



PERCEIVED DECEPTION IN ADVERTISING: ANTECEDENTS AND CONSEQUENCES

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Abstract:

Deception is an unethical practice little explored in advertising communication, particularly from the consumer's point of view. This article proposes to identify the antecedents and consequences of perceived deception in advertising. It is interested in the deception felt by the consumer after being exposed to an advertisement. The results of a survey conducted with a sample of consumers show that skepticism toward advertising and persuasion knowledge have a positive impact on perceived deception in advertising. The influences of consumer gender and age have not been confirmed. Negative effects on consumer reactions were finally highlighted.

Keywords: perceived deception, advertising, skepticism, persuasion knowledge

1. Introduction

Ethics in advertising is of great importance because of its effects on the company's image and values in society. In some cases, advertisers use unethical tactics such as deception to get consumers' attention and convince them. In this context, several examples can be cited: claims relating to the curative effects of a product without proven evidence, products guaranteeing dramatic weight loss in a very short time, the omission of important information, the use of false testimony... According to Attas(1999), advertising deception is unethical because it harms consumers by misleading them about the real characteristics of the product and can harm competition.

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It can also lead to an increase in overall levels of societal mistrust (Boush, Friestad and Wright, 2009).

Despite its negative effects on consumer interests and its prohibition by law, deception is sometimes used to persuade the consumer and increase sales to the detriment of competition. A study by Estrada (2006) found that companies do benefits from deceptive advertising. On the other hand, other study confirms the negative influence of the detection of misleading advertising by the consumer on the financial performance of the company (Jeong and Yoo, 2011). The question then arises: Is it in companies' interest to resort to deception? To make this question answers, it is important to explore the topic of deception from the consumer's point of view and to identify its perceptions and reactions to this practice.

Academically, deceptive advertising research is not new. However, researchers have focused on the conceptualization of deception in advertising and its measurement (e.g., Barbour and Gardner, 1982; Hyman, 1990; Barone and al., 1999). It is only recently that research has focused on the exploration of advertising deception from the consumer's point of view (Nagar, 2009 ; Xie, 2016).

The purpose of this study is to propose and test a conceptual model of the antecedents and consequences of perceived deception in advertising. We will first expose the theoretical framework of the research. We will then present the methodology adopted to test the hypotheses proposed. The results will finally be presented and discussed.

2. Literature review and research hypotheses

Deception is a practice that can be observed in all areas. This is the reason for the existence of some confusion regarding its definition and the delimitation of its key features. In social psychology, deception is defined as a message deliberately transmitted (Vrij and al., 2010) by a person who knows that the information conveyed is false (Massip and al., 2004) to create a false belief in the receiver (Buller and Burgoon, 1996). From a legal point of view, deception is a regulated practice sanctioned by law. Consequently, some authors consider that the conceptualization of deception in advertising must necessarily integrate the legal aspect (Richards, 1990). In the field of advertising, several academic researchers have been based on the behaviorist approach to define deception (e.g., Gardner, 1975; Olson and Dover, 1978; Russo, Metcalf and Stephens, 1981). Under this approach, deception occurs when "*consumers acquire demonstrably false beliefs as a function of exposure to an advertisement*" (Olson and Dover; 1978). Following the same reasoning, Barone and Miniard (1999) consider that an advertisement is deceptive if consumers make incorrect inferences due to this advertisement. Thus, under the behaviorist approach, deception is measured on the basis of beliefs acquired after exposure to advertising and regardless of the actual intentions of the advertiser. On the other hand, in interpersonal communication, the presence of a deliberate intention to deceive on the part of the sender of the message is considered as an essential element for the realization of deception (Vrij and al.,

2010). Indeed, it is the way to distinguish between lying and false information provided involuntarily because of problems of memory or incompetence (Massip and al.; 2004). However, this condition is often difficult to verify because it is difficult to identify the true intentions of the sender of the message.

In a social marketing approach, Aditya (2001) defines deception as *“any act, claim or message that (a) causes at least some consumers acting reasonably to make decisions that they would not otherwise make; (b) leads at least some consumers acting reasonably to believe something about the product, brand or manufacturer that is not verifiably true or (c) has the potential to foster distrust of any kind, general or specific or in other ways cause an erosion of ethical values deemed desirable in society”*. This definition reclaims consumer sovereignty by introducing a potentially long-term effect of the deception, namely, psychosocial undesirability (Shabbir and Thwaites, 2007).

