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Are we measuring the same attitude? Understanding media effects on attitude towards advertising

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Abstract. This article empirically explores the relationship between the general attitude towards advertising and the attitude towards advertising in specific media: television and print. Our results support the proposition that attitude towards advertising in general (\(A_G\)) is an abstract level construct while attitude towards television advertising (\(A_{TV}\)) and attitude towards print advertising (\(A_{PRINT}\)) are experience-based constructs in the consumer’s structure of attitudes towards advertising. We found a significantly negative reciprocal relationship between \(A_{TV}\) and \(A_{PRINT}\), a significantly positive reciprocal relationship between \(A_{TV}\) and \(A_G\), and a non-significant relationship between \(A_{PRINT}\) and \(A_G\). Macro level belief factors like ‘good for the economy’ and ‘materialism’ are related positively and negatively to \(A_G\), respectively. The personal experience belief factor of ‘product information’ is positively related to \(A_{PRINT}\) while personal experience belief factors like ‘hedonic’ and ‘falsity/no sense’ are related positively, and ‘social image’ is related negatively, to \(A_{TV}\). Implications for future research and advertising practices are discussed. Key Words • attitude towards advertising • attitude towards print advertising • attitude towards television advertising • media effects • structural equation model

Introduction

Attitude towards advertising is an important concept as it is one of the determinants of attitude towards specific advertisements (Lutz, 1985) and can influence the way a consumer will respond to any particular advertising (Mehta, 2000). Since Zanot’s (1984) report of a negative trend in public opinion about advertising during the 1960s and 1970s, some research has shown that the public’s attitude towards advertising has been declining over time (e.g. Ogilvy and Mather, 1985; Muehling, 1987; Andrews, 1989), while others have shown a more favorable
evaluation of advertising (Shavitt et al., 1998). However, these studies examined consumers’ attitude towards advertising in general, rather than advertising in a particular medium. Researching consumers’ attitude towards television advertising in particular, Alwitt and Prabhaker (1992) and Mittal (1994) found that American consumers’ attitudes are still overwhelmingly negative, while several studies show that print ads are perceived as more enjoyable and informative than broadcast ads (Haller, 1974; Somasundaran and Light, 1991). Recently, the cluster-bomb approach of ads on the internet has been cited as a reason for the trend towards declining consumer responsiveness to internet ads (Cho and Cheon, 2004: 89). Thus, there is much ambivalence about consumers’ attitude towards advertising, depending on the advertising media being examined.

In terms of attitude structure, apart from Lutz’s (1985) structural model, which identifies attitude towards advertising as an antecedent to attitude towards the ad, extant research in attitude towards advertising examined its structure mainly in terms of the belief dimensions forming attitudes to advertising. These dimensions have been classified into two levels of attitudinal beliefs: personal experience of advertising and generalized or institutional beliefs (see O’Donohoe [1995] for a comprehensive review). There is as yet no research that examines the structure of attitude towards advertising in terms of the relationships between attitude towards advertising in general and attitude towards advertising in specific media. One exception is Schlosser et al.’s (1999) study which empirically examined the relationship between attitude towards internet advertising (IA) and attitude towards advertising in general (GA). They found that more subjects found IA to be informative and trustworthy than a demographically similar sample found GA, and that the attitudes and perceptions of IA and GA were significantly different, although the structure of GA and IA attitudes was the same (Schlosser et al., 1999). However, Schlosser et al. (1999) used an aggregate attitude towards internet advertising measure while industry studies have found that Web users have different attitudes towards online advertising depending on the format of such ads (Dynamic Logic, 2001; Harris Interactive, 2001; Statistical Research, 2001). Moreover, Schlosser et al. (1999) did not formally develop a framework linking the relationship between the attitude towards internet advertising (IA) and the attitude towards advertising in general (GA).

In response to a call for ‘[a] framework for thinking how different sorts of advertisements might work, for different people, in different media, in different circumstances, at different stages of time’ (O’Donohoe, 1995: 260), this article seeks to investigate the relationship between the general attitude towards advertising and attitude towards advertising in specific media, by incorporating media considerations into the traditional attitude towards advertising model. We focus on two traditional media, television and print, since ‘[e]ffects found for television cannot be transferred to, for example, print media, because the media differ in several ways’ (Moorman et al., 2002: 29). We did not examine the internet as a media in consideration since ‘the internet is a convergent media for all other media, that is, a hybrid of television, radio, newspapers, magazines, billboards, direct mail, and so forth’ (Miller, 1996). Moreover, in internet advertising, there
are many online ad formats, each possessing distinctive features that could complicate the consumers’ perception of what constitutes online advertising (Burns and Lutz, 2006).

