

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Vera, Jorge; Espinosa, Marco

Article

Consumer involvement as a covariant effect in rethinking the affective-cognitive relationship in advertising effectiveness

Journal of Business Economics and Management (JBEM)

Provided in Cooperation with:

Vilnius Gediminas Technical University

Suggested Citation: Vera, Jorge; Espinosa, Marco (2019): Consumer involvement as a covariant effect in rethinking the affective-cognitive relationship in advertising effectiveness, Journal of Business Economics and Management (JBEM), ISSN 2029-4433, Vilnius Gediminas Technical University, Vilnius, Vol. 20, Iss. 2, pp. 208-224, https://doi.org/10.3846/jbem.2019.8099

This Version is available at: https://hdl.handle.net/10419/317325

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.



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

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.



Journal of Business Economics and Management



ISSN 1611-1699/eISSN 2029-4433 2019 Volume 20 Issue 2: 208-224

https://doi.org/10.3846/jbem.2019.8099

CONSUMER INVOLVEMENT AS A COVARIANT EFFECT IN RETHINKING THE AFFECTIVE-COGNITIVE RELATIONSHIP IN ADVERTISING EFFECTIVENESS

Jorge VERA **, Marco ESPINOSA

EGADE Business School, Tecnologico de Monterrey, Mexico City, Mexico

Received 26 February 2018; accepted 24 January 2019

Abstract. The relationship between advertising effectiveness and behavioural intentions is assessed when involvement with the product is introduced as a direct covariant effect, rather than as a moderator. Advertising effectiveness is assessed through attitude towards the ad and advertising cognition. Advertising media type combined with age is tested as a moderating variable (younger/digital vs. older/traditional). With a sample of n = 307 consumers, a structural statistical path model is implemented to empirically test the hypotheses. It is found that involvement has an effect on attitude towards the ad and on ad cognition. Thus, it is established that the ad cognition variable, rather than attitude towards the ad, has a strong statistical effect on behavioural intentions. The model suggests that the level of the consumer's attention to the ad depends on her/his degree of involvement with the product. Also, the evidence tends to indicate that the cognitive process through which the consumer builds purchase intentions is similar in both communication channels irrespective of age difference.

Keywords: advertising effectiveness, behavioural intentions, consumer involvement, attitude towards the ad, advertising cognition.

JEL Classification: M30, M31, M37.

Introduction

Two of the major concerns of advertisers are how advertising affects consumers, and how to formulate more effective advertising tactics. Involvement with the advertised product has been considered an important factor for the effectiveness of a campaign. Previous studies show that advertising tends to be more persuasive when there is high level of involvement (K. Wang, E. Wang, & Farn, 2009, among others). Apparently, involvement is related to the consumer's incentive to process the advertising message. Traditionally, in advertising research studies, consumer involvement has been treated as a moderating variable of the relationship between advertising perception and purchase intentions. In the studies where involvement

Copyright © 2019 The Author(s). Published by VGTU Press

^{*}Corresponding author. E-mail: jorge.vera@tec.mx

has been assessed as an advertising effectiveness modifier, it has been introduced in experimental studies as two different conditions, *i.e.*, "high" and "low" (*e.g.*, Wang et al., 2009; Kerr, Schultz, Kitchen, Mulhern, & Beede, 2015). On the other hand, in non-experimental studies, the involvement effect has been tested as a moderating or dummy variable between advertising effectiveness and some type of outcome variable (such as behavioural intentions), also with the values "high" and "low" (*e.g.*, Bart, Stephen, & Sarvary, 2014; Belanche, Flavián, & Pérez-Rueda, 2017).

The authors of the current work believe that this two-level approach to involvement may result from a misunderstanding of how the consumer actually processes the information of an ad, and how this information encourages him/her (or not) to manifest a behavioural intention towards the advertised good. Involvement can be considered a lasting perception of the product. The level and kind of involvement with a given product is already present when the consumer is exposed to an advertising campaign. Therefore, it can be considered an antecedent of the information processing that arises in a consumer when she/he becomes aware of an ad. The idea for this study began during the analysis of the role of the product in the effectiveness of an advertising campaign. It was noticed that taking involvement as a binary variable could result in an overly simplistic approach, considering the potential complexity of the construct. Thus, if involvement is a covariant concept rather than a binary variable, an initial question arises: how does product involvement really affect advertising effectiveness? If product involvement is a much more complex phenomenon than one reducible to a mere two-stage condition ("high" and "low"), then it may have a much more important and complex role than what has been hitherto attributed to it in the advertising effectiveness literature. For advertising practitioners, this may in turn signal the need to rethink the complexity of the product/service in the advertising process. Furthermore, it may bear significant theoretical implications with respect to how advertising effectiveness is assessed.

In the assessment of advertising effectiveness for this study, another element was taken into consideration: a comparison of Internet advertising with traditional advertising (TV). Internet advertising has shown stable growth as an important media. Nevertheless, advertisers still tend to hesitate to switch large portions of advertising budgets from TV to Internet (Draganska, Hartmann, & Stanglein, 2014). The Internet offers global consumers a wider product selection and makes it possible to provide more personalized products for specific consumer needs (Feldman, 2002). More choices, lower prices, and the latest products are available online for all consumers, even though they may be physically far removed from traditional commercial areas (Teo, 2006). Despite the growing importance of digital media as an advertising channel (Ha, 2008; Kim & McMillan, 2008), it is still not clear whether digital media advertising leads to immediate purchases, or has at least some long-term effect (Breuer, Brettel, & Engelen, 2011). Thus, the role of digital media advertising has been at the centre of an extended debate. Under one paradigm, it should only be considered as an alternative channel of marketing communication strategy. From this, it would follow that digital media advertising has only a limited use, namely to expand brand awareness. Should this turn out to be so, the core communication strategy would have to be built through traditional media channels, such as television, radio or public spaces (Robinson, Wysocka, & Hand, 2007). Under the opposing view, digital media do have the potential to function as a core marketing communication channel; not only do they have the power to build brand awareness, but also that required to carry on the full communication strategy of a brand (Robinson et al., 2007). In the present study, the media type (digital vs. traditional) is believed to have a moderating role on the process proposed below, in which involvement with the product may affect attitude towards the ad and ad cognition, which in turn is expected to affect purchase intentions. An attempt is thus made here to provide additional understanding of advertising effectiveness in the context of digital media (YouTube) versus traditional media (TV).