Two forms of advertising deception can be observed in advertising: explicit and implicit deception (Xie and Boush, 2011; Hastak and Mazis, 2011). Explicit deception consists of using false information. However, false information does not all have a deceptive effect, especially when lies are so unreasonable that no one can believe (Richards, 1990). So, to be deceptive false information must have the capacity to create false beliefs among targeted individuals (Richards, 1990; Carson, 2010). Implicit deception consists in using claims that are intentionally crafted in a way to mislead consumers to read beyond the literal messages and to draw erroneous inferences about product or service attributes (Xie and Boush, 2011). Five major types of misleading advertising claims have been identified: omission of material facts, misleadingness due to semantic confusion, intra-attribute misleadingness, inter-attribute misleadingness and source-based misleadingness (Hastak and Mazis, 2011).

2.1 The antecedents of perceived deception in advertising

In this research, we are interested in the perception of deception from the point of view of the consumer rather than objective deception. Indeed, as Xie, Madrigal and Boush(2014) point out, consumers are often unable to judge deception objectively. However, they are more likely to evaluate the degree of veracity of the advertising message on the basis of their own perception. We define perceived deception in advertising as *“the individual’s assessment that the advertising to which he has been exposed attempts to mislead him about the actual performance of the product or service and to harm his interests”*. We propose that the perception of deception in advertising depends on the demographic characteristics of the receiver of the message, his knowledge about persuasion and his degree of skepticism toward advertising.

A. The consumer gender

The results relating to the influence of the consumer's on the perception of deception gender seem inconclusive. Indeed, several works in interpersonal communication testify to the absence of differences between men and women in the detection of deception (DePaulo and al., 1988; Ekman and O'Sullivan, 1991; Levine and McCornack, 1991; Aamodt and Custer, 2006). Others confirm women's ability to detect more non-

verbal clues about deception (Hall, 1978; Rosenthal and al., 1979). In the field of commerce, research agrees that women are more sensitive and more aware of unethical sales practices (Weeks and al., 1999; Roxas and Stoneback, 2004). In the advertising field, Barone, Palan and Miniard (2004) have shown that men are more susceptible to potential deceptive effect associated with partial comparative advertising when they are users of the compared brand. However, female nonusers of the product are more susceptible than male nonusers.

The selectivity hypothesis (Meyers-Levy, 1989; Meyers-Levy and Maheswaran, 1991; Meyers-Levy and Sternthal, 1991) provides a relevant framework for understanding the difference between men and women in the processing and judgment of information. According to this hypothesis, the difference between the two sexes lies in the strategy adopted in the information processing. Men tend to process information selectively. They rely on salient indices to evaluate the information instead of a detailed treatment of the message. The judgments, based on a selection of information available allow them to save time and effort. In contrast, women process information more fully. They analyze the content of the message in more detail and try to assimilate all the available information. They therefore make a more laborious and complete analysis of the information. As a result, women would be less likely to be misled by deceptive advertising. Indeed, the relatively detailed treatment of information in relation to men increases their chances of identifying attempts at deception. We then propose the following hypothesis: **H1**: Perceived deception in advertising is higher for women than for men.

B. The consumer age

Gaeth and Heath (1987) studied the effect of age on consumer vulnerability to deceptive advertising. The results of three separate experiments on young and old consumers have shown that both age groups are likely to make false inferences and confuse truthful and misleading information. However, this susceptibility decreases more for young people when there is an opportunity to more thoroughly examine advertising when evaluating information. The authors concluded that the difference in susceptibility to deception is not related to memory problems created with age, but to the higher tendency of youth to engage in deep information processing. For their part, Jinkook and Horacio (1997) found that older, less educated and/or unmarried individuals are the most vulnerable to unfair commercial practices.

According to John and Cole (1986), limitations in memory-strategy usage and knowledge-base development are the source of processing deficits in young children. With age, the individual will accumulate knowledge that will enable him to better process the information and consequently better assess its degree of veracity. We then propose a positive effect of age on perceived deception in advertising. Hence the hypothesis proposed is the following: **H2**: Age has a positive influence on the perceived deception in advertising.