In social psychology, attitudes are recognized as categories of beliefs that can be rank-ordered from the very concrete to the very abstract, with the latter providing the basis for some fundamental social attitudes (Triandis, 1971). Following this categorization, we posit that people hold attitude towards advertising on different abstraction levels ranging from specific attitude, such as attitude towards advertising in a specific medium (\(A_{\text{MEDIA}}\)), to general attitude towards advertising (\(A_{\text{G}}\)). This means that beliefs associated with each level of abstraction of attitude towards advertising may also differ. Those concerning informational or entertainment type of beliefs that O’Donohoe (1995) categorized as personal experience beliefs may therefore affect people’s attitude towards advertising in a specific medium (\(A_{\text{MEDIA}}\)). For example, print advertising is often associated with the provision of product information, while television advertising is perceived to provide more entertainment value (Haller, 1974; Soley and Reid, 1983; Mittal, 1994). Those beliefs concerning the effect of advertising on the economy that ‘move beyond consumers’ individual experience to consider advertising on a macro level’ (O’Donohoe, 1995: 250), are broad societal beliefs that may affect the higher level attitude, attitude towards advertising (\(A_{\text{G}}\)). An example would be the general belief that advertising raised the standard of living and led to better products that contributes to a positive attitude towards advertising in general (Bauer and Greyser, 1968). Hence, with the inclusion of \(A_{\text{MEDIA}}\), the antecedents of \(A_{\text{G}}\) proposed by past researchers (e.g. Sandage and Leckenby, 1980; Muehling, 1987; Pollay and Mittal, 1993) may well be changed. In our model, we propose that different extant belief dimensions support different levels of attitude towards advertising, ranging from the basic attitudes such as attitude towards television advertising (\(A_{\text{TV}}\)) and attitude towards print advertising (\(A_{\text{PRINT}}\), to the more abstract attitude towards advertising in general (\(A_{\text{G}}\)).

The proposed model will be empirically tested using belief dimensions established in the literature and the results are important in helping us to get a better understanding of attitude towards advertising in general and its determinants. This understanding is needed before one can fully examine the many theoretical relationships proposed in models of attitude towards the ad. (Durvasula et al., 1993). It may also help to resolve some of the ambivalence reported about consumers’ attitude towards advertising. Advertisers may also be interested in knowing consumers’ attitude towards different media advertising when formulating their media strategy. It has been lamented that ‘it is disappointing that research addressing the structure of advertising beliefs is almost entirely American’ (O’Donohoe, 1995: 249). This study thus contributes to the limited pool of empirical studies on attitude towards advertising that are not American in nature.

The rest of the article is organized as follows. The Literature Review examines extant literature on attitude towards advertising to set the stage for the proposed model and hypotheses, which are detailed in the Conceptual framework section. The Methodology section contains details about the empirical study carried out,
outcomes of which are reported in the Results section. The Discussions and Implications section concludes the article by providing the conceptual and managerial implications of our findings, as well as suggestions for future research.

Literature review

Early research on attitude towards advertising ($A_G$) has shown it to be a multi-dimensional component, most often considered in economic or social terms (Bauer and Geyser, 1968; Larkin, 1977; Anderson et al., 1978; Reid and Soley, 1982; Andrews, 1989). In addition, Sandage and Leckenby (1980) proposed that $A_G$ is made up of an ‘instrument’ and an ‘institution’ component. The institution component has been defined as the ‘social and economic functions that society has assigned to the institution of advertising’ (Sandage and Leckenby, 1980), while advertising as an instrument has been defined as the ‘executional qualities and shortcomings of advertising’s instruments’ (Sandage and Leckenby, 1980). Researchers have found support for the existence of these two separate dimensions of $A_G$ (e.g. Muehling, 1987; Durvasula et al., 1993), and Pollay and Mittal (1993) have further shown the possibility of reclassifying the ‘institution’ component into two major sub-components of societal and personal factors. However, in all these studies, advertising as an instrument dimension was an aggregate concept and was not operationalized to capture a person’s attitude towards advertising in a specific medium. Neither was the issue of whether the same set of beliefs will have equal impact on these attitudes addressed.

In a comprehensive review of American and British research on attitude towards advertising, O’Donohoe (1995) concluded that despite different dimensions being identified or different terms being used to describe them, there appeared to be a consensus that attitude towards advertising comprised two levels of beliefs: personal experience of advertising and generalized or ‘macro’ level type of belief. For the personal experience dimension of advertising beliefs, O’Donohoe (1995) includes items like perceptions of advertising’s entertainment and information value, attitudes to advertising in different media and for different products, wariness of advertising’s persuasive or manipulative qualities and perceptions of its repetitive nature (1995: 250). For the beliefs about the institution of advertising, O’Donohoe (1995) included beliefs about economic and social effects of advertising. Unfortunately, O’Donohoe (1995) does not highlight the importance of determining the relationship between attitude towards advertising in general and attitude towards advertising in specific media. Nevertheless, O’Donohoe (1995) comments that: ‘practitioners may do well to monitor the nuances and dimensions to advertising relevant to particular styles or executions, rather than relying on global measures of approval’ (1995: 259). This is important as a study by Shavitt et al. (1998) which asked subjects to take into consideration advertising in all different media (commercials on TV, radio, magazines and newspapers, billboards, classified ads, direct mail ads, etc.) when they answered 17 attitudinal questions on advertising, reported ‘a more favorable evaluation of
advertising than previous data would suggest’ (1998: 38). Perhaps the difference in results between their study and other public surveys of attitude towards advertising could be due to the confounding effect of subjects relating to different media of advertising when they are evaluating beliefs about advertising. The need to take into consideration media differences is important, particularly with the advent of new advertising media such as the internet and mobile phones.

