INTRUSIVE DIGITAL ADVERTISING: FROM CONTROL TO RESISTANCE?

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RESUME

Mobile digital advertising is now accounting for half of advertising investments. However ad intrusiveness seems to induce resistance behaviors from users. Our research analyzes the relationships between intrusion, perceived control and resistance in a context of exposure to display mobile advertising. A qualitative study confirms the multi-dimensionality of the perceived control concept as well as the occurrence of resistance behaviors due to a user lack of control. The reinforcement of the Internet users’ data protection by public authorities makes it necessary to deepen the work on understanding the role of control in the users’ acceptance of display mobile ads.
INTRODUCTION

According to the Mobile Marketing Association, mobile advertising revenue totaled € 3.2 billion in 2016 at a global scale, representing a 400% increase over 2011. In France, mobile digital advertising (display + search formats) now accounts for 54% of online advertising investments (compared to 46% in 2016 according to IPG Media Brands). Such performances are mainly due to the adoption and widespread use of mobile devices (smartphones and tablets) which are now representing for French people the first means to access the Internet. Whatever the use (private or professional), mobile users regularly use utilitarian (remote banking services, etc.), informational (digital press, etc.) and / or hedonic applications (leisure booking services, games, etc.).

The growth of digital advertising could however be strongly challenged by the feeling of perceived intrusion issued from the exposure to display mobile advertising. Such advertising seems to induce avoidance and circumvention behaviors from mobile users. According to the Adblock Ipsos IAB 2016 study, 85 % of the French Internet users declare that digital advertising is disrupting navigation. The installation of software called adblockers allowing users to no longer be exposed to online advertising has been illustrating such resistance behaviors in recent years. 200 million Internet users are regular adblockers users in the world. They are 30% among the French Internet users.

Many studies have focused on the role of perceived media intrusiveness on the relationship between individuals and media (Ha, 1996) and on the respect for individuals private life (Lancelot-Miltgen and Volle, 2005; Morimoto and Macias, 2009; Hérault and Belvaux, 2014). If perceived intrusion seems to partially explain the digital advertising resistance phenomena (Gauzente, 2008; Perraud, 2013), it seems to fail to explain alone the type of resistance strategies implemented both in terms of nature (cognitive, decisional and / or behavioral) and in terms of intensity. To better understand such strategies another possible way of exploration seems to focus on the Internet user perception of control he desires or he thinks he has on the digital contents to which he is exposed. The investigation and understanding of human attitudes and behaviors from the control perspective (and in particular its corollary, loss of control) have however been subject to very few studies in the consumer behavior research field. The purpose of this exploratory research is therefore to study the relationships between intrusion, control and resistance, in a context of exposure to mobile digital advertising. This research will focus on one specific form of digital advertising which are the display formats of mobile advertising.

After having theoretically defined the concepts of control and of perceived intrusion and studied their anticipated effects on the level of consumer resistance, we will investigate, through a qualitative study, the cognitive, affective and behavioral reactions of individuals depending on the type of display advertising format to which they were exposed.

THEORETICAL FRAMEWORK

PERCEIVED CONTROL AND PERCEIVED INTRUSION

According to Perraud (2013), intrusion can refer to several contexts regarding access to media content (Ha, 1996) revealing one intrusion due to the disruption of the relationship between one media and the individual on the one hand, and, on the other hand, the disruption of the cognitive process (Li et al., 2002). Following the second approach, researchers point out that intrusion represents invasion of a personal individual space (interference with privacy). From this perspective the notion of control appears as the most appropriate to understand individual reaction. Indeed, intrusion into privacy and control are linked. Perceived intrusion reveals to individuals a possible loss of control associated to solicitations made to them. Perceived intrusion would thus be strongly associated with a perceived loss of control.

Perceived control construct has caught the attention of many researchers in psychology and in social psychology, sometimes leading to some confusion. In fact, the notions of locus of control (Rotter, 1966), causal attribution (Weiner, 1985), self-efficacy (Bandura, 1977) or learned helplessness (Seligman, 1975) each contribute to the understanding of the notion of control but seem to stumble to present a consensual definition. Skinner (1995) clarifies the concept by resituating it in a complex system and stating that perceived control is not a stable personality variable. For many years researchers have however approached perceived control from this perspective, thus maintaining confusion with locus of control. Actually, perceived control is the product of the interaction between individual locus of control (which concerns all the past experiences of the individual) and his environment (the context).
As Rodin (1986) states « to perceive a situation as controllable is a subjective appreciation that consists in thinking that one can decide and act in this situation so as to modify the result ». 