C. Advertising skepticism

Skepticism in the marketing literature is described on the basis of two approaches: the dispositional approach and the situational approach. Under the first approach, skepticism is considered as an enduring characteristic of a consumer. It is defined as the general tendency to disbelieve advertising claims (Obermiller and Spangenberg; 1998). The situational approach describes skepticism as a cognitive response that varies according to the context and content of the communication (Mohr, Eroglu and Ellen; 1998). In this research, we are interested in the relationship between skepticism towards advertising in general and the perception of deception in advertising. According to Boush, Friestad and Wright (2009), advertising skepticism constitutes a means of self-protection against attempts at advertising deception. Indeed, it helps the consumer to critically evaluate advertising (Manglebury and Bristol, 1998). On the other hand, it has been shown that a high level of skepticism negatively influences the credibility of the ad, which will negatively affect advertising effectiveness (Boyer, 2010). Similarly, Obermiller, Spangenberg and MacLachlan (2005) demonstrated that more skeptical consumers find advertising claims less believable, less influential, and less informative. Therefore, we can say that the more the consumer has doubts about the advertising promises, the more he will question the veracity of these promises. This will increase his perception of advertising deception. We can then predict a positive effect of skepticism on perceived deception. We then state the following hypothesis: **H3**: Advertising skepticism has a positive influence on the perceived deception in advertising.

D. The persuasion knowledge

The persuasion knowledge is defined as “the knowledge that consumers use to interpret, evaluate and respond to influence attempts from advertisers and sellers” (Boyer, 2010). This knowledge is built, over time, on the basis of the experiences of the individual and those around him. According to the persuasion knowledge model (Friestad and Wright, 1994), the consumer has three categories of knowledge: knowledge about the subject of the message, the message sender and the persuasion techniques. Faced with an attempt at persuasion, the consumer activates his knowledge to cope with it and react in the most appropriate way. According to Boush and al. (2009), every time the consumer uses his own knowledge of persuasion techniques, he automatically activates his knowledge of deception practices. The authors consider that persuasion knowledge enhances the consumer's ability to detect deception and plays an important role in self-protection of this type of practice. Moreover, Xie, Boush and Boerslter (2007) have empirically demonstrated that the more deception is salient, the more it is perceived by the consumer. As a result, we can suggest a positive effect of the knowledge of persuasion on the deception perceived in advertising. We then propose the following hypothesis: **H4**: Persuasion knowledge has a positive influence on perceived deception in advertising.

2.2 The consequences of perceived deception in advertising

According to Darke and Ritchie (2007), deception undermines the credibility of advertising by making consumers broadly defensive towards future advertising claims from both the same source and second-party sources. In fact, the feeling of being fooled evokes self-protective goals, which bias information processing in order to minimize the possibility of being duped again. For its part, Romani (2006) studied consumer reactions to advertising containing misleading price information. The results of an experiment conducted with a sample of Italian consumers exposed to various forms of price deception confirm the negative influence on the level of trustworthiness towards the source of information and the willingness to buy the product. The results reveal more negative reaction to the price of misleading advertising based on incompleteness rather than the lack of clarity of information provided. In addition, these negative reactions are more intense for suspicious rather than non-suspicious consumers.

In the context of environmental advertising, Schmuck and al. (2018) have shown that the use of false verbal claims increases the perception of greenwashing, which in turn negatively influences the attitude towards the advertisement.

For their part, Xie, Madrigal, and Boush (2014) examined consumer responses to misleading advertising based on the severity of anticipated harm of deception. Two studies were conducted with 182 and 183 respondents resident in the United States. They were exposed to an ad containing a misleading claim about a weight-loss product. The authors have shown that the negative effect of perceived deception on attitude toward the brand and the intention to purchase is greater when the consequences of deception are perceived as very serious. The anticipated harm was manipulated by inserting information on the side effects of weight-loss pills. In the second study, the authors examined the mediating effect of diagnosticity of perceived deception defined as *"the importance given by the consumer to potential deception"*. They found that a high level of perception of harm increases the diagnosticity of deception which, in turn, leads to less favorable reactions from consumers.

Moreover, Lim and al. (2018) have shown that perceived deception in advertising increases the likelihood of consumers engaging in corrective actions on social media and reinforces their support for the government in regulating this type of advertising.

From the foregoing, we can then infer a negative effect from the perception of deception in advertising on consumer reactions. Hence, the research hypotheses are as follows:

H5: Perceived deception in advertising has a negative influence on the attitude toward the ad.