People hold different expectations about different media. For instance, it has been found that people are likely to seek information from print and entertainment from broadcast (Speck and Elliott, 1997), while many people still believe that the internet is a tool or task-performing medium rather than an entertainment medium (Cho and Cheon, 2004). Television and print media are also very dissimilar with respect to the way they are used by their audience: television is a display medium with external pacing (which means that the medium decides the moment and speed of information transfer), while print media are search media with internal pacing by the reader (Smit, 1999). It has been found that the internet ads are perceived to be more intrusive when compared with other media ads (Li et al., 2002).

In most public surveys of attitudes towards advertising, only the abstract attitude \( A_c \) was asked when examining consumers’ attitude towards advertising in general (see, for example, Zanot, 1981, 1984; Ducoffe, 1996; Previte, 1998; Shavitt et al., 1998; Schlosser et al., 1999; Mehta, 2000). For instance, in Shavitt et al.’s (1998) survey, they asked the respondents to think of all forms of advertising when answering questions relating to their thoughts and feelings about advertising. This kind of ambivalence in the treatment of media context when asking subjects about their attitude towards advertising is problematic in that when respondents answer questions relating to advertising beliefs, we do not know whether their frame of reference is based on attitude towards print advertising, attitude towards television advertising, or attitude towards online advertising, rather than attitude towards advertising in general. Studies have shown that one’s predisposition to avoid ads in a medium is related to categorical beliefs and perceptions about them (see, for example, Cronin and Menelly, 1992; Lee and Lumpkin, 1992; Speck and Elliot, 1997, Cho and Cheon, 2004). Thus given existing findings about different categorical beliefs and perceptions that people have about media, including the predisposition to avoid ads in certain media, the resulting attitudes towards advertising that are obtained in the extant attitude towards advertising studies may be confounded. For instance, several studies have examined attitudes towards online advertising in general (Ducoffe, 1996; Previte, 1998; Schlosser et al., 1999), but since there are many different formats of online advertising (e.g. buttons, banner ads, pop-up ads, paid text links, target sites, superstitials, etc.) each possessing distinctive features, this could complicate the consumers’ perception of what constitutes online advertising and hence the reported attitudes towards online advertising may differ (Burns and Lutz, 2006).

Lutz’s (1985) structural model mainly identifies attitude towards advertising as one of the five first-order determinants of attitude towards the ad, and perceptions of advertising as one of the second-order determinants affecting attitude towards
the ad through its direct impact on attitude towards advertising. The only research about the structure of attitude towards advertising that we found relevant was an attempt by Reid and Soley (1982) who found significant differences between what they termed generalized attitudes (attitudes about the effects advertising has on others) and personalized attitudes (attitudes about the effects advertising has on the respondent). The importance of making such a distinction between personalized attitudes and generalized (third-person) attitudes in the domain of attitudes towards advertising has also been highlighted by Shavitt et al. (1998). This provides motivation and support for the link that we are attempting to construct between the generalized attitude towards advertising and the specific attitudes towards advertising in television and print, respectively.

**Conceptual framework**

In the social psychology literature, it is claimed that every discriminable category to which people react may provide the basis for an attitude (Comrey and Newmeyer, 1965). Since there are millions of these categories, they are usually organized by humans into larger and more abstract categories. These more abstract categories provide the basis for some of the fundamental social attitudes. For example:

the attitude toward the church may be an expression of some fundamental value, such as a man’s good or evil nature, but it may also be conceived as an organizing attitude for several more specific attitudes, for example, the attitudes toward priests, ministers, church-going people, atheists, and so on. (Triandis, 1971: 66)

Thus we have a structure of attitudes that resembles a tree: the leaves are the millions of concepts that we use to perceive and conceive our world; the branches are different kinds of attitudes, at various levels of abstraction and the trunk system represents the basic values (Comrey and Newmeyer, 1965).

Drawing on this categorization, we posit that peoples’ attitude towards advertising could also be structured as such, with the attitude towards advertising in general ($A_G$) being the organizing attitude for attitudes towards advertising in specific media, such as attitude towards print and television advertising ($A_{PRINT}$ and $A_{TV}$). We posit the attitude towards advertising in general ($A_G$) as an abstract attitude since it involves general beliefs about advertising without any media contexts. For example, the attitude of American consumers who respected the economic role of advertising, but criticized its social effects (Bauer and Greyser, 1968). This general attitude also corresponds to the generalized (third-person) attitude towards advertising suggested by Reid and Soley (1982). The attitudes that consumers have towards advertising in different media ($A_{MEDIA}$ or $A_{PRINT}$ and $A_{TV}$, specifically) would then be specific attitudes that are less abstract and which correspond to the personalized attitudes suggested by Reid and Soley (1982).