Therefore, the purpose of this work is twofold. On the one hand, consumer involvement with the product is conceived of as a covariant antecedent of advertising effectiveness. On the other hand, the aim of this study is to show whether or not the media type chosen for the ad (traditional/TV versus digital/YouTube) has a moderating role in this proposed involvement-effectiveness relationship. Consequently, a *post-hoc* study was implemented in which a sample divided between TV watchers and YouTube watchers were interviewed to assess their perception of ads (in these two media) using advertising effectiveness measurements, and to assess their involvement with the advertised product in these ads. To show these relationships, a statistical structural model was developed. Thus, a conceptual framework is offered that leads to the hypotheses. Also, sections are presented dealing with methodology, measurements and results. Lastly, a section discussing theoretical and practical implications of this study is presented, as well as conclusions where limitations and possibilities for future research are deliberated.

1. Conceptual framework and hypotheses

Meta-analysis of the correlations between measurements of advertising input (such as source credibility, content and tactical execution) and measurements of advertising outcome (such as affectivity, cognition, awareness, intentions and behaviour) shows that in general advertising tends to be highly effective for marketing purposes (Eisend & Tarrahi, 2016). Under the persuasion hierarchy theory, advertising has two immediate effects related to consumer response: the cognition effect (the thinking dimension: awareness, memory, conviction) and the affective effect (attitude towards the ad), where these effects can generate a purchase disposition and a product usage behaviour (Vakratsas & Ambler, 1999). These two effects constitute the dimensions in which advertising effectiveness has been widely assessed as an antecedent of behavioural intentions. Ad cognition refers to the interpretation of ad content (Lutz, Mackenzie, & Belch, 1983), where ad content can be a catalyst for self-generated persuasion resulting in beliefs about the brand (MacInnis & Jaworski, 1989). In other words, ad cognition results from the consumer's propensity to engage in an effort to deliberate (B. Martin, Lang, Wong, & B. Martin, 2003). Otherwise, when the consumer does not engage in a thorough processing of the ad, only a few personal connections are made with it (Buchholz & Smith, 1991). Attitude towards the ad has been proposed as an affective construct representing favourable/unfavourable consumer disposition towards the advertising piece itself (Mitchell & Olson, 1981). Favourable feelings can be a mediating influence on the relationships between other constructs, such as attitude toward the brand and purchase intention (Mitchell & Olson, 1981). Later, attitude towards the ad was conceptualized as a predisposition to respond in a favourable or unfavourable manner to a particular advertising stimulus during a particular exposure occasion (Lutz, 1985).

When relating involvement with advertising effectiveness, Krugman (1965) was the first to operationalize personal involvement as the number of connections that the viewer makes between his own life and an advertisement. Depending on this level of involvement, the consumer may have either active or passive reactions when receiving advertising content (Tyebjee, 1979). Consumer engagement can thus be strengthened when the information of an ad is relevant to the receiver, as the advertisement affects the consumer emotionally, hence motivating a response (Petty & Cacioppo, 1979). Depending on these possible reactions, the consumer may actively seek and process relevant product information and be more detailed in his analysis of ads (Burnkrant & Sawyer, 1983). When there is higher product involvement, the consumer tends to have greater recall and recognition of advertising information; these may foster a better attitude towards the information and favour purchase intentions (Bart et al., 2014; Kerr et al., 2015). Thus, a constant tendency in advertising research literature on involvement has been that under a greater level of involvement several variables and relationships related to advertising effectiveness show increased values. For example, the rational appeal of an ad tends to have a higher effect on the cognitive response towards the ad when there is higher consumer involvement (Wu, Lu, & Chen, 2017). Likewise, in some cases, attitude towards the ad (impression and favourableness) can be higher for a group of highly involved customers than for a group of lower-involvement customers (Kerr et al., 2015). Furthermore, involvement tends to have a strong influence on advertising effectiveness, increasing favourable attitudes towards the ad and towards the brand, reducing the negative effect of the ad's invasiveness (Belanche et al., 2017).

Therefore, product involvement becomes a relevant variable when determining whether the advertisement is important to the receiver, and thus may have a positive influence on the effectiveness of that advertisement (Bart et al., 2014; Belanche et al., 2017). Yet, in previous studies regarding advertising effectiveness, involvement has been implemented as a binary moderating variable with two possible levels (high and low), as in Figure 1 (Petty, Cacioppo, & Schumann, 1983; Gotlieb & Sarel, 1991; Wang et al., 2009; Wu et al., 2017; Bart et al., 2014; Kerr et al., 2015; Belanche et al., 2017), even though involvement has been generally accepted as a covariant group of variables since Laurent and Kapferer (1985) and Zaichkowsky (1986) discarded the formerly prevailing notion of involvement as a binary concept.

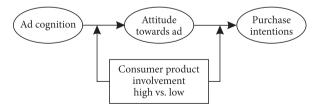


Figure 1. Traditional approach to advertising effectiveness

Although Wu (2001) and Te'eni-Harari, Lehman-Wilzig, and Lampert (2009) have already proposed the direct effect of involvement on advertising effectiveness, they too treat involvement as a binary variable using ANOVA analysis, and not as a covariant variable. In

the current study, it is proposed that involvement may have a direct effect on the perception of the ad as a covariant variable. In other words, the degree of product involvement appears to be an integrated factor in the cognitive processing of advertising information (assuming that with no involvement there can be no advertising effectiveness). Consistently with this idea, some evidence points to a positive relationship between product differentiation and advertising effectiveness (McAlister, Srinivasan, Jindal, & Cannella, 2016). Also, degree of familiarity with the product is likely to have a positive effect on recall of the ad's message (Okechuku, 2015). Furthermore, shared consumption of a hedonic good (which can presumably be considered a high-involvement condition) can accelerate the effects of advertising on sales (Delre, Broekhuizen, & Bijmolt, 2016). Accordingly, advertising effectiveness depends initially on the relevance of the context; this relevance is derived from consumer needs and experiences as well as product category (i.e., product involvement) (Vakratsas & Ambler, 1999). For instance, in an online context, advertising messages are less likely to be skipped when there is high product involvement because they attract attention more effectively (Belanche et al., 2017). Hence:

H1: Consumer product involvement has a direct effect on attitude towards the ad.