All definitions converge on the multi-dimensionality of perceived control. Paquet et al. (2009) stress the importance of distinguishing four dimensions of perceived control in order to take into account the entire individual environment: personal control, favorable control by others, unfavorable control by others (ie. acting in the opposite direction to the expectations of the individual) and control exercised by uncontrollable external factors. Nuissier (1994, quoted by Paquet et al., 2009) further states that individual perceived control can be modified in three ways: behavioral control, cognitive control and decision control. Behavioral and cognitive controls correspond to the fact that, if individuals have responses – respectively – information about the situation, individual perception of the situation control will increase. Decision control refers to the individual’s decision-making ability in a given situation: individuals who are able to make a choice will feel that they are better able to control a situation.

FROM CONTROL DEPRIVATION TO INDIVIDUAL RESISTANCE

According to Ric (2001), a low perceived control can be assimilated to control deprivation and individual response would depend on the intensity of deprivation. Control deprivation would promote more intensive information processing but up to a certain level of deprivation only. On the one hand, a low control deprivation would increase the need for control and thus explain the reactance of individuals (Brehm, 1966) who would seek to restore their sense of control (return to an acceptable level of control). On the other hand, a strong loss of control would lead to a decline in performance. At these two levels of control deprivation correspond two different ways of processing information. Following Chaiken’s postulates (1980), informational theory of acquired helplessness proposes that in the face of any problematic situation (e.g. a situation of control deprivation), individuals first engage important cognitive efforts in order to identify a hypothesis that will guide them in their future behavior (this would explain the reactance effects). But when the situation becomes uncontrollable, individuals are exposed to contradictory information and their efforts to come up with a hypothesis therefore remain unsuccessful. Individuals cannot then reduce the high uncertainty they are facing (establishment of behavioral resistance). According to Roux (2007), resistance is a motivational state that pushes the consumer to oppose practices, logics or market discourses deemed dissonant. It can be situational or dispositional. Thus, resistance occurs if a force is exerted on the consumer and that the latter seeks to annihilate the effects by adopting a certain behavior or forging certain opinions. In the case of attitudinal resistance, resistance occurs by maintaining the individual initial attitude despite attempts to influence (Tormala and Petty, 2004). Resistance to persuasion may also be of a conative nature, taking the form of inertia, reactance, vigilance, mistrust or avoidance behavior (Speck and Elliot, 1997).

In a context of exposure to digital advertising perceived as intrusive, what role does perceived control play in resistance behaviors? Does the type of display format give rise to alternative modes of resistance?

METHODOLOGY

DATA COLLECTION

In order to meet our research objective, we opted for a qualitative exploratory approach in the form of 10 face-to-face interviews. The construction of the experimental protocol was guided by a concern for external validity regarding the respondents sample structure, the « test » video construction and the choice of display advertising formats. Respondents were indeed homogeneously selected on two variables (owning a smartphone and having been exposed at least once to mobile advertising) and heterogeneously selected on gender, age and socio-occupational category variables (Table 1).
Table 1 – Respondents sample structure

<table>
<thead>
<tr>
<th>No.</th>
<th>Gender</th>
<th>Respondent</th>
<th>Age categories</th>
<th>Socio-occupational category (INSEE)</th>
<th>Watched video No.</th>
<th>Smartphone and operating system</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female</td>
<td>France</td>
<td>[32-50]</td>
<td>Middle-level professions</td>
<td>1</td>
<td>Samsung Android</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>Vincent</td>
<td>[32-50]</td>
<td>Executive and Intellectual</td>
<td>3</td>
<td>Samsung Galaxy S7</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>Gabriel</td>
<td>[15-24]</td>
<td>Student</td>
<td>6</td>
<td>iPhone iOS</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>Maxime</td>
<td>[15-24]</td>
<td>Student</td>
<td>4</td>
<td>LG Android</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>Sylvie</td>
<td>&gt; 50</td>
<td>Middle-level professions</td>
<td>3</td>
<td>Samsung Android</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>Adeline</td>
<td>[32-50]</td>
<td>Middle-level professions</td>
<td>3</td>
<td>Samsung Android</td>
</tr>
<tr>
<td>7</td>
<td>Female</td>
<td>Sophie</td>
<td>[25-34]</td>
<td>Executive and Intellectual</td>
<td>6</td>
<td>Samsung Galaxy Android</td>
</tr>
<tr>
<td>8</td>
<td>Male</td>
<td>Maxime</td>
<td>[35-50]</td>
<td>Executive and Intellectual</td>
<td>7</td>
<td>Motorola Android</td>
</tr>
<tr>
<td>9</td>
<td>Female</td>
<td>Josiane</td>
<td>&gt; 50</td>
<td>Retired</td>
<td>2</td>
<td>Samsung Android</td>
</tr>
<tr>
<td>10</td>
<td>Male</td>
<td>Raphael</td>
<td>&gt; 50</td>
<td>Retired</td>
<td>5</td>
<td>Samsung Android</td>
</tr>
</tbody>
</table>