Using O’Donohoe’s (1995) categorization of the extant beliefs of attitudes towards advertising into two groups, personal experience beliefs and macro
beliefs, and the stratification of concrete to abstract levels of attitude used in social psychology, we propose the framework shown in Figure 1. The personal experience and macro belief constructs of product information, hedonic/pleasure, falsity/no sense, good for the economy, and corrupt values/materialism, respectively, are all adopted from Pollay and Mittal’s (1993) study. This is because the focus of this study is not to determine the already well-researched belief dimensions of attitude towards advertising, but rather to determine the structural relationships between general and specific attitudes towards advertising. However, unlike Pollay and Mittal’s (1993) model, not all beliefs are posited to have a direct causal effect on \( A_G \) in our model. The macro belief constructs of good for the economy and materialism are hypothesized to affect \( A_G \) while the rest (personal experience factors) are hypothesized to affect \( A_{\text{PRINT}} \) and \( A_{\text{TV}} \) differently, as explained below.

In our framework, a person has an attitude towards advertising in general which is an abstract level attitude. It is based mostly on shared beliefs that this person acquired from secondary information sources, rather than from one’s own experience with advertising. For instance, this person learns about the ‘bad’ effects of advertising that cause consumers to buy a brand that they do not like, from opinions expressed by others verbally or through the popular media. This information

Figure 1

Conceptual framework of attitudes towards advertising

a: latent relationships depending on saliency of the media
b: possible long-term relationships not examined in this study
may influence the person’s beliefs about social effects of advertising which are well
documented in the literature as antecedents to the formation of an attitude
towards advertising in general (see, for example, Bauer and Greyser, 1968;
Sandage and Leckenby, 1980; Muehling, 1987; Durvasula et al., 1993; Pollay and
Mittal, 1993; Schlosser et al., 1999).

On the other hand, this person may have purchased a product/brand that meets
his/her needs after learning about it from an ad in a magazine. This personal
experience reinforced his/her beliefs about the informative nature of print adver-
tising. However, we propose that because this is a personal experience belief
(O’Donohoe, 1995) about the attribute of advertising in a specific media, it will
help shape the person’s attitude towards print advertising but not about advertis-
ing in general, which is more abstract. Of course, over time this personal experi-
ence belief may also reinforce the shared macro level beliefs this person has about
advertising, that will then have an impact on his/her attitude towards advertising
in general.

Hence, when we ask a person about his/her attitude towards advertising,
response to the question ‘In general, do you like or dislike advertising?’ (e.g.
Shavitt et al., 1998) could be in the form of a general attitude towards advertising
shaped by the macro level beliefs that the person has about advertising, or a
specific attitude towards advertising in a particular medium shaped by the
personalized beliefs that this person has about advertising in a specific medium.
The saliency of the medium to the respondent will determine whether the
response is in the form of an abstract level attitude (A_G) or basic level attitude, such
as A_PRINT or A_TV. Saliency has been defined as the degree to which a stimulus stands
out from its immediate context (Fiske and Taylor, 1984). In the context of our
model, saliency of the medium applies to how a particular medium stands out in
the minds of the respondent when they are asked about his/her attitude towards
advertising. For example, saliency of the television medium may be high to a
respondent because he/she has been involuntarily exposed to a series of television
ads while watching a program, and hence his/her response to a question like ‘In
general, do you like or dislike advertising?’ will be influenced mostly by the beliefs
that this person has as a result of personal experience with television advertising.
As such, his/her response will be in the form of a basic level attitude (A_TV) rather
than the abstract level attitude (A_G). The same could apply to attitude towards
print advertising or other media advertising.

The relationships between attitude towards advertising in general (A_G) being
the organizing attitude for attitudes towards advertising in specific media such as
attitude towards print and television advertising (A_PRINT and A_TV), as well as the set
of antecedents that lead to these attitudes, are hypothesized as follows.

Hypotheses

Based on the foregoing discussion about the categorization of attitudes from basic
to abstract, we hypothesize that:
H1 (a): \( A_{PRINT} \) and \( A_{TV} \) are basic level constructs different from \( A_G \), which is an abstract level construct.

In line with Fiske and Taylor’s (1984) definition of saliency, television is a more salient medium than print because of its high visibility as well as intrusiveness (Mittal, 1994). Reading print advertisement is a matter of choice, while television advertising is thrust on the viewer and may be interruptive for people (James and Kover, 1992). In our framework, television’s saliency as an intrusive media will therefore lead to greater attitude accessibility to \( A_{TV} \) than to \( A_{PRINT} \), when a person is asked about his/her attitude towards advertising in general (\( A_G \)), unless the media context is specified. Thus, it is hypothesized that:

H1(b): \( A_G \) and \( A_{TV} \) are mutually reinforcing and they causally affect each other while \( A_{PRINT} \) is an independent variable.

