. Path estimate results for final model**

Hypothesis	Path	Path Coefficient	Standard Error	t-Statistic	Decision
H1	PI→ ATB	0.508	0.065	7.839*	Supported
H2	PI→ ATW	0.519	0.054	8.456*	Supported
H3	PI→ ATOA	0.432	0.057	11.302*	Supported

Source: Developed by authors

## 5. Discussion and implications

Tourism research is rich with data and a lot of studies have been carried out in tourism advertisement effectiveness, modelling, forecasting but studies on perceived ad intrusiveness are still an untouched area (Chiou et al., 2008; Clarke, 2000; Kim et al., 2005; Kong et al., 2019). This study becomes more so important because the basic purpose of tourism is recreation and leisure, which in a way is moving away from chaos, is defeated with perceived ad intrusiveness in the minds of young travellers. Perceived ad intrusiveness and attitude towards online advertising, brands being advertised, and the website is empirically tested in the context of young Indian travellers. The findings indicate that perceived ad intrusiveness is directly and negatively associated with online advertising, brands being advertised, and the host website.

Attitude developed by young travellers towards brand is a key component in destination marketing experience. As the intensity of perceived ad intrusiveness goes up, attitude developed by young travellers towards brand is impacted negatively. The relationship between perceived ad intrusiveness by young travellers and attitude towards brand as perceived by young travellers has not been established in destination marketing literature (Kim et al., 2005). This finding is a major contribution to the body of knowledge about intrusiveness in destination marketing literature.

Additionally, attitude developed by young travellers towards brand will translate into negative attitude towards host website in the minds of young travellers. This has been tested empirically in destination marketing context. Theorizing about attitude towards host websites by exposing these ads to young travellers in destination marketing is a contribution of this paper. Negative attitude towards website could also be attributed to spillover effect of negative effect of online advertising. This negative attitude has led to ad-avoidance attitude towards online advertising, which is an alarming situation for host-website as well as the brand (Kelly, Kerr, & Drennan, 2010).

Extant literature on perceived ad intrusiveness, attitude formation and other constructs like ad length, ad frequency, ad recall, buying intent in product advertising literature is present even though clear consensus is lacking (Rasty, Chou, & Feiz, 2013). In the context of tourism, studies should confirm the findings theorized in advertising literature like ad intrusiveness as the importance of tourism and travel is growing (Xiang, Magnini, & Fesenmaier, 2015). Perceived ad intrusiveness by young travellers is strongly and negatively related to attitude towards brand as supported by this study. The study also supports the finding that young travellers' perception of ad intrusiveness has negative response towards attitude towards host website exposing the advertisement which interrupts the original goal towards seeking a destination in their planning stage (Mason, 2015). It is important to revisit these findings as advertising technology is evolving quickly.

The study showed that perceived ad intrusiveness by young travellers is one of the key factors for negative attitude formulation towards online advertising, brand being advertised and the host website. Since perceived ad intrusiveness is all pervasive and can't be mitigated completely, the managerial aim should be to reduce the effect of perceived ad intrusiveness of young travellers who come across such ads in pursuit of finding a destination. Ying et al. (2009), suggest ads, which provide value to the user is perceived less intrusive ads provide value in the form of information or entertainment. Ads which are not entertaining may be designed to provide related information of the product. For example, a de-tan lotion ad may inform the benefits of exposure to sun or a contraceptive brand may inform it's not fool-proof or an office-furniture brand may inform ergonomically correct sitting posture.

Slowly but steadily advertisers are moving from skippable ad to non-skippable ad (Belanche et al., 2017b). Non-skippable ads are rich-media ad formats appearing pre, mid, or post-roll while viewing original content. The online advertisers have taken back control from the user to skip the ad after certain time-duration. Its length usually varies from 15 to 20 s depending on geographical location of user. It mandates the viewer to watch complete ad before original content, which improves brand recall but also brand is associated with intrusiveness which ultimately leads to form a strong negative attitude towards the brand. To get rid of negative attitude towards brand, ads should serve better user experience, which could be achieved either by giving back the control to the user to skip the ad or shortening the length of the ad without diluting the message.