The seven videos created using smartphone navigation capture software are of equivalent duration (about 60 seconds) and all contain one to two different formats of mobile display ads (Table 2). These videos were randomly presented to respondents. Four « in-app advertising » (advertising within an app) formats were selected: the dynamic banner, the interstitial (an ad displayed on the whole screen during loading), the in feed banner (a persistent ad included within an editorial content) and the « mid roll » instream video (a 10 to 20 second video displaying in the middle of a content).

The interview guide was structured around four themes (« your smartphone in general », mobile applications, mobile advertising – respondent exposure to a video, real-life situation – handling of the respondent).

Table 2 – Mobile digital advertising displayed

<table>
<thead>
<tr>
<th>Digital advertising format</th>
<th>Advertisers</th>
<th>Mobile App</th>
<th>Editorial Content</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersstitial + in feed banner</td>
<td>Bon Prix + Samsung</td>
<td>20 Minutes</td>
<td>Society section article</td>
<td>1</td>
</tr>
<tr>
<td>In feed banner</td>
<td>Bon Prix</td>
<td>20 Minutes</td>
<td>Sport section article</td>
<td>9</td>
</tr>
<tr>
<td>Intersstitial</td>
<td>LandRover</td>
<td>20 Minutes</td>
<td>Economy section article</td>
<td>2, 5, 6</td>
</tr>
<tr>
<td>In feed banner</td>
<td>Audi A3</td>
<td>20 Minutes</td>
<td>Technology section article</td>
<td>4</td>
</tr>
<tr>
<td>In feed banner</td>
<td>Audi A3</td>
<td>20 Minutes</td>
<td>Society section article</td>
<td>10</td>
</tr>
<tr>
<td>In feed banner</td>
<td>Cofidis</td>
<td>20 Minutes</td>
<td>High-tech section article</td>
<td>3, 7</td>
</tr>
<tr>
<td>Mid roll in stream video</td>
<td>Adagio.com</td>
<td>20 Minutes</td>
<td>Daily TV program</td>
<td>8</td>
</tr>
<tr>
<td>Dynamic banner</td>
<td>Booking.com</td>
<td>20 Minutes</td>
<td>Télé 7 Jours</td>
<td></td>
</tr>
</tbody>
</table>
DATA ANALYSIS

Two analyzes were carried out (a lexical analysis and a thematic analysis). The lexical content analysis (carried out by using Iramuteq, the R interface for multidimensional analysis of texts and questionnaires) allowed us to study 91.57% of the corpus. Based on a factorial correspondence analysis (CFA), this text mining approach reveals 2 dimensions. Each one is organized around 2 classes. The 4 clusters observed in the dendrogram (Figure 1) categorize the most active words.

![Figure 1: Dendrogram](image)

Dimension 1 (42.7% of the analyzed corpus) reflects classes 1 and 2 representing respectively 18.6% (in red) and 24.1% (in green) of ECUs (elementary context units). Class 1 is mostly mentioned in all age and gender categories; Class 2 is more often evoked by young men aged between 15 and 24. Dimension 2 (57.3% of the corpus) reflects classes 3 and 4 representing respectively 31.4% (in blue) and 25.9% (in purple) of ECUs (class 3: rather evoked by 25-34 and 35-50 year old men, class 4: rather evoked by 25-34 year old women).

RESULTS

Result N°1: a favorable perception of smartphones and mobile applications

The first dimension evokes aspects related to ergonomics. 18% of the terms used (class 1, red) are dedicated to the phone device as a daily object and to the most used features (agenda, mail, phone, etc.).
Beyond the “telephone” function, (e.g. social network, application, download), smartphones enable people to manage their daily life (e.g. friends, weather, home) and their professional life (e.g. mails, appointments, calendar). This is particularly salient among the younger respondents.

Class 2 mainly discusses network issues, technical installation issues or application-related bugs. These different very negatively perceived elements represent an “unpleasant experience” for our respondents (of all ages), even if mobile applications are overall rather favorably appreciated.