H2: Consumer product involvement has a direct effect on advertising cognition.

In order to allow for a better understanding of variability in advertising effectiveness, Lutz et al. (1983) suggest the inclusion of consumer attitude in the discussion of advertising effectiveness as a mediator of advertising effect. Donovan and Jalleh (1999) contribute to research into the form of messages presented to the consumer, showing that ad-evoked feelings influence acceptance of the ad and the brand; in general, positive feelings increase acceptance of the ad, while negative feelings reduce it. Berger and Mitchell (1989) find that indirect experiences (advertising) can be as influential as direct experiences (product usage) in changing attitudes. Furthermore, the effect of these indirect experiences (advertising) depends on the extent to which the messages and stimuli are elaborated (Priester, Nayakankuppam, Fleming, & Godek, 2004). The seminal assumption in advertising effectiveness is that ad cognition leads to attitude towards the ad, while attitude towards the ad leads to behavioural intention (Lutz et al., 1983; Mackenzie, Lutz, & Belch, 1986). However, it has been suggested that individual attitudinal factors related to advertising in general tend to influence how the consumer reacts to a particular ad (Mehta, 2000). Furthermore, it has been found that the manner in which the information in an ad is presented to the consumer and how it is perceived (attitude towards the ad) influences consumer willingness to pay attention and remember ad content (ad cognition) (Mckay-Nesbitt, Manchanda, Smith, & Huhmann, 2011). Thus, it is suggested that:

H3: Attitude towards the ad has a direct effect on ad cognition (consistently with H2: "Product involvement has an effect on ad cognition").

In much the same vein, MacInnis and Jaworski (1989) state that connective elaborations based on consumer interpretation of advertising content produce "self-generated persuasion," resulting in strong beliefs (positive or negative) about the brand. In other words, ad cognition results from the propensity to engage in an effort to think (Martin et al., 2003). On the other hand, when the consumer does not engage in a thorough processing of the ad, few personal connections are established with it (Buchholz & Smith, 1991). Lutz et al. (1983)

define purchase intention as the likelihood that consumers will purchase a brand in the near future as a consequence of exposure to advertising. This is in line with Martin et al. (2003) claim that the ultimate aim of advertising is to persuade consumers to buy certain brands rather than others. Therefore:

H4: Ad cognition has a direct effect on purchase intentions. Thus, consumer product involvement and attitude towards the ad will have an indirect effect on purchase intentions.

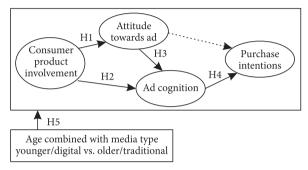


Figure 2. Conceptual frame work and hypotheses

Furthermore, it is expected that the relationships among these constructs could be affected by a moderating factor such as age. Age is a variable that can determine the consumer's reactions to all kinds of advertising input: the younger the consumer, the more open to innovations he tends to be. This has been corroborated by several studies of various products and services: bank cards (Adcock, Hirschman, & Goldstucker, 1977), automatic teller machines (Porter, Swerdlow, & Staples, 1979) and solar energy systems (Labay & Kinnear, 1981). More precisely, age can have an effect on advertising effectiveness (McKay-Nesbitt et al., 2011). Specifically, Te'eni-Harari et al. (2009) show an inverse relationship between age and advertising effectiveness. The level of engagement with a given digital medium can also have an effect on this group of variables (Calder, Malthouse, & Schaedel, 2009). For example, a positive relationship between online engagement and the effectiveness of ads presented online has been found (Calder et al., 2009). For example, under certain conditions, when exposed in a store location, mobile ads (on a smartphone) can capture more attention than point-of-purchase advertising (Ketelaar et al., 2017). Moreover, Dehghani, Niaki, Ramezani, and Sali (2016) suggests that YouTube Ads can be especially attractive to young consumers, and effective for generating purchase intentions due to features such as the informativeness, customization and entertainment found in these kinds of ads. Hence, assuming that younger consumers are more engaged with digital media, it is expected that for advertising campaigns using digital media (YouTube), the younger the consumer, the stronger the relationship between these constructs will be, while opposite results are expected for traditional media (TV) and older users. Thus, the lower the age of the consumer, the higher the moderating effect of digital media over traditional media on advertising effectiveness is expected to be. This conjecture is presented here as follow:

H5: Age and media type have a combined moderating effect on the involvement-attitude-cognition-intentions relationship.

2. Methodology

In order to compare the proposed relationships in the contexts of TV and Internet advertising (as established by one of the hypotheses), the research was conducted with consumers who claimed to be heavy users of either of these two media outlets. A *post-hoc* non-experimental study was implemented to generate comparable data between respondents who claimed to remember an ad from TV, versus consumers who claimed to remember an ad from Internet (YouTube).

An issue to settle was whether the study should allow the respondents to evaluate any ad they remembered seeing on any website, or should be limited to an ad from a specific website. One much-visited website is YouTube. The format in which advertising is exposed on YouTube before or after viewed material happens to be similar to that of ads delivered on TV. More specifically, viewers on YouTube seek videos of interest to them, just as TV viewers do by zapping though TV channels. Therefore, for our purposes the YouTube website closely replicates the experience of watching TV, but in a digital medium.