Ad breaks in long video is also prevalent due to which users develop negative attitude towards brand (Gill, Grossbart, & Lacznik, 1988). In long form videos (generally greater than 10 min) ads may be enabled "mid-roll" (middle of the original content), not just at the pre-roll (beginning of the original content). "Mid-roll" ads are more intrusive compared to "Pre-roll" ads. In common parlance, it is like getting disturbed by someone when you are in the middle of something versus getting disturbed before you have started the work. It breaks the flow of the content and diverts the attention of the user elsewhere. To improve user experience, acceptable middle ground

is to show part of the advertisement in pre-roll and pick-up from where user skipped the ad in the “mid-roll” ad break.

This study also shows perceived ad intrusiveness has strong and negative effect on attitude towards the host-website. As already mentioned, website publishing these ads though earn revenue but also threatens the prospect of return of their users. Hence, a balanced view is required to counter this issue (McCoy et al., 2017). One possible way out is placing congruent ads as per the original content streaming on the website. For example, for a destination video, an outdoor travel gear ad of trekking and hiking equipment is congruent, but a cosmetic ad is a misfit. This approach will not only reduce perceived ad intrusiveness but also improve intention to buy advertised product. Managers could use these ad strategies and minimize the negative influence of intrusiveness.

## 6. Conclusion

This research contributes to travel advertisement literature and unearths how young travellers perceive advertisements when they search for destination and its impact on attitude formation towards online ads, brands shown in the ad and hosting website. Ad-strategies have been formulated by providing value and control to the consumer, tackling ad-breaks in long videos and placing congruent ads.

Like any research study, this paper too has few limitations, and these act as pathways for future research work. Firstly, means to reduce the perception of ad intrusiveness has been suggested as ads should be entertaining or informative but actual behaviour could not be tested. Future studies could validate actual behaviour by exposing entertaining or informative ad to the viewer along with an ad which are neither entertaining nor informative and measure perceived ad intrusiveness in both cases. Secondly, result of such a study could help refine the suggested means to reduce perceived ad intrusiveness. Thirdly, the focus of this study was to find how perceived ad intrusiveness and attitude towards ad and website are correlated, this study could examine only attitude and not actual behaviour by young travellers which could be a potential area for future study. Fourth, longitudinal study could be pursued to achieve behavioural validity. And lastly, “Pre-roll” and “mid-roll” ads are considered to cause intrusiveness, but their individual effect has not been measured so far. Future studies may attempt to explore which serves better to customer, brand and host website by measuring various aspects of advertisement like ad intrusiveness, brand recall, attitudes towards brand or site and purchase intention.

This is a never-ending game of cat and mouse in marketing communication. Marketers on one hand create a persuasive brand advertisement and on the other hand customers will find a way to “ad avoidance”. Such a pursuit indicates that advertising will continue to advance in the way it is viewed and will remain to be a topic of interest. Rule of thumb is to reach the targeted customer without being offended.

### Funding

The author received no direct funding for this research.

### Author details

Vinod Madhavan<sup>1</sup>  
E-mail: [vinod.madhavan@tapmi.edu.in](mailto:vinod.madhavan@tapmi.edu.in)  
ORCID ID: <http://orcid.org/0000-0002-8910-4951>  
Simon George<sup>1</sup>  
E-mail: [simon@tapmi.edu.in](mailto:simon@tapmi.edu.in)  
Gururaj Kidiyoor<sup>1</sup>  
E-mail: [gururaj@tapmi.edu.in](mailto:gururaj@tapmi.edu.in)

<sup>1</sup> Marketing, T A Pai Management Institute, TAPMI  
Campus, 80, Manipal, Karnataka 576104, India.

### Citation information

Cite this article as: Perceived intrusiveness of rich media ads in online advertising: Evidences from young Indian

travellers, Vinod Madhavan, Simon George & Gururaj Kidiyoor, *Cogent Economics & Finance* (2019), 7: 1645631.