“[…] So for me if the application is not made to be on Smartphone, uh … Well we are expecting from developers to… that the application works, so for me if the app isn’t functional, I don’t use it.” (Maxime, 15-24 years old)

“We have an interface that is more tailored, that is more suitable […] because mobile websites are often bad in ergonomics even if it’s getting better. With the apps we find a perfect ergonomics.” (Vincent, 35-50 years old)

Result N°2: Different cognitive and affective responses depending on the type of mobile display format

The second dimension refers to the mobile applications content (class 4) and to respondents’ advertisement perceptions. An in-depth analysis of the class 3 content enables us to obtain a graph of similarity underlining the co-occurrences of terms relating to display advertising formats (FIG. 1). Class 4 (25.9%) refers to the content of the applications viewed during the interview but also to the content corresponding to what respondents spontaneously viewed on their smartphone during the manipulation phase (phase 4 of the interview guide). This class is very dependent on class 3 (31.4%) focused on mobile advertising and consumer reactions at the time of appearance of advertisements on the smartphone. Nearly one-third of the vocabulary used is dedicated to the display advertising that appears in the video of the experimental protocol whatever the different randomly chosen display formats.

Result N°2.1: Resistance to mobile advertising through avoidance

Overall, respondents spontaneously negatively evoke mobile advertising using many unfavorable terms (e.g. irritating, annoying, inhibiting, waiting) or demonstrating the will to flee or to avoid any form of advertising (e.g. clicking, deleting, closing, zapping, cutting).

“…Some ads are much longer so you have to wait sometimes 10 seconds to be able to remove the ad. That is really painful and I wish I could remove it but I don’t know how to do it. 10 seconds is very long and then it annoys me. I launch it, then I do something else and I have to come back. I am losing time. And it’s really very long! 10 seconds… it’s long!” (Josiane, more than 50 years old)

Result N°2.2: A perceived loss of control resulting in the non-use or even in the mobile application removal

The monetary nature of applications (free or paid) determines the acceptance of advertisement intrusiveness. On the one hand, when applications are free, interviewees indeed accept the appearance of an advertisement (even if the format is not appreciated) and justify such acceptance by highlighting the fact that free applications are funded through advertisement. Such analysis reveals some expertise of the interviewees regarding the business model of free applications. On the other hand, when the application has been paid, respondents are not tolerating any form of advertising.

“I do understand because it’s part of the game, you visit a free site. They have to make money. So I can understand. But it must not be too abusive.” (Adeline, 35-50 years old)

“We can’t do otherwise… anyway… they have to finance their newspapers so … I don’t necessarily criticize. This is the way it is. They have to, but uh … As only few people are willing to pay for this kind of information, ads are needed.” (Maxime, 15-24 years old)

“I understand that business models based on advertising need advertising to be seen. So you can’t wanting to have free apps and no advertising, it doesn’t make sense. […] Totally free apps don’t exist.” (Vincent, 35-50 years old)
Result 2.3: Perceived behavioral control and resistance are depending on the display formats

Among the 4 display formats studied, the interstitial full page recurrently and particularly appears to be seen as very intrusive and being rejected. Whether the application is free or paid, this format is systematically mentioned very negatively. When respondents evoke such format, they quickly mention the notion of « cross » reflecting the sign in the form of « x » supposed to close the inserted advertising. If they cannot control the ad, individuals then express a strong negative reaction associated with a feeling of low perceived control due to the impossibility of sometimes avoiding the advertising intrusion and are consequently developing a strong resistance.

“…”So I immediately delete advertising … I’m looking for the cross each time … […] I would have closed the advertisement much faster in fact. I’m always looking for the cross to quickly remove the ad because it put on my nerves […] it always annoys me, especially when it takes the whole screen. I wanted to click on the cross to skip the ad.” (Adeline, 35-50 years old)

“…”But when the ad « invades the whole screen » even if it lasts only few seconds, it bothers me. I don’t want any advertising that encroaches on the space that I think is necessary for the proper functioning of the app […] I have no problem with a form of product placement in the app but only when it doesn’t inhibit the first use of the app. This is what I am expecting from an app” (Maxime, 35-50 years old)

“…”But when there is a cross, the screen often gets gray so you can’t read the article and you’re never sure that the cross will not lead you to another website or to the Playstore […] it’s unbearable. You can’t do anything. You touch everywhere and that leads you anywhere […] I didn’t feel much as I told you […] but when it comes to this it is infernal. Logic-immo fully displayed in front of your eyes. It’s very long. The ad remains a long time, I don’t dare pressing the cross. I wait, then I click. Ah ok! That one takes the ad away… but… you know… it’s not always the case.” (Sophie, 25-34 years old)