Respondents were required to be between 17 and 49 years old. The reason for this was to assess a sufficiently broad age range as this variable is one of the moderators being tested. It was also required of the respondents that they have watched TV for a minimum of 2 hours per day on average, at least 6 days a week, over the previous 2 weeks. This number of hours watching TV is conservative, based on Bacardí-Gascón, Díaz-Ramírez, Gruz López, López Zuñiga, and Jiménez-Cruz (2013) findings, which show that the average time spent watching TV in Mexico is 2.7 hours per day, for an average of 5.9 days per week. For those claiming to remember an ad seen on the YouTube website, they needed to be in the habit of surfing the web at least 1 hour per day on average. This figure of hours surfing the web is conservative, based on Millward Brown (2011), where it is claimed that Mexican web-surfers (between 12 and 70 years old) stay online on a daily basis for an average of 4 hours and 29 minutes per day. Finally, while gender is not considered a decisive variable for this research, a balanced sample was nevertheless considered desirable. Thus, throughout the interviewing process, an effort was made to keep the sample as close to 50-50 as possible (151 male vs 156 female). Likewise, a sample of n = 307 was divided between 180 TV users and 127 YouTube users. The selection method was purposive following the former criteria for control of the variables.

As presented below, the data analysis technique to test the hypotheses is a structural equation model elaborated according to the conceptual model presented in Figure 2. This statistical model is composed of four latent variables, where each of these is related to the observed variables (items) shown in Table 1. SEM (structural equation modelling) is a statistical multivariate technique developed to empirically test complex (structural) theories in behavioural sciences when several constructs and hypotheses are interrelated in a single conceptual model (Dimitrov, 2010).

3. Measurements

To measure the consumer involvement variables, items were selected and adapted from well-known involvement scales (Laurent & Kapferer, 1985; Schneider & Rodgers, 1996). The in-

volvement components that were specifically measured were product importance, product symbolism and product pleasure. For the assessment of the variables related to the advertising effectiveness constructs (attitude towards the ad and ad cognition) items were adapted from Lutz et al. (1983), Lavidge and Steiner (1961), Keller (2003) and Belch (1983). Purchase intention items were adapted from Till and Busler (2000).

Table 1. Measurements. Cronbach's alpha values for items within latent variables and standardized measurement weights in SEM model

Latent variables	Items (translated from Spanish)		smw
Consumer Involve- ment	Choosing products like the one in the ad is a relevant decision. Buying the type of product like the one appearing in the ad distinguishes me. I would love to have a product like the one that appears in the ad. The type of product seen in the ad means a lot to me. A product like the one that appears in the ad is nice to have.	0.88	0.85* 0.70* 0.71* 0.77* 0.84*
Attitude towards the Ad	The ad was entertaining. The ad was interesting. The ad was original.	0.91	0.88* 0.94* 0.80*
Ad Cognition	How credible are the claims made by the product/brand in the ad? What are your beliefs concerning the brand that appears in the ad? What is your opinion of the brand that appears in the ad?	0.81	0.66* 0.82* 0.84*
Purchase Intention	How likely am I to buy the product/brand that appears in the ad? The next time I go shopping I will buy the brand of the product that appears in the ad. I have been persuaded to buy the product/brand that appears in the ad.	0.91	0.86* 0.84* 0.92*
α = alpha co smw = stand	*p value ≤ 0.001		

Cronbach's alpha estimates were calculated for the variables within each construct. Cronbach's alpha as an internal reliability indicator is the expected correlation between the items measuring the same construct (J. A. Gliem & R. R. Gliem, 2003). It is assumed that the alpha coefficient is an accurate estimate of the average correlation of all items belonging to a given construct (Nunnally, 1978). As can be appreciated in Table 1, all the alpha values are above 0.8; they are thus considered highly acceptable according to Hulland (1999) and J. A. Gliem and R. R. Gliem (2003). In additional, the measurement weights (standardized estimates between latent variables and observed variables) for the structural analysis used to test the hypotheses are displayed in Table 1. The values of these measurement weights (≥0.66 with a p value ≤0.001) tend to confirm a good level of convergent validity between the items for each construct.

4. Results

As mentioned above, a structural equations model was created (using Amos software) to corroborate the relationships among the constructs as a whole, as established in the conceptual framework and shown in Figure 2. This technique makes it possible to calculate regression

weights among the latent variables as well as the measurement weights between observed variables and latent variables (Vinzi, Trinchera, & Amato, 2010). Checking the values in Table 2 with the rule of thumb criterion, the obtained fit indexes can be considered highly acceptable, as explained below.

	Table 2	Fit indexes	for the structural	model
--	---------	-------------	--------------------	-------

	Absolute fit indexes			Rel	lative fit inde	exes	
	RMSEA	CMIN/DF	NFI	RFI	IFI	TLI	CFI
Ī	0.085	3.225	0.925	0.905	0.947	0.933	0.947

The structural base model showed a RMSEA value of 0.085. According to Beowne and Cudeck (1993), all values below 0.1 are acceptable. As for the CMIN/DF index, the obtained coefficient was 3.215. According to Wheaton, Muthen, Alwin, and Summers (1977), CMIN/DF values below 5.0 can be considered acceptable. The Bentler-Bonett normed fit index (NFI) varies from 0 to 1, where values over 0.9 are considered acceptable (Bentler & Bonett, 1980). Regarding the relative fit index (RFI), measurement models with values of at least 0.9 (Bentler & Bonett, 1980) are recommended. The incremental fit index (IFI) is relatively insensitive to sample size where values exceeding 0.9 are considered acceptable, and those near 0.95 superior (Byrne, 2013, p. 98). The Tucker-Lewis Index (TLI) is similar to the NFI and can fall between 0 and 1 where values over 0.9 are considered adequate (Tucker & Lewis, 1973). The comparative fit index (CFI) must exceed 0.93 to be considered acceptable (the CFI compares the fit of a target model with the fit of an independent model, one in which the variables are assumed to be uncorrelated) (Hu & Bentler, 1999).