### References

- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of Applied Social Psychology*, 32(4), 665–683. doi:10.1111/jasp.2002.32.issue-4
- Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European Review of Social Psychology*, 11(1), 1–33. doi:10.1080/14792779943000116
- Baggio, R., Milano, R., & Piattellib, R. (2011, January 26–28). *The effects of online social media on tourism websites*. Presented at the 18th International

- Conference on Information Technology and Travel & Tourism, Innsbruck, Austria.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. doi:10.1007/BF02723327
- Bang, H., Kim, J., & Choi, D. (2018). Exploring the effects of ad-task relevance and ad salience on ad avoidance: The moderating role of internet use motivation. *Computers in Human Behavior*, 89, 70–78. doi:10.1016/j.chb.2018.07.020
- Belanche, D., Flavián, C., & Pérez-Rueda, A. (2017a). Understanding interactive online advertising: Congruence and product involvement in highly and lowly arousing, skippable video ads. *Journal of Interactive Marketing*, 37, 75–88. doi:10.1016/j.intmar.2016.06.004
- Belanche, D., Flavián, C., & Pérez-Rueda, A. (2017b). User adaptation to interactive advertising formats: The effect of previous exposure, habit and time urgency on ad skipping behaviors. *Telematics and Informatics*, 34(7), 961–972. doi:10.1016/j.tele.2017.04.006
- Chandrasekaran, D., Srinivasan, R., & Sihi, D. (2018). Effects of offline ad content on online brand search: Insights from super bowl advertising. *Journal of the Academy of Marketing Science*, 46(3), 403–430. doi:10.1007/s11747-017-0551-8
- Chiou, W. B., Wan, C. S., & Lee, H. Y. (2008). Virtual experience vs. brochures in the advertisement of scenic spots: How cognitive preferences and order effects influence advertising effects on consumers. *Tourism Management*, 29(1), 146–150. doi:10.1016/j.tourman.2007.03.016
- Cho, C., & Cheon, U. (2004). Why do people avoid advertising on the internet? *Journal of Advertising*, 33(4), 89–97. doi:10.1080/00913367.2004.10639175
- Cho, C. H. (1999). How advertising works on the WWW: Modified elaboration likelihood model. *Journal of Current Issues & Research in Advertising*, 21(1), 34–50. doi:10.1080/10641734.1999.10505087
- Cho, C. H., Lee, J. G., & Tharp, M. (2001). Different forced-exposure levels to banner advertisements. *Journal of Advertising Research*, 41(4), 45–56. doi:10.2501/JAR-41-4-45-56
- Choi, S. M., & Rifon, N. J. (2002). Antecedents and consequences of web advertising credibility: A study of consumer response to banner ads. *Journal of Interactive Advertising*, 3(1), 12–24. doi:10.1080/15252019.2002.10722064
- Clarke, J. (2000). Tourism brands: An exploratory study of the brands box model. *Journal of Vacation Marketing*, 6(4), 329–345. doi:10.1177/13567667000600404
- Clee, M. A., & Wicklund, R. A. (1980). Consumer behavior and psychological reactance. *Journal of Consumer Research*, 6(4), 389–405. doi:10.1086/jcr.1980.6.issue-4
- Diao, F., & Sundar, S. S. (2004). Orienting response and memory for web advertisements: Exploring effects of pop-up window and animation. *Communication Research*, 31(5), 537–567. doi:10.1177/0093650204267932
- Diwanji, S. (2019). Digital ad spend in India 2018 by industry. Retrieved from <https://www.statista.com/statistics/237962/online-advertising-spending-in-india/>