H6: Perceived deception in advertising has a negative influence on the attitude toward the brand.

H7: Perceived deception in advertising has a negative influence on the intention to purchase the product.

The conceptual model of the antecedents and consequences of perceived deception in advertising we propose to test is presented in Figure 1.

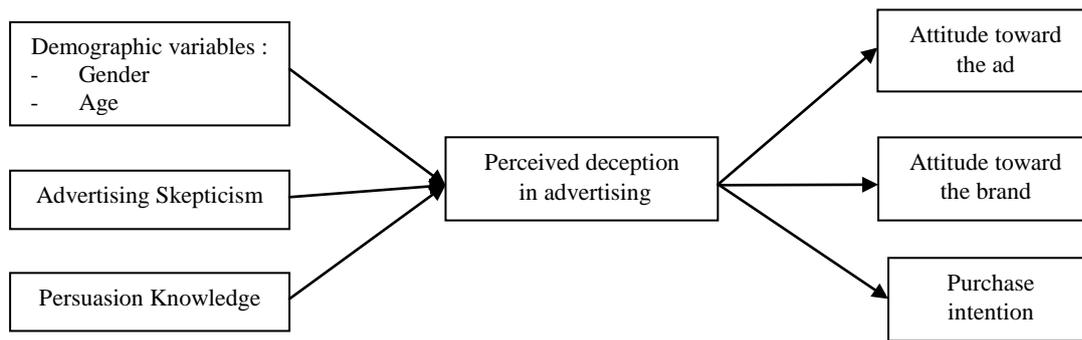


Figure 1: Conceptual model

3. Methodology

In order to test all the relationships presented in our model, we conducted a face-to-face survey based on a questionnaire among a sample of Tunisian consumers. The choices relating to advertising stimuli and measurement scales are described in the following section.

3.1 Advertising stimuli

Four products were chosen for this research, namely mobile phones, sports shoes, yoghurt and weight-loss product. These products are likely to be consumed by both sexes and provide them with different levels of involvement. Four ads were designed with fictitious brand names to avoid any bias related to a prior knowledge or attitude towards a specific brand. For the mobile phone advertisement, information to know the real price of the product and the conditions with which the consumer can get the product with the price mentioned were omitted. The advertisement on sport shoes was designed from the Reebok's Easytone ad that was prosecuted for deception in the United States in September 2011 for lack of evidence confirming the ability of these shoes to tone and strengthen the body. Regarding the advertisement on drinking yoghurt, we were inspired by Actimel's advertising whose claim "helps support children's natural defenses" was found to be misleading in the United Kingdom in 2009 and in the United States in 2010. Finally, for the weight-loss product ad, the deceptive claim was about fast weight loss without diet or physical activity. This type of promise is considered deceptive by several studies (Cleland and al., 2002; Mongeau and al., 2004).

3.2 Data collection

A face-to-face survey was conducted among a convenience sample composed of 480 Tunisians on the basis of a questionnaire. 46% of the respondents were women. 54% were between 21 and 30 years old. 36% were students and 86% had a university level of study. Four versions of questionnaires were created. In each version, we have inserted one of the four designed ads. Each respondent was asked to randomly answer one of these questionnaire versions after seeing the advertisement.

3.3 Measures

The measure of perceived deception in advertising was made by a new measurement scale (Garbouj and Ben Rached, 2012) created on the basis of the Churchill paradigm (1979) and updated by Gerbing and Anderson (1988). It is a five point scale ranging from “strongly disagree” to “strongly agree”. Two dimensions, each composed of 4 items, emerged (Appendix A). The first dimension “perceived veracity” refers to the extent to which the consumer considers the content of the advertisement to be true. The second dimension “perceived ethics” describes the extent to which deception is perceived as an unethical practice that could harm consumers and competitors. Despite its importance, ethics is rarely included as a measured construct in deception-related studies (Scholl and O’Hair, 2005).

The other scales were taken from the literature. Thus, we used the scale of Boyer, Albert and Valette Florence (2006) to measure skepticism. The measurement scale of persuasion knowledge was based on the Bearden, Hardesty and Rose (2001) scale. The Holbrook and Batra (1987) scale was used to measure the attitude toward the ad. Finally, we used the Spears and Singh scales (2004) to measure the attitude toward the brand and the purchase intent.