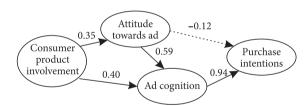


Figure 3. Standardized regression weights between latent variables

According to the information displayed in Figure 3 and in Table 3, the regression weights between the latent variables in the structural model tend to confirm what was proposed in the conceptual framework. Although the correlation coefficients between the constructs are statistically significant, some of these association values cannot be considered particularly high. Nevertheless, the r² determination coefficients for the dependent variables advertising cognition and purchase intentions are considerable, as they display values of 0.65 and 0.71 (closer to 1 than to 0) respectively. These values tend to indicate that, although the regression weights are not particularly high at the beginning of the path model, the combined effects of the variables generate acceptable values of the determination coefficients for the dependent variables. The r² determination coefficient is useful as a measure of achievement predicting a dependent variable from independent ones (Nagelkerke, 1991).

Latent variables	Coefficient
Involvement → Attitude toward Ad	0.36**
Involvement → Ad cognition	0.40**
Attitude toward Ad → Ad cognition	0.59**
Attitude toward Ad → Purchase intention	-0.12
Ad cognition → Purchase intention	0.94**
**Significant level at 0.01	

Table 3. Standardized regression weights between latent variables

Consistently with what was initially suggested, these results tend to confirm the covariant relationship between product involvement and advertising effectiveness assessments. Also, attitude towards the ad does not appear to have a significant effect on purchase intentions. This underscores the need for advertising cognition as a mediating variable between attitude toward the ad and purchase intentions.

Table 4. Conclusions about hypotheses

Hypothesis	Conclusion
H1 Involvement → Attitude to ad	Accept
H2 Involvement → Ad cognition	Accept
H3 Attitude to ad → Ad cognition	Accept
H4 Ad cognition → Purchase intention	Accept
H5 Age-media type moderating effect	Reject

The effect of the moderating variable proposed in the model (see Figure 2) was verified using a nested model comparison test. For this multi-group analysis model, fit indexes were acceptable (CFI = 0.95, NFI = 0.92, RMSEA = 0.085). Regarding the base model, path coefficients yielded similar results. For this kind of test, a moderating variable has only two possible values (in this case younger/YouTube *vs.* older/TV). However, according to the coefficient obtained from the invariance test for structural weights (18.79), the result of this test is not statistically significant (p value over 0.05). Thus, age-media did not show a moderating effect between the model's relationships. In other words, none of the corresponding path regression weights from either nested model (younger/YouTube *vs.* older/TV) was significantly different. The same results were obtained when testing the moderating effects of age (young *vs.* old) and the moderating effect of media (YouTube *vs.* TV) separately. To specifically respond to the proposed hypotheses, the conclusion for each hypothesis based on the interpretation of the results exposed in this study is presented in Table 4.

5. Discussion

Taking under consideration that media type as a moderating effect did not show differences in the relationships proposed here, the results of the present study appear to be consistent with the notion that advertising effectiveness can be assessed and measured in the same way in both online advertising and traditional media advertising. In fact, there is evidence that advertising campaigns tend to garner the best results when tactics of traditional media (such as TV) and digital media (such as search engines) are combined in an overall communication strategy (Zenetti, Bijmolt, Leeflang, & Klapper, 2014). The results of the present study thus support the idea that the consumer's reaction to traditional media advertising and to digital media advertising, as well as his information processing of each of these, tend to remain quite similar. Congruently with these findings, when levels of brand knowledge are equivalent, Internet advertising is not likely to raise levels of brand-message recall that are significantly different from those obtained through TV advertising (Draganska et al., 2014).

In this study, it was interesting to observe that the advertising effectiveness variables within the construct proposed by Lutz et al. (1983) could be separated into two different latent variables, as assessed by Mackenzie et al. (1986): attitude towards the ad and ad cognition. However, what differs considerably from previous studies is the proposed sequence within the relationship between attitude to the ad and ad cognition. In previous studies, e.g., Mackenzie et al. (1986), cognition was established as an antecedent for attitude, while the latter was taken as the direct antecedent of purchase intention (cognition-attitude-intention). In the present study, the relationship between these constructs was conceived in a different way, as laid out in the conceptual framework (Figure 2 and Figure 3). It appears that including consumer involvement with the advertised product as a covariant antecedent can reconfigure these relationships. Previously, it was found that product category type could affect attitude towards the ad substantially, because the different types of associations that the product evokes could influence perception of the ad (Geuens, De Pelsmacker, & Faseur, 2011). For example, hedonic products tend to generate better perceptions of the ad (Geuens et al., 2011). Thus, positive associations and favourable attitude towards electronic devices tend to have a positive effect on digital media advertising effectiveness (Izquierdo-Yusta, Olarte-Pascual, & Reinares-Lara, 2015). Now, based on the present results, it may be claimed that some level of involvement with the product is needed before the ad can become relevant to the consumer (in a product-selling logic). A favourable attitude to the ad can be claimed to depend partially on the degree of involvement of the consumer with the advertised product. When the consumer is involved with the product and his attitude toward the ad is favourable, only then will she/he engage in the cognitive process of evaluating the benefits of the product and the brand presented in the ad. As proposed in Vakratsas and Ambler (1999), context is composed of a group of elements that can provide a substantial explanation for advertising effectiveness. To be effective in motivating the consumer's behaviour the ad must be embedded in a meaningful context. Here, context includes five factors: customer goal, product category, competition characteristics, product life-cycle stage and customer. Under this approach, the perception of the product category being advertised is thus a relevant contextual factor. Consequently, what can be inferred from current findings is that consumer involvement with the product category is the relevant contextual element, not the product category per se. In this light, the relationship path confirmed in the present study could be explained as follows. A consumer's attention is first caught by the ad, as determined by his involvement with the product. Depending on the attitude towards the ad and the brand generated at this second step, the advertising content and the brand can generate a certain level of persuasion. Only then can a behavioural (purchase) intention be prompted. This is consistent with previous findings, where it is suggested that advertising efforts tend to be more effective when customers with high levels of involvement with the product are targeted (Belanche et al., 2017).