Research has shown that print advertisements consistently emerged as the most informative (Haller, 1974; Soley and Reid, 1983; Mittal, 1994). Information content studies have also shown consistently that print ads contain more information than television ads (Resnik and Stern, 1977; Stern et al., 1981). Subjects in Alwitt and Prabhaker (1992) study also perceived that television advertising does not offer information. Hence, we hypothesize that:

H2: The personal experience belief construct ‘Product Information’ is positively related to \( A_{PRINT} \).

Broadcast ads use modalities (sound and movement) that have an emotional impact (Speck and Elliott, 1997). It has been found that a striking feature of the most successful campaigns is that the advertisers are able to hold viewers’ attention by making the ads engaging, entertaining, lighthearted and amusing to look at (Jones, 1999). People are more likely to seek entertainment from broadcast ads (Speck and Elliott, 1997). For instance, Alwitt and Prabhaker (1992) found a strong and significant relationship between liking television programs and liking television advertising, above and beyond the effects of demographic characteristics. Mittal (1994) also found in his study that significantly more respondents agree that, ‘Sometimes TV commercials were even more enjoyable than TV programs’ (1994: 41). This led us to hypothesize that:

H3: The personal experience belief construct ‘Hedonic’ is positively related to \( A_{TV} \).

Pollay and Mittal (1993) defined ‘Falsity/No sense’ ads as those that are misleading and provide untrue information (Baker, 1968; Greyser and Greece, 1971; Feldman, 1980). Television ads, although entertaining, are often criticized for their falsity. For instance, Schutz and Casey (1981: 340) found that all or most television advertising was considered to be ‘seriously misleading’ by four out of ten respondents in their survey. Studies have also confirmed that most subjects perceive television advertising to be deceptive (Alwitt and Prabhaker, 1992) and manipulative (Mittal, 1994). Thus, we hypothesize that:

H4: The personal experience belief construct ‘Falsity/No sense’ is negatively related to \( A_{TV} \).
Most advertising portrays a certain lifestyle element and communicates a brand image or personality. It typifies the ideal lifestyle and associates certain goods with certain lifestyles to aid product choice that is consistent with one’s social class. In fact, most television advertising (such as ‘transformation advertising’) is focused on creating social identities for products. However, subjects in Mittal’s (1994) study did not find television advertising useful in helping them ‘figure out how to keep up with the Joneses’ (1994: 41). Nevertheless, we hypothesize that:

H5: The personal experience belief construct ‘Social Image’ is positively related to ATV.

Bauer and Greyser (1968) found that over 70 percent of their sample believed that advertising raised the standard of living and led to better products. Andrews (1989) found strong support for the economic role of advertising in his study. The economics of information theory (Stigler, 1961; Telser, 1964) suggests that advertising provides information and/or reduces search costs (Nelson, 1974; Eskin and Baron, 1977; Chiplin and Sturgess, 1981; Bharadwaj et al., 1993). Hence, for the economic role of advertising we hypothesize that:

H6: The macro belief construct ‘Good for the Economy’ is positively related to AG.

In terms of advertising’s social effects, consumers have expressed concerns about issues such as materialism and stereotype portrayals (Crane, 1991). Advertising has also been strongly criticized for its emphasis on the ease and desirability of obtaining products (Barnes, 1982). Materialism and value corruption were two separate factors in Pollay and Mittal’s (1993) model. However, in their factor analysis, these two factors collapsed into one, a practice we adopt in this study. We also followed Pollay and Mittal’s (1993) practice of identifying materialism as a macro level factor. To date, only one study on attitude towards advertising in general has confirmed that consumers often thought advertising contributes to materialism in the society (Pollay and Mittal, 1993), although advertising critics often claim that ‘advertising has been instrumental in creating a highly materialistic society in which the pursuit of possessions is valued above all other goals’ (Cunningham, 1999: 502). We therefore hypothesize that:

H7: The macro belief construct ‘Materialism’ is negatively related to AG.

To summarize, the abstract attitude AG represents a global impression of advertising that is related to more macro issues such as whether advertising is good for the economy and whether it promotes materialism. The basic attitudes (APRINT and ATV) are influenced more by personal experience beliefs involving whether the ads in specific media provide information and or entertainment, whether they mislead consumers and whether they help consumers to create their own social role and image. Table 1 provides a summary of the hypotheses generated in the proposed model.
Methodology

The basic research method used in this study is a self-administered questionnaire survey. The questionnaire was adopted from Pollay and Mittal’s (1993) study except for those indicators that were used to measure attitudes towards television and print advertising. The indicators used to measure attitudes towards television advertising were adopted from Mittal’s (1994) study on the ‘Public Assessment of TV Advertising.’ The indicators used for print advertising are the same as those used for television.