4. Results

4.1 Reliability and validity of scales

The psychometric quality of the scales was first studied by exploratory factor analyzes on SPSS21. Items whose communality is less than 0.5 or that are strongly or moderately correlated to several axes at once have been eliminated (Evrard and al., 2003). Second, the confirmatory factor analysis was conducted by means of AMOS21.

Table 1: Results of the Exploratory Factor Analysis and Scale Reliability

	Dimensions	Items	Items eliminated	KMO and Bartlett’s test	% of variance explained	Reliability	
						Cronbach’s α	Jöreskog ρ
Perceived deception in advertising	Perceived veracity	4	-	KMO = 0.894 Khi 2 = 3210.243 (ddl = 28 ; p = 0.000)	64.311%	0.932	0.907
	Perceived ethics	4	-		17.596%	0.918	0.899
Skepticism	Doubt	4	-	KMO = 0.903 Khi 2 = 2868.242 (ddl = 28 ; p = 0.000)	65.04 %	0.916	0.900
	Expectation	4	-		13.345%	0.895	0.852
Persuasion knowledge	1 dimension	6	2	KMO = 0.843 Khi 2 = 1173.149 (ddl = 6 ; p = 0.000)	76.924%	0.900	0.838
Attitude toward the ad	1 dimension	4	-	KMO = 0.865 Khi2 = 1868.477 (ddl = 6 ; p = 0.000)	86.293%	0.947	0.934
Attitude toward the brand	1 dimension	5	1	KMO = 0.869 Khi2 = 2029.032 (ddl = 6 ; p = 0.000)	87.908%	0.954	0.944
Purchase intention	1 dimension	5	1	KMO = 0.847 Khi2 = 1269.577 (ddl = 6 ; p = 0.000)	78.681%	0.908	0.869

The reliability of the measurement scale was assessed by Cronbach's alpha and Jöreskog's rho. As shown in Table 1, the values of Cronbach's alpha and Jöreskog's rho are all greater than 0,8. This attests to the good reliability of all the scales mobilized in this research.

Regarding the convergent validity, it was appreciated by calculating the Rhô of convergent validity (ρ_{vc}) which must be greater than 0.5 (approach of Fornell and Larcker, 1981). The results presented in Table 2 show that the convergent validity has been verified for all measurement scales since the value of ρ_{vc} is greater than 0.5 for all the constructs. Finally, the discriminant validity has been examined on the basis of the Fornell and Larcker (1981) approach. The latter consists of verifying that the average variance extracted by each of the two constructs is greater than the square of the structural link between the two constructs. According to the results presented in Table 2, discriminant validity is verified for all scales.

Table 2: Convergent validity and correlations

	ρ_{vc}	Perceived veracity	Perceived ethics	Doubt	Expectation	Persuasion knowledge	Aad	Ab	Ib
Perceived veracity	0.694	1							
Perceived ethics	0.669	0.622	1						
Doubt	0.633	0.624	0.424	1					
Expectation	0.587	0.416	0.209	0.725	1				
Persuasion knowledge	0.589	0.576	0.369	0.767	0.569	1			
Aad	0.673	-0.600	-0.538	-0.425	-0.162	-0.407	1		
Ab	0.726	-0.497	-0.466	-0.428	-0.203	-0.373	0.777	1	
Ib	0.577	-0.482	-0.486	-0.431	-0.240	-0.402	0.681	0.758	1

4.2 Tests of hypotheses

To test the hypotheses regarding the influence of gender and age on perceived deception in advertising, we used the ANOVA test. This method is based on the principle of homogeneity of variances between groups (Jolibert and Jourdan, 2006). The Levene test is then used to evaluate this homogeneity. As shown in Table 3, the variance between groups is homogeneous for both constructs perceived veracity and perceived ethics at the 5% level. The ANOVA can then be performed to measure the influence of gender on perceived deception in advertising.

Table 3: Test of homogeneity of variances

Criteria	Dimensions of perceived deception	Levene statistic	Sig.	Conclusion
Gender	Perceived veracity	2.380	0.124	Variance is homogeneous
	Perceived ethics	0.159	0.691	Variance is homogeneous
Age	Perceived veracity	3.309	0.011	Variance is not homogeneous
	Perceived ethics	0.716	0.581	Variance is homogeneous

The ANOVA results presented in Table 4 demonstrate that the F test is not significant at the 5% level of significance for the two dimensions of perceived deception namely perceived veracity ($F=1.765$; $p=0.185 > 0.05$) and perceived ethics ($F=0.29$; $p=0.865 > 0.05$). As a result, perceived deception in advertising does not seem to be influenced by the consumer's gender. Hypothesis H1 is then rejected.