For the main practical contributions of the present study, three relevant aspects can be mentioned. On the one hand, the role of the advertised product appears be of greater importance for the ad's effectiveness than previously believed. This implies that advertisers may decide that no matter how great the originality and creativity of the content of an ad, its effectiveness will always depend on the level of importance, symbolic value and/or pleasure associated with the offered product. On the other hand, marketing practitioners will bear in mind that a digital media ad can be as effective as a TV ad, regardless of the age of the consumer. At least, this may turn out to be true for YouTube ads as compared with TV ads. Furthermore, they can have a powerful effect when combined in a single advertising campaign. One last practical implication of the present study should also be highlighted. Although a considerable number of advertising effectiveness indicators for digital media have been proposed, traditional advertising effectiveness measurements originally developed for traditional media can also be used to assess this construct in the digital environment. Additionally, the use of the same measurement methods for both media creates a basis for performing comparative assessments between them.

Conclusions

A relevant conclusion to the present study is that there is an argument for product involvement as a covariant antecedent of advertising effectiveness. Apparently, the consumer will pay attention to the ad and generate cognition of the information in it as long as the product is interesting and important to him. Hence, it is sound to claim that when the advertised product implies a higher involvement for the consumer, it becomes more likely that he will have a favourable attitude towards the advertising piece, and thus become persuaded of the proposed value.

Nevertheless, based on the non-significant relationship between attitude to the ad/brand and behavioural intentions exposed in the structural model, the findings of the present study suggest that however attractive a piece of advertising may be, this feature will not be enough to drive purchase intentions. An interesting or catchy piece of advertising can accomplish the function of drawing consumer attention to the message of the advertising; then, through assimilation of the message, purchase intention can be driven. This is something for advertisers to keep in mind, inclined as they may be to make the mistake of producing fun and distinctive ads that fail to dwell sufficiently on the product/brand value content.

Another important finding is that the medium (TV or YouTube) combined with age as a moderating variable showed no significant effect on the correlations between advertising effectiveness and its antecedents and consequences. This suggests that with respect to the stimulation of purchase intentions, product involvement influences advertising effectiveness variables in a consistently similar way, regardless of the media through which the ad is presented or the particular inclination a consumer may or may not have toward any of these media.

In the present study, as stated above, a post-hoc design was implemented. This is consistent with the intended kind of general explanatory model. However, experimental design in advertising research is often used because is a way to test the effects of more specific elements, such as specific types of media, advertisements, brands and psychographic characteristics. Due to the constrained methodological design of this study, only two media types were compared (TV and YouTube). For future research, an alternative could be to include a third or a fourth media type such as magazines or outside advertising, in order to see whether media type has significant influence on advertising effectiveness in function of various customer profiles. Other limitations of the study can be related to the fact that for the present study consumers were asked to evaluate an ad they had seen before and remembered. This entitled that it was not possible to measure variables related to advertising recall and repetition. It is known that these types of variables are also important for the assessment of advertising effectiveness.

Additional ideas for future research may arise from the current findings. In the present study, subjects were required only to evaluate TV ads or YouTube ads without any other filtration. However, in these two media there is a wide range of specific forms of advertising that were not considered here. Future studies could be more specific about the type of advertising (not only the type of media). For example, since content-integrated advertising can more effectively trigger a purchase than other forms of online advertising (De Haan, Wiesel, & Pauwels, 2016), it would be interesting to assess whether the level of involvement of the customer with the product increases the effectiveness of this kind of advertising. Additionally, as there is evidence suggesting a higher level of attractiveness to online advertising for young consumers (Dehghani et al., 2016), it would be interesting to analyse the relationship between age and perception of content-integrated advertising. Moreover, as the membership of the customer in a loyalty program can have a positive effect on the relationship between advertising effectiveness and purchase intentions (Maity & Gupta, 2016), it would be worthwhile in future studies to analyse the relationship between product involvement and loyalty program membership to assess a possible combined effect with advertising effectiveness on behavioural intentions.

Disclosure statement

We do not have any competing financial, professional, or personal interests from other parties.

References

Adcock, W. O., Hirschman, E. C., & Goldstucker, J. L. (1977). Bank credit card users: an updated profiled. *Advances in Consumer Research*, 4(1), 236-241.

Bacardí-Gascón, M., Díaz-Ramírez, G., Gruz López, B., López Zuñiga, E., & Jiménez-Cruz, A. (2013). Efecto de anuncios de alimentos en la tv sobre el consumo de alimentos y la adiposidad en mujeres y niños en México. *Nutrición Hospitalaria*, 28(6), 1900-1904. http://doi.org/10.3305/nh.2013.28.6.6966