Questions were scaled using a five-point interval Likert-like scale ranging from ‘1 = Strongly Disagree’ to ‘5 = Strongly Agree.’ Composite measures, comprising three indicators, were used to measure each construct. The order of the questions was randomized to avoid any order bias. For instance, a statement such as ‘Advertising results in better products for the public’ would be followed by a statement like ‘Advertising makes people buy unaffordable products just to show off.’ The questions used to measure attitudes towards advertising in general, and print and television advertising were also randomized and spaced apart to avoid any consciousness on the respondents’ part to make a forced comparison among the three constructs. This would minimize any possible halo effects. Reverse wordings were used for some questions to detect any inconsistencies in the respondent’s answers (see details in the section on Measures).

A pre-test was conducted using a convenience sample of 15 business undergraduates from a top ranking English medium university in Singapore to identify any possible problems associated with the questionnaire design. Since a majority of the undergraduates in the pre-test did not report any problems while filling out the questionnaire, the questionnaire was adopted for the actual study.

Table 1

Summary of hypotheses

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<th>Hypotheses</th>
<th>Parameters</th>
<th>Hypothesized relationship</th>
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<td>H7</td>
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Measures

The proposed structural model (see Figure 2) consists of six exogenous and three endogenous variables. The indicators used to measure each exogenous variable were the same as those used by Pollay and Mittal (1993), except for the values corruption/materialism variable since these two constructs were collapsed into one by Pollay and Mittal (1993). Three indicators from these two constructs that were deemed to be most representative of the construct in question were chosen. The six exogenous variables are operationalized as follows:

**Product information**
1. Advertising is a valuable source of information about sales.
2. Advertising tells me which brands have the features I am looking for.
3. Advertising helps me keep up to date about products/services available in the marketplace.

**Social image**
1. From advertising I learn about fashions and about what to buy to impress others.
2. Advertising tells me what people with lifestyles similar to mine are buying and using.
3 Advertising helps me know which products will or will not reflect the sort of person I am.

_Hedonic pleasure_
1 Quite often, advertising is amusing and entertaining.
2 Sometimes I take pleasure in thinking about what I saw or heard or read in advertisements.
3 Sometimes advertisements are even more enjoyable than other media contents.

_Good for the economy_
1 In general, advertising helps our nation’s economy.
2 Mostly, advertising is wasteful of economic resources.
3 In general, advertising promotes competition, which benefits the consumer.

_Falsity/no sense_
1 In general, advertising is misleading.
2 Most advertising insults the intelligence of the average consumer.
3 In general, advertisements present a true picture of the product advertised (Reverse scored).

_Materialism_
1 Advertising promotes undesirable values in our society.
2 Advertising makes people buy unaffordable products just to show off.
3 Advertising makes people live in a world of fantasy.

The three endogenous variables tested in this study are:

**Attitude towards advertising in general**
1 Overall, I consider advertising a good thing.
2 My general opinion of advertising is unfavorable (reverse scored).
3 Overall, I like advertising.

**Attitude towards television advertising**
1 Overall, I consider television advertising a bad thing (reverse scored).
2 Overall I like television advertising.
3 I consider television advertising to be very essential.

**Attitude towards print advertising**
1 I consider print (newspaper and magazine) advertising to be very essential.
2 Overall, I consider print advertising a bad thing (reverse scored).
3 Overall, I like print advertising.
Sample

Students from a top ranking English-speaking university in Singapore formed the sample population for this study. University students were used in this sample for several reasons. Firstly, students constitute a more homogenous population, which according to Calder et al. (1981), permitted ‘more exact theoretical predictions than may be possible with a more heterogeneous group’ (Muehling, 1987: 33). Since our focus is to determine the underlying structure of AG, the use of a student sample would therefore ensure internal validity. Secondly, Singapore is a young country with a population structure that has a median age of 29, and a majority of the population (38.1%) is in the 15–44 age group, to which the undergraduates surveyed belonged (Singapore Department of Statistics, 2000). To obtain a more balanced student sample, non-business as well as business undergraduates were included in the sample. This was done to cushion any biased attitude towards advertising (if any) that business undergraduates may have because of their exposure to the field (Andrews, 1989).

A total of 450 undergraduate students (201 males and 217 females) from different faculties of the university taking a basic course in marketing participated in the self-administered questionnaire survey as part of the course for credit. After screening for incomplete responses, only 418 completed survey forms with no missing data were retained for analysis.

Data analysis

Before testing the causal relationships specified in the proposed model, we validated the assumptions for structural equation modeling with respect to normality, sampling adequacy, and no extreme multicollinearity (Hair et al., 1998). Although our sample was non-random, normality testing using the SPSS frequency program showed that the skewness and kurtosis statistics for all the variables used in the model were within acceptable range. Frequency histograms also showed all variables having cases distributed fairly evenly above and below the line of zero deviation from expected normal values (Tabachnick and Fidell, 2001). The final sample size used was 418, above the minimum level of 200 recommended for small to medium models (Tabachnick and Fidell, 2001). The assumption about no extreme multicollinearity was also confirmed within acceptable boundary.