- Edwards, S. M., Li, H., & Lee, J. H. (2002). Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of Advertising*, 31(3), 83–95. doi:10.1080/00913367.2002.10673678
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18, 382–388. doi:10.1177/00224378101800313
- Frennea, C., Han, K., & Mittal, V. (2019). Value appropriation and firm shareholder value: Role of advertising and receivables management. *Journal of Marketing Research*, 56(2), 291–309. doi:10.1177/002243718822506
- Gill, J., Grossbart, S., & Laczniak, R. (1988). Influence of involvement, commitment and familiarity on brand beliefs and attitudes of viewers exposed to alternative ad claim strategies. *Journal of Advertising*, 17(2), 33–43. doi:10.1080/00913367.1988.10673111
- Goodrich, K., Schiller, S., & Galletta, D. (2015). Consumer reactions to intrusiveness of online-video advertisements. *Journal of Advertising Research*, 55(1), 37–50. doi:10.2501/JAR-55-1-037-050
- Ha, L. (1996). Advertising clutter in consumer magazines: Dimensions and effects. *Journal of Advertising Research*, 36, 76–83.
- Hühn, A. E., Khan, V.-J., Ketelaar, P., van 't Riet, J., König, R., Rozendaal, E., ... Markopoulos, P. (2017). Does location congruence matter? A field study on the effects of location-based advertising on perceived ad intrusiveness, relevance & value. *Computers in Human Behavior*, 73, 659–668. doi:10.1016/j.chb.2017.03.003
- Jagan, K., Mehta, B., & Panda, R. (2018). Irritate me and I'll block you! – consumer's cognitive process leading to ad blockers. In 2018 *Global Marketing Conference* (pp. 1107–1108). Tokyo.
- KANTER. (2019). 2018 BrandZ™ top 75 most valuable Indian brands ranking and report. Retrieved from <http://www.millwardbrown.com/brandz/rankings-and-reports/top-indian-brands/2018>
- Kelly, L., Kerr, G., & Drennan, J. (2010). Avoidance of advertising in social networking sites. *Journal of Interactive Advertising*, 10(2), 16–27. doi:10.1080/15252019.2010.10722167
- Kim, D. Y., Hwang, Y. H., & Fesenmaier, D. R. (2005). Modeling tourism advertising effectiveness. *Journal of Travel Research*, 44(1), 42–49. doi:10.1177/0047287505276590
- Kong, S., Huang, Z., Scott, N., Zhang, Z. A., & Shen, Z. (2019). Web advertisement effectiveness evaluation: Attention and memory. *Journal of Vacation Marketing*, 25(1), 130–146. doi:10.1177/1356766718757272
- Krugman, D., & Johnson, K. (1991). Differences in the consumption of traditional broadcast and VCR movie rentals. *Journal of Broadcasting & Electronic Media*, 35(2), 213–232. doi:10.1080/08838159109364119
- Lee, Y. H. (2000). Manipulating ad message involvement through information expectancy: Effects on attitude evaluation and confidence. *Journal of Advertising*, 29(2), 29–43. doi:10.1080/00913367.2000.10673607
- Lessne, G. J., & Notarantonio, E. M. (1988). The effect of limits in retail advertisements: A reactance theory perspective. *Psychology & Marketing*, 5(1), 33–44. doi:10.1002/(ISSN)1520-6793
- Li, H., Edwards, S. M., & Lee, J. H. (2002). Measuring the intrusiveness of advertisements: Scale development and validation. *Journal of Advertising*, 31(2), 37–47. doi:10.1080/00913367.2002.10673665
- Li, Y., Palma, M. A., Hall, C. R., Khachatryan, H., & Capps, J. O. (2019). Measuring the effects of advertising on green industry sales: A generalized propensity score approach. *Applied Economics*, 51(12), 1303–1318. doi:10.1080/00036846.2018.1527448