- Bart, Y. S., Stephen, A. T., & Sarvary, M. (2014). Which products are best suited to mobile advertising? A field study of mobile display advertising effects on consumer attitudes and intentions. *Journal of Marketing Research*, 51(3), 270-285. https://doi.org/10.1509/jmr.13.0503
- Belch, G. E. (1983). The effects of message modality on one and two sided advertising messages. *Advances in Consumer Research*, 10(1), 21-26.
- Belanche, D., Flavián, C., & Pérez-Rueda, A. (2017). Understanding interactive online advertising: congruence and product involvement in highly and lowly arousing, skippable video ads. *Journal of Interactive Marketing*, 37(1), 75-88. https://doi.org/10.1016/j.intmar.2016.06.004
- Bentler, P. M., & Bonett, D. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606. http://doi.org/10.1037/0033-2909.88.3.588
- Berger, I. E., & Mitchell, A. A. (1989). The effect of advertising on attitude accessibility, attitude confidence and the attitude-behavior relationship. *Journal of Consumer Research*, 16(3), 69-279. https://doi.org/10.1086/209213
- Breuer, R., Brettel, M., & Engelen, A. (2011). Incorporating long-term effects in determining the effectiveness of different types of online advertising. *Marketing Letters*, 22(4), 327-340. https://doi.org/10.1007/s11002-011-9136-3
- Brown, M. (2011). Estudio de consumo de medios digitales entre internautas mexicanos. Es.slideshare. net. Retrieved from https://es.slideshare.net/iabmexico/estudio-de-consumo-de-medios-digitales-entre-internautas-mexicanos
- Buchholz, L. M., & Smith, R. E. (1991). The role of consumer involvement in determining cognitive response to broadcast advertising. *Journal of Advertising*, 20(1), 4-17. https://doi.org/10.1080/00913367.1991.10673202
- Burnkrant, R. E., & Sawyer, A. G. (1983). Effects of involvement and message content on information processing intensity. *Information Processing Research in Advertising*, 12(2), 46-64.
- Byrne, B. M. (2013). Structural equation modeling with EQS: Basic concepts, applications, and programming. New York: Psychology Press. https://doi.org/10.4324/9780203726532
- Calder, B. J., Malthouse, E. C., & Schaedel, U. (2009). An experimental study of the relationship between online engagement and advertising effectiveness. *Journal of Interactive Marketing*, 23(4), 321-331. https://doi.org/10.1016/j.intmar.2009.07.002
- De Haan, E., Wiesel, T., & Pauwels, K. (2016). The effectiveness of different forms of online advertising for purchase conversion in a multiple-channel attribution framework. *International Journal of Research in Marketing*, 33(3), 491-507. https://doi.org/10.1016/j.ijresmar.2015.12.001
- Dehghani, M., Niaki, M. K., Ramezani, I., & Sali, R. (2016). Evaluating the influence of YouTube advertising for attraction of young customers. *Computers in Human Behavior*, *59*, 165-172. https://doi.org/10.1016/j.chb.2016.01.037
- Delre, S. A., Broekhuizen, T. L., & Bijmolt, T. H. (2016). The effects of shared consumption on product life cycles and advertising effectiveness: the case of the motion picture market. *Journal of Marketing Research*, 53(4), 608-627. https://doi.org/10.1509/jmr.14.0097
- Dimitrov, D. M. (2010). Testing for factorial invariance in the context of construct validation. *Measurement and Evaluation in Counseling and Development*, 43(2), 121-149. https://doi.org/10.1177/0748175610373459
- Draganska, M., Hartmann, W. R., & Stanglein, G. (2014). Internet versus television advertising: A brand-building comparison. *Journal of Marketing Research*, 51(5), 578-590. https://doi.org/10.1509/jmr.13.0124
- Donovan, R. J., & Jalleh, G. (1999). Positively versus negatively framed. Product attributes: the influence of involvement. *Psychology and Marketing*, *16*(7), 613-630. https://doi.org/10.1002/(SICI)1520-6793(199910)16:7<613::AID-MAR4>3.0.CO;2-F

- Eisend, M., & Tarrahi, F. (2016). The effectiveness of advertising: A meta-meta-analysis of advertising inputs and outcomes. *Journal of Advertising*, 45(4), 519-531. https://doi.org/10.1080/00913367.2016.1185981
- Geuens, M. D., De Pelsmacker, P., & Faseur, T. (2011). Emotional advertising: revisiting the role of product category. *Journal of Business Research*, 64(4), 418-426. https://doi.org/10.1016/j.jbusres.2010.03.001
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting and reporting cronbach's alpha reliability coefficient for like-type scales. In *Midwest research-to-practice conference in adult, continuing and community education*. Retrieved from http://hdl.handle.net/1805/344
- Gotlieb, J. B., & Sarel, D. (1991). Comparative advertising effectiveness: The role of involvement and source scredibility. *Journal of Advertising*, 20(1), 38-45. https://doi.org/10.1080/00913367.1991.10673205
- Ha, L. (2008). Online advertising research in advertising journals: a review. *Journal of Current Issues and Research in Advertising*, 30(1), 31-48. https://doi.org/10.1080/10641734.2008.10505236
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling: a Multidisciplinary Journal*, 6(1), 1-55. https://doi.org/10.1080/10705519909540118
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. Strategic Management Journal, 20(2), 195-204. https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7
- Izquierdo-Yusta, A., Olarte-Pascual, C., & Reinares-Lara, E. (2015). Attitudes toward mobile advertising among users versus non-users of the mobile internet. *Telematics and Informatics*, 32(2), 355-366. https://doi.org/10.1016/j.tele.2014.10.001
- Kerr, G., Schultz, D. E., Kitchen, P. J., Mulhern, F. J., & Beede, P. (2015). Does traditional advertising theory apply to the digital world?: a replication analysis questions the relevance of the elaboration likelihood model. *Journal of Advertising Research*, 55(4), 390-400. https://doi.org/10.2501/JAR-2015-001
- Ketelaar, P. E., Bernritter, S. F., van't Riet, J., Hühn, A. E., van Woudenberg, T. J., Müller, B. C., & Janssen, L. (2017). Disentangling location-based advertising: the effects of location congruency and medium type on consumers' ad attention and brand choice. *International Journal of Advertising*, 36(2), 356-367. https://doi.org/10.1080/02650487.2015.1093810
- Kim, J., & McMillan, S. (2008). Evaluation of internet advertising research: a bibliometric analysis of citations from key sources. *Journal of Advertising*, 37(1), 99-112. https://doi.org/10.2753/JOA0091-3367370108
- Krugman, H. E. (1965). The impact of television advertising: learning without involvement. *Public Opinion Quarterly*, 29(3), 349-356. https://doi.org/10.1086/267335
- Labay, D. G., & Kinnear, T. C. (1981). Exploring the consumer decision process in the adoption of solar energy systems. *Journal of Consumer Research*, 8(3), 271-278. https://doi.org/10.1086/208865
- Laurent, G., & Kapferer, J. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research*, 22(1), 41-53. https://doi.org/10.2307/3151549
- Lavidge, R. J., & Steiner, G. A. (1961). A model for predictive measurements of advertising effectiveness. *Journal of Marketing*, 25(6), 59-62. https://doi.org/10.2307/1248516
- Lutz, R., Mackenzie, S., & Belch, G. (1983). Attitude toward the ad as a mediator of advertising effectiveness: determinants and consequences. *Advances in Consumer Research*, 10(1), 532-539.
- Lutz, R. (1985). Affective and cognitive antecedents of attitude toward the ad: a conceptual framework. In L. Alwitt & A. Mitchell (Eds.), *Psychological processes and advertising effects* (pp. 45-63). Hillsdale: Erlbaumn.