“…”As soon as I can I remove them, I press on the cross to remove them but there are always some ads. It annoys me but… anyway… I know it’s unavoidable but as soon as I can I press on the cross and I delete them and sometimes even when there is information, between two pieces of information there is an ad that is inserted… so I remove it and then it’s done.” (Jostiane, more than 50 years old)

DISCUSSION

RESULTS CONVERGING WITH THE MULTIDIMENSIONAL CONCEPTION OF PERCEIVED CONTROL

Our results confirm that perceived control has several dimensions. Indeed, we identify a concomitant presence of cognitive, behavioral or decisional control according to the design initially proposed by Nuissier (quoted by Paquet et al., 2009). In the case, for example, of the exposure to an advertisement considered as very intrusive by respondents (full-page interstitial), a form of decision-making control appears, because individuals have the impression to be able to make a choice (downloading vs. not downloading vs. no longer using apps whose ad formats are too annoying) thanks to a high cognitive and behavioral control.

RESULTS CONFIRMING THE ACQUIRED HELPLESSNESS INFORMATIONAL THEORY

Our results confirm the hypothesis underlying the acquired helplessness theory, which foresees several possible situations in case of different intensity of perceived control. Low and high control deprivation levels are leading to different cognitive and / or behavioral responses. In the case of an exposure to a full-page interstitial, the situation for respondents becomes uncontrollable (strong control deprivation). Thus individuals fail to restore an acceptable level of control, they cannot reduce the high uncertainty they are facing and consequently opt for behavioral resistance (by purely and simply closing the mobile application).

A REVEALED DESIRE FOR CONTROL

Beside situational perceived control, our results also emphasize the importance of an individual characteristic related to perceived cognitive control. Indeed, our respondents know that there are advertisements on the free mobile applications installed on their smartphones. Such prior knowledge (also related to the acquired experience) gives them a high cognitive control consequently reducing their desire for control. Accepting the « rule » of mobile advertising for having free application, respondents thus have a high perceived
behavioral control level combined with a low control desire, which lead them to put in place weak resistance strategies taking the form of simple bypass or avoidance.

CONCLUSIONS

LIMITATIONS AND AVENUES FOR RESEARCH

The external validity of our exploratory qualitative research could be improved by the use of a larger display mobile advertising sample offering a greater variety of studied scenarios. This would enable us to better take into account various situations embracing more variables (level of the mobile advertisement appropriateness to the editorial content, degree of convergence or not between used applications and individual personal interests, etc.).

Moreover, quantitative study allowing a precise measurement of the concepts on the one hand, and an appreciation of the direction and intensity of the causality relationships between the different concepts on the other hand, would be useful. It would also be interesting to investigate the possible interaction effects between intrusion and control in order to determine different modes of resistance (whether in terms of the resistance nature – cognitive, decisional and behavioral – or in terms of resistance intensity).

MANAGERIAL IMPLICATIONS

At the time of strengthening the Internet users data protection (RGDP policy in France and e-Privacy circular), taking into account the user control is of major importance. Such reinforcement is desired by public authorities (European Commission) and correlated to an increased degree of users’ control (reinforcement of user cookies control). However, if increased control sometimes allows reducing behavioral resistance, being able to identify and measure the users perceived levels of control for digital advertising formats and especially for display formats seems necessary. Such formats have only been investigated in terms of perceived levels of intrusion for the moment. Our research work complements other works that highlight the need for a better understanding of perceived control. Our results suggest that a strong intrusion does not necessarily lead to rejection by the users. Measuring only the intrusion is therefore no longer sufficient to account for the acceptance or rejection mechanisms of mobile advertising. We still need to complete our analyses by measuring the different facets of perceived control (cognitive, decisional and / or behavioral) to better predict click rates on mobile advertising.

Resistance against digital advertising has for consequences to prevent advertisers from being able to reach their target audience. Without awareness and a certain self-regulation, the risk for the profession is to see mobile users (as it is the case in the United States) also install ad blockers software on their smartphones as soon as the mobile technology would be broadcasted in France (the set-up of ad blockers on desktop increase has been notable in recent years). The various actors involved in digital advertising (advertisers, agencies…) have the imperative to take this threat into account otherwise mobile users risk turning away from display formats in favor of search formats. Such trend has already been observed for about two years in France. Market players must therefore think and work on all the conditions (context of exposure, designs…) to vary the perceived levels of digital advertising control and to better understand the effects of perceived control on behavioral resistance. Getting users satisfied of the arbitration between perceived benefits and advertising costs of use is becoming one of the major challenges of mobile digital advertising market.

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