Table 4: Perceived deception and gender: ANOVA results

	Mean		F	Sig.
	Man	Women		
Perceived truth	-0.0648	0.0567	1.765	0.185
Perceived ethics	-0.0083	0.0073	0.29	0.865

Regarding the hypothesis concerning the influence of age, the relationship can only be tested between age and perceived ethics since the variance between the groups is homogeneous (Table 3). According to the ANOVA results, Fisher's F test is not significant at the 5% level ($F(4, 474) = 0.878$; $p = 0.477 > 0.05$). As a result, the age of the consumer does not influence perceived ethics. Hypothesis H2 which predicts a positive relationship between age and perceived deception in advertising is rejected.

Table 5: Perceived ethics and age: ANOVA results

Age groups	Mean	F	Sig.
Under 20 years	-0.0770	0.878	0.477
From 21 to 30 years	-0.0044		
From 31 to 40 years	-0.0178		
From 41 to 50 years	-0.0968		
More than 51 years old	0.2675		

In order to test the other hypotheses proposed, we used the structural equations method based on the Maximum Likelihood procedure. Respect for multinormality has been studied through the examination of the coefficient of symmetry (Skewness) which must not exceed 3 in absolute value and the Kurtosis coefficient which must not exceed 8 in absolute value (Roussel and al., 2002) . The values obtained are all below the limit values. However, the value of Mardia is equal to 342.874 well above the threshold of 3 (Roussel and al., 2002).

To evaluate the effect of the violation of the normality assumption, we first use a Bootstrap for 2000 samples and we calculate the p value of Bollen-Stine (approach of Nevitt and Hancock, 2000). Bollen-Stine's p is equal to zero less than 0.05. We can then pronounce for a minor effect of the violation of normality. We re-estimate the measurement model with the Bootstrap procedure by setting the number of bootstrap samples at 250. The test of bias is not significant for all variables at the level of 5%. So there is no difference between the parameter values estimated by the Maximum Likelihood method and those estimated by the bootstrap. We then continue our interpretations with the results of the Maximum Likelihood method.

Regarding the quality of the adjustment of the global model, it was evaluated by examining absolute fit indices, incremental fit indices and parsimonious fit indices. Key

values are from Roussel and al. (2002). Overall, these indices indicate a good fit of the model with the data (Table 6). Indeed, the value of normed chi-square is 3.135 close to 3. The RMSEA indice has a value of 0.067 <0.08. The CFI and TLI indices have values above 0.9 while the GFI and AGFI indices have values close to 0.9.

Table 6: The Fit Indices of Structural Equation Model

Chi2	Chi2 / ddI	GFI	AGFI	NFI	CFI	TLI	RMSEA	ECVI	PNFI	AIC
1429.340 (ddl=456; p = 0.000)	3.135	0.852	0.828	0.903	0.932	0.926	0.067	3.285 <30.871	0.830 >0.000	1573.340 <14787.063

The results from modeling by the structural equations presented in Table 7 show that the relationship between skepticism and perceived deception in advertising is significant at the 5% level ($t = 4.340$; $p = 0.000$). The factorial contribution is positive, which means that the more the individual doubts the advertisement, the more likely he is to question the degree of veracity of the message. Hypothesis H3 is validated. Regarding the link between knowledge of persuasion and perceived deception in advertising, it's also significant at the threshold of 5% ($t=7.523$; $p=0.000$). The hypothesis H4 is also validated. As a result, the individual's knowledge of the techniques of deception practiced in advertising increases his perception of deception.

Finally, the results shown in Table 7 confirm the negative impact of the perceived deception in advertising on the attitude toward the ad, the attitude toward the brand and the intention to purchase. Assumptions H5, H6 and H7 are well validated. We confirm then the negative influence of perceived deception in advertising on the reactions of the consumer.