- MacKenzie, S., & Lutz, R. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, 53(2), 48–65. doi:10.1177/002224298905300204
- Mackey, T. K., Cuomo, R. E., & Liang, B. A. (2015). The rise of digital direct-to-consumer advertising?: Comparison of direct-to-consumer advertising expenditure trends from publicly available data sources and global policy implications. *BMC Health Services Research*, 15(1), 236. doi:10.1186/s12913-015-0718-2
- Mason, P. (2015). *Tourism impacts, planning and management*. London, UK: Routledge.
- McCoy, S., Everard, A., Galletta, D., & Polak, P. (2004). A study of the effects of online advertising: A focus on pop-up and in-line ads. In *SIGHCI 2004 Proceedings*, Washington, DC (pp. 11).
- McCoy, S., Everard, A., Galletta, D. F., & Moody, G. (2012, June). A rational choice theory approach towards a causal model of online advertising intrusiveness and irritation. In J. Wareham (Ed.) *In ECIS*, Barcelona Spain (pp. 124).
- McCoy, S., Everard, A., Galletta, D. F., & Moody, G. D. (2017). Here we go again! The impact of website ad repetition on recall, intrusiveness, attitudes, and site revisit intentions. *Information & Management*, 54(1), 14–24. doi:10.1016/j.im.2016.03.005
- McCoy, S., Everard, A., Polak, P., & Galletta, D. F. (2008). An experimental study of antecedents and consequences of online ad intrusiveness. *Intl. Journal of Human-Computer Interaction*, 24(7), 672–699. doi:10.1080/10447310802335664
- Mehta, A. (2000). Advertising Attitudes and Advertising Effectiveness. *Journal of Advertising Research*, 40(3), 67–72. doi:10.2501/JAR-40-3-67-72
- Ministry of Tourism. (2018). Indian Tourism Statistics, 2017. Retrieved from <http://tourism.gov.in/sites/default/files/Other/INDIA%20TOURISM%20STATISTICS%202017.pdf>
- Morimoto, M., & Chang, S. (2006). Consumers' attitudes toward unsolicited commercial e-mail and postal direct mail marketing methods: Intrusiveness, perceived loss of control, and irritation. *Journal of Interactive Advertising*, 7(1), 1–11. doi:10.1080/15252019.2006.10722121
- Morimoto, M., & Macias, W. (2009). A conceptual framework for unsolicited commercial e-mail: Perceived intrusiveness and privacy concerns. *Journal of Internet Commerce*, 8(3–4), 137–160. doi:10.1080/15332860903467342
- Olenski. (2017). Travel brands shift their attention to the millennial market. Retrieved from <https://www.forbes.com/sites/steveolenski/2017/06/27/travel-brands-shift-their-attention-to-the-millennial-market/#36d0c3c563d7>
- Padmanabhan, N. (2018). Online marketing—Present scenario. *International Journal of Scientific Research*, 2, 4.
- Pallant, J. (2016). *SPSS survival manual*. Maidenhead: Open University Press.
- Pan, S., Tsai, H., & Lee, J. (2011). Framing New Zealand: Understanding tourism TV commercials. *Tourism Management*, 32(3), 596–603. doi:10.1016/j.tourman.2010.05.009
- Rasty, F., Chou, C., & Feiz, D. (2013). The impact of internet travel advertising design, tourists' attitude, and internet travel advertising effect on tourists' purchase intention: The moderating role of involvement. *Journal of Travel & Tourism Marketing*, 30(5), 482–496. doi:10.1080/10548408.2013.803394
- Riedel, A. S., Weeks, C. S., & Beatson, A. T. (2018). Am I intruding? Developing a conceptualization of advertising intrusiveness. *Journal of Marketing Management*, 34(9–10), 750–774. doi:10.1080/0267257X.2018.1496130
- Shamdasani, P. N., Stanaland, A. J., & Tan, J. (2001). Location, location, location: Insights for advertising placement on the web. *Journal of Advertising Research*, 41(4), 7–21. doi:10.2501/JAR-41-4-7-21
- Shavitt, S., Vargas, P., & Lowrey, P. (2004). Exploring the role of memory for self-selected ad experiences: Are some advertising media better liked than others. *Psychology & Marketing*, 21(12), 1011–1032. doi:10.1002/mar.20035
- Tessitore, T., Pandelaere, M., & Van Kerckhove, A. (2014). The amazing race to India: Prominence in reality television affects destination image and travel intentions. *Tourism Management*, 42, 3–12. doi:10.1016/j.tourman.2013.10.001
- Torrance, E., & Brehm, J. (1968). A theory of psychological reactance. *The American Journal of Psychology*, 81(1), 133. doi:10.2307/1420824
- Truong, Y., & Simmons, G. (2010). Perceived intrusiveness in digital advertising: Strategic marketing implications. *Journal of Strategic Marketing*, 18(3), 239–256. doi:10.1080/09652540903511308
- UNWTO. (2016). Tourism highlights. Retrieved from <http://www.e-unwto.org/doi/book/10.18111/9789284418145>.
- Van Doorn, J., & Hoekstra, J. C. (2013). Customization of online advertising: The role of intrusiveness. *Marketing Letters*, 24(4), 339–351. doi:10.1007/s11002-012-9222-1
- Varnali, K. (2014). SMS advertising: How message relevance is linked to the attitude toward the brand? *Journal of Marketing Communication*, 20(5), 339–351. doi:10.1080/13527266.2012.699457
- Verlegh, P. W., Franssen, M. L., & Kirmani, A. (2015). Persuasion in advertising: When does it work, and when does it not? *International Journal of Advertising*, 34(1), 3–5. doi:10.1080/02650487.2014.994732
- Wang, J., & Calder, B. J. (2006). Media transportation and advertising. *Journal of Consumer Research*, 33(2), 151–162. doi:10.1086/506296
- Wu, G. (1999). Perceived interactivity and attitude toward websites. In M. S. Roberts (Ed.), *Proceedings of the conference-American Academy of Advertising* (pp. 254–262). Gainesville, FL: American Academy of Advertising. American.
- Xiang, Z., Magnini, V., & Fesenmaier, D. (2015). Information technology and consumer behavior in travel and tourism: Insights from travel planning using the internet. *Journal of Retailing and Consumer Services*, 22, 244–249. doi:10.1016/j.jretconser.2014.08.005
- Ying, L., Korneliusson, T., & Grønhaug, K. (2009). The effect of ad value, ad placement and ad execution on the perceived intrusiveness of web advertisements. *International Journal of Advertising*, 28(4), 623–638. doi:10.2501/S0265048709200795
- Zhu, Y. Q., & Chang, J. H. (2016). The key role of relevance in personalized advertisement: Examining its impact on perceptions of privacy invasion, self-awareness, and continuous use intentions. *Computers in Human Behavior*, 65, 442–447. doi:10.1016/j.chb.2016.08.048