The measurement model was then assessed using confirmatory factor analysis. The constructs of interest were the personal experience and macro level belief constructs as well as the three attitude constructs used in the proposed model. In Pollay and Mittal’s (1993) study, they had chosen to average the belief items that measured each construct. The implicit assumption in averaging was that all the $\lambda$ s had an equal factor loading on each indicator. We relaxed this assumption, to take into account the relative effects of the constructs on the various indicators.

The results of the confirmatory factor analyses for the belief constructs and the attitudinal constructs show that the standardized loadings of all items were greater
than 0.4 and significant \( (p < .05) \), except for the item ‘Advertising is a valuable source of information about sales’ for the Product Information factor which has a loading of 0.26 and the item ‘In general, advertising helps our nation’s economy’ for the Good for the Economy factor which has a loading of 0.34. However, since both items are significant and we are using only three items for each construct, these items are retained in the measurement model used. The reliability estimates for the six belief constructs and three attitudinal constructs are shown in Table 2, ranging from 0.62 to 0.74, and are in an acceptable range (Nunnally, 1967). The fit indices of the CFA models are acceptable with goodness of fit index of 0.93 for the belief factors and 0.94 for the attitudinal constructs, the adjusted goodness of fit index of 0.91 for the belief factors and 0.89 for the attitudinal constructs, despite the large chi-square values (291.23 with \( p = 0.00 \) for the belief factors and 119.20 with \( p = 0.00 \) for the attitudinal constructs), suggesting the acceptance of the six-factor belief and three-factor attitude measurement models. The LISREL program (Joreskog and Sorbom, 1989) was then used to estimate parameters of the proposed model.

Results

The parameter estimates and the model fit measures are indicated in Table 3. The proposed model has a goodness of fit index of 0.81 and a RMSEA of 0.17, which indicated an acceptable fit. As Table 3 and Figure 3 show, there are significant and positive reciprocal relationships between \( A_G \) and \( A_{TV} \), and positive but not significant reciprocal relationships between \( A_G \) and \( A_{PRINT} \). However, the results show that the impact of \( A_{TV} \) on \( A_{PRINT} \) is negative and significant, while that of \( A_{PRINT} \) on \( A_{TV} \) is negative but not significant. Generally, Hypothesis 1(b), which postulates that \( A_G \) and \( A_{TV} \) are mutually reinforcing and they causally affect each other while \( A_{PRINT} \) is an independent variable, is supported.

The variable ‘product information’ is positive and significant in predicting attitude towards print advertising \( (A_{PRINT}) \) hence providing support for Hypothesis H2. Hypothesis H3 is also supported in that the variable ‘hedonic/pleasure’ is positive and significant in predicting attitude towards television advertising \( (A_{TV}) \). These results confirm extant studies about the different expectations people have towards print and television advertising (e.g. Haller, 1974; Soley and Reid, 1983; Mittal, 1994; Speck and Elliott, 1997). Hypothesis H4 is not supported as the variable ‘falsity/no sense’ is significantly positive in influencing \( A_{TV} \) instead of the hypothesized negative effect. This finding appears anomalous since it is well documented that people find television advertising deceptive (see Mittal, 1994). There could be two possible explanations for this positive relationship between ‘falsity/no sense’ and \( A_{TV} \). In a study of six decades of survey data on beliefs about advertising in general, Calfe and Ringold (1994) found that although most consumers think that advertising is often untruthful, it nonetheless provides valuable information. They rationalized this to be a reflection of ‘a complex process in which advertisers devise methods to achieve credibility with rational consumers who
Table 2