Table 7: Significance of causal links

Structure links	Standardized Estimates	S.E.	C.R.	P
Skepticism → Perceived deception	0.224	0.037	4.340	***
Persuasion Knowledge → Perceived deception	0.394	0.036	7.523	***
Perceived deception → Attitude toward the ad	-0.861	0.107	-15.586	***
Perceived deception → Attitude toward the brand	-0.796	0.093	-14.097	***
Perceived deception → Purchase intention	-0.848	0.099	-16.100	***

5. Conclusion, implications and future research

This research has shed light on a theme still little explored in advertising, especially from the consumer's point of view. It has allowed a better understanding of deception in advertising. In this context, we focused on the deception felt by the consumer after being exposed to an advertisement and not the objective deception provoked by the elements of the message. A conceptual model of antecedents and consequences of perceived deception in advertising has been established. In order to test the proposed research hypotheses, a face-to-face survey based on a questionnaire was conducted

among 480 individuals with diverse profiles. The results of this study did not confirm the effect of consumer gender and age on perceived deception in advertising. Thus, no difference was found between men and women in the perception of deception. This is consistent with some work in interpersonal communication (Levine and McCornack, 1991; Aamodt and Custer, 2006). Moreover, and contrary to our expectations, we did not observe a variation in the perception of deception between different age groups.

On the other hand, the results from structural equation modeling confirm the positive influence of skepticism on perceived deception in advertising. Thus, the more the consumer tends to suspect the veracity of the advertisement, the more he will judge it to be untruthful and dishonest. Skepticism, considered as a means of self-protection against deception (Boush and al., 2009), is then likely to increase the perception and the detection of deception by the consumer. However, at an extreme level, it could lead to the total rejection of speeches or interesting offers that are wrongly deemed untrue (Obermiller, Spangenberg and MacLachlan, 2005). At this level, all advertisements can be harmed.

The results also confirm the positive impact of the knowledge of persuasion on the perception of deception. So, to judge the degree of veracity of the advertising promises, the consumer has recourse to all his knowledge on the techniques of deception used in advertising communication. The more important this knowledge is, the more the consumer will be able to perceive the advertising deception. Note that there are several sources that can contribute to enriching the knowledge of the individual such as television programs and informative websites. Finally, we were able to confirm the negative effect of perceived deception on the effectiveness of advertising. Indeed, the perception of deception acts negatively on the attitude towards the advertisement, the attitude towards the brand as well as the intention to purchase the product.

From a managerial point of view, the theme of deception is of great importance. Indeed, it enlightens advertisers about consumers' reactions to perceived deception in advertising as well as the factors likely to influence this perception. As a result, advertisers are strongly advised to avoid the use of deception because of its negative impact on the effectiveness of advertising. The consumer is now better informed about the techniques of deception in advertising, especially via the Internet. This leaves him able to better perceive deceptive promises. So, when designing advertising messages, it is imperative to give importance to the veracity of the information. In this sense, Urban(2004) confirms the importance of providing consumers with honest and comprehensive information beyond traditional push marketing techniques in order to gain their trust and loyalty. It is also important for advertisers to build a culture based on respect for ethics. According to Davis (1994), if ethics were to be the number one consideration while creating the ad, the incidence of deceptive advertising practices would be reduced. Finally, this research shed light on the role played by skepticism in reinforcing the perception of deception. But a skeptical consumer is not impossible to convince. It is then possible for advertisers to act on the

degree of consumer skepticism in order to reduce their perception of deception, for example through the use of quality signals.

This research has also limitations related mainly to the subjective choice of products and the nature of the sample. In addition, other variables such as situational variables may explain the perception of deception. For example, a positive mood is likely to encourage consumers to carry out a profound treatment of misleading advertising, thus enhancing their ability to detect misinformation (LaTour and LaTour, 2009). Moreover, we limited this research to the deception that is done in a verbal way whereas deception can be also visual (Germelmann and Held, 2014). It is then interesting to conduct a comparative study between the two forms of deception. Finally, it is possible to add moderating variables to the model such as the type of product, product involvement and perceived risk.

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Appendix A : Measurement Scale for perceived deception in advertising

Perceived veracity:

- 1) This ad is not entirely truthful about its offerings.
- 2) This ad shows to individual what he wants to see and not the reality.
- 3) I think that the reality is different from what it is mentioned in the ad.
- 4) This ad misleads consumer about the actual performances of the product.

Perceived ethics:

- 1) This ad harms consumer' interests.
- 2) This ad is contrary to the principles of fair competition.
- 3) This ad is dishonest.
- 4) This ad is trying to dupe the consumer.

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