- MacInnis, D., & Jaworski, B. (1989). Information processing from advertisements: toward an integrative framework. *Journal of Marketing*, 53(4), 1-23. https://doi.org/10.2307/1251376
- MacKenzie, S., Lutz, R., & Belch, G. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: a test of competing explanations. *Journal of Marketing Research*, *23*(2), 130-143. https://doi.org/10.2307/3151660
- Maity, M., & Gupta, S. (2016). Mediating effect of loyalty program membership on the relationship between advertising effectiveness and brand loyalty. *Journal of Marketing Theory and Practice*, 24(4), 462-481. https://doi.org/10.1080/10696679.2016.1205450
- Martin, B., Lang, B., Wong, S., & Martin, B. (2003). Conclusion explicitness in advertising: the moderating role of need for cognition and argument quality on persuasion. *Journal of Advertising*, 32(4), 57-66. https://doi.org/10.1080/00913367.2003.10639148
- McAlister, L., Srinivasan, R., Jindal, N., & Cannella, A. (2016). Advertising effectiveness: the moderating effect of firm strategy. *Journal of Marketing Research*, 53(2), 207-224. https://doi.org/10.1509/jmr.13.0285
- McKay-Nesbitt, J., Manchanda, R., Smith, M., & Huhmann, B. (2011). Effects of age, need for cognition, and affective intensity on advertising effectiveness. *Journal of Business Research*, 64(1), 12-17. https://doi.org/10.1016/j.jbusres.2009.09.013
- Mehta, A. (2000). Advertising attitudes and advertising effectiveness. *Journal of Advertising Research*, 40(3), 67-72. https://doi.org/10.2501/JAR-40-3-67-72
- Mitchell, A., & Olson, J. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, 18(3), 318-332. https://doi.org/10.2307/3150973
- Nagelkerke, N. (1991). A note on a general definition of the coefficient of determination. *Biometrika*, 78(3), 691-692. https://doi.org/10.1093/biomet/78.3.691
- Nunnally, J. C. (1978). Psychometric theory. New York: McGraw-Hill Ed.
- Petty, R., & Cacioppo, J. (1979). Issue involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology*, 37(10), 1915-1926. https://doi.org/10.1037/0022-3514.37.10.1915
- Petty, R., Cacioppo, J., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: the moderating role of involvement. *Journal of Consumer Research*, 10(2), 135-146. https://doi.org/10.1086/208954
- Porter, T., Swerdlow, R., & Staples, W. (1979). Who uses bank debit cards? *Business Horizons*, 22(1), 75-83. https://doi.org/10.1016/0007-6813(79)90111-3
- Priester, J., Nayakankuppam, D., Fleming, M., & Godek, J. (2004). The A2SC2 model: the Influence of attitudes and attitude strength on consideration and choice. *Journal of Consumer Research*, 30(4), 574-587. https://doi.org/10.1086/380290
- Robinson, H., Wysocka, A., & Hand, C. (2007). Internet advertising effectiveness: the effect of design on click-through rates for banner ads. *International Journal of Advertising*, 26(4), 527-541. https://doi.org/10.1080/02650487.2007.11073031
- Schneider, K., & Rodgers, W. (1996). An "importance" subscale for the consumer involvement profile. *Advances in Consumer Research*, 23(1), 249-254.
- Teeni-Harari, T., Lehman-Wilzig, S., & Lampert, S. (2009). The importance of product involvement for predicting advertising effectiveness among young people. *International Journal of Advertising*, 28(2), 203-229. https://doi.org/10.2501/S0265048709200540
- Teo, T. (2006). To buy or not to buy online: adopters and non-adopters of online shopping in Singapore. Behaviour & Information Technology, 25(6), 497-509. https://doi.org/10.1080/01449290500256155

- Till, B., & Busler, M. (2000). The match-up hypothesis: physical attractiveness, expertise, and the role of fit on brand attitude, purchase intent and brand beliefs. *Journal of Advertising*, 29(3), 1-13. https://doi.org/10.1080/00913367.2000.10673613
- Tucker, L., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1-10. https://doi.org/10.1007/BF02291170
- Tyebjee, T. T. (1979). Refinement of the involvement concept: an advertising planning point of view. In J. C. Maloney & B. Silverman (Eds.), *Attitude research plays for high stakes* (pp. 11-94). Proceeding Series, American Marketing Association.
- Vakratsas, D., & Ambler, T. (1999). How advertising works: what do we really know? *Journal of Marketing*, 63(1), 26-43. https://doi.org/10.2307/1251999
- Vinzi, V. E., Trinchera, L., & Amato, S. (2010). PLS path modeling: from foundations to recent developments and open issues for model assessment and improvement. In *Handbook of partial least squares* (pp. 47-82). Berlin, Heidelberg: Springer.
- Wang, K., Wang, E., & Farn, C. (2009). Influence of web advertising strategies, consumer goal-directedness, and consumer involvement on web advertising effectiveness. *International Journal of Electronic Commerce*, 13(4), 67-96. https://doi.org/10.2753/JEC1086-4415130404
- Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. *Sociological Methodology*, 8(1), 84-136. https://doi.org/10.2307/270754
- Wu, W. Y., Lu, H. Y., & Chen, L. T. (2017). The moderating roles of involvement and heuristics on advertising effectiveness: a study of financial advertisements. *Asian Journal of Business and Accounting*, 4(1), 1-21.
- Wu, S. (2001). An experimental study on the relationship between consumer involvement and advertising effectiveness. *Asia Pacific Journal of Marketing and Logistics*, 13(1), 43-56. https://doi.org/10.1108/13555850110764702
- Zaichkowsky, J. (1986). Conceptualizing involvement. *Journal of Advertising*, 15(2), 4-34. https://doi.org/10.1080/00913367.1986.10672999
- Zenetti, G., Bijmolt, T. H., Leeflang, P. S., & Klapper, D. (2014). Search engine advertising effectiveness in a multimedia campaign. *International Journal of Electronic Commerce*, 18(3), 7-38. https://doi.org/10.2753/JEC1086-4415180301