## **Appendix 1. Measures used in in final data analysis**

### **Ad Intrusiveness**

Measured by a 7-point scale with labelled ends “Strongly Disagree–Strongly Agree”. Participants respond to the statement “When I saw the ad, I thought it was:”

1. Distracting
2. Disturbing
3. Forced
4. Interfering
5. Intrusive
6. Invasive
7. Obtrusive

### **Attitudes towards site**

Measured by a 7-point scale with the following end labels; participants are responding to a statement “Overall reactions to the site:”

Terrible	Wonderful
Frustrating	Satisfying
Dull	Stimulating
Difficult	Easy
Inadequate design	Adequate design
Rigid	Flexible
Difficult to explore	Easy to explore

### **Attitudes towards Brand**

The brand in the ad is likely to possess the stated ad claims.  
I react favourably to the brand.  
I feel positive towards the brand.  
I dislike the brand.

### **Attitudes towards online advertisement**

Web advertising provides valuable information in general.  
Web advertising is irritating in general.  
Web advertising is entertaining in general.  
Web advertising is valuable in general.  
Advertising is necessary on the web.



© 2019 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



***Cogent Economics & Finance* (ISSN: 2332-2039) is published by Cogent OA, part of Taylor & Francis Group.**

**Publishing with Cogent OA ensures:**

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

**Submit your manuscript to a Cogent OA journal at [www.CogentOA.com](http://www.CogentOA.com)**