Reliability estimates

<table>
<thead>
<tr>
<th>Items (factor loadings in parenthesis)</th>
<th>Construct</th>
<th>Cronbach Alphas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising is a valuable source of information (0.26)</td>
<td>Product information</td>
<td>0.606</td>
</tr>
<tr>
<td>Advertising tells me which brands have the features I am looking for (0.44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising helps me keep up to date about products/services (0.45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From advertising I learn about fashion and what to buy to impress others (0.61)</td>
<td>Social image</td>
<td>0.745</td>
</tr>
<tr>
<td>Advertising tells me what people with lifestyles similar to mine are buying and using (0.53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising helps me know which products will or will not reflect the sort of person I am (0.49)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quite often, advertising is amusing and entertaining (0.40)</td>
<td>Hedonic</td>
<td>0.736</td>
</tr>
<tr>
<td>Sometimes I take pleasure in thinking what I saw or heard or read in advertisements (0.54)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes advertisements are even more enjoyable than other media contents (0.64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In general, advertising is misleading (0.47)</td>
<td>Falsity/ no sense</td>
<td>0.670</td>
</tr>
<tr>
<td>Most advertising insults the intelligence of the average consumer (0.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In general, advertisements present a true picture of the product advertised (0.42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In general, advertising helps our nation’s economy (0.33)</td>
<td>Good for economy</td>
<td>0.66</td>
</tr>
<tr>
<td>Mostly, advertising is a waste of economic resources (0.43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In general, advertising promotes competition, which benefits the consumer (0.44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising promotes undesirable values in our society (0.51)</td>
<td>Materialism</td>
<td>0.72</td>
</tr>
<tr>
<td>Advertising makes people buy products just to show off (0.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising makes people live in a world of fantasy (0.51)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall I consider advertising a good thing (0.59)</td>
<td>A_G</td>
<td>0.648</td>
</tr>
<tr>
<td>My general opinion of advertising is unfavourable (0.53)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall I like advertising (0.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall I consider television advertising a good thing (0.46)</td>
<td>A_TV</td>
<td>0.721</td>
</tr>
<tr>
<td>My general opinion of television advertising is unfavourable (0.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall I like television advertising (0.63)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall I consider print advertising a good thing (0.46)</td>
<td>A_PRINT</td>
<td>0.671</td>
</tr>
<tr>
<td>My general opinion of print advertising is unfavourable (0.49)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall I like print advertising (0.57)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3

**Structural parameter estimates**

Model fit measures:
- $\chi^2 = 141.208$, $p = 0.00$, Goodness-of-fit index = 0.81;
- Root-Mean-Square-Error-of-Approximation: 0.170

<table>
<thead>
<tr>
<th>Structural parameters</th>
<th>Unstandardised estimates</th>
<th>p-Value</th>
<th>t-value</th>
<th>Hypothesized sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product information → APRINT ($\gamma_{31}$)</td>
<td>0.66</td>
<td>0.05</td>
<td>12.66</td>
<td>+</td>
</tr>
<tr>
<td>Hedonic/pleasure → ATV ($\gamma_{12}$)</td>
<td>0.42</td>
<td>0.04</td>
<td>10.08</td>
<td>+</td>
</tr>
<tr>
<td>Social image → ATV ($\gamma_{13}$)</td>
<td>-0.21</td>
<td>0.04</td>
<td>-5.28</td>
<td>+</td>
</tr>
<tr>
<td>Falsity/no sense → TV ($\gamma_{14}$)</td>
<td>0.34</td>
<td>0.05</td>
<td>6.68</td>
<td>-</td>
</tr>
<tr>
<td>Good for economy → AG ($\gamma_{25}$)</td>
<td>0.84</td>
<td>0.05</td>
<td>16.16</td>
<td>+</td>
</tr>
<tr>
<td>Materialism → AG ($\gamma_{26}$)</td>
<td>-0.12</td>
<td>0.04</td>
<td>-2.96</td>
<td>-</td>
</tr>
<tr>
<td>ATV → AG ($\beta_{12}$)</td>
<td>0.67</td>
<td>0.03</td>
<td>26.30</td>
<td>+</td>
</tr>
<tr>
<td>AG → ATV ($\beta_{13}$)</td>
<td>0.856</td>
<td>0.03</td>
<td>27.20</td>
<td>+</td>
</tr>
<tr>
<td>APRINT → AG ($\beta_{23}$)</td>
<td>0.10</td>
<td>0.07</td>
<td>1.36</td>
<td>0</td>
</tr>
<tr>
<td>AG → APRINT ($\beta_{32}$)</td>
<td>0.16</td>
<td>0.06</td>
<td>2.96</td>
<td>0</td>
</tr>
<tr>
<td>ATV → APRINT ($\beta_{31}$)</td>
<td>-0.24</td>
<td>0.05</td>
<td>-4.83</td>
<td>0</td>
</tr>
<tr>
<td>APRINT → ATV ($\beta_{13}$)</td>
<td>-0.19</td>
<td>0.06</td>
<td>-3.38</td>
<td>0</td>
</tr>
</tbody>
</table>

$^a$ $p < 0.05$; $^b$ $p < 0.10$

Figure 3

**Estimated structural relationships**
understand the self-interested nature of advertising’ (1994: 236). Perhaps this complex process also applies to the respondents’ evaluation of television advertising as a result of which the negative relationship between ‘falsity/no sense’ and $A_{TV}$ is moderated. Alternatively, one can allude to Alwitt and Prabhaker’s (1992) explanation that perhaps the government has been successful in convincing the public that the deceptive aspect of advertising is sufficiently regulated and that deception has become a non-issue such that viewers are willing to accept that television does not have to offer information. This explanation about how consumers come to accept that deceptive advertising is under control is plausible in Singapore, whereby although the advertising industry is self-regulated it is also being watched over carefully by the government. Out of 13 members in the self-regulatory body (the Advertising Standards Authority of Singapore), four are representatives from the Ministries of Health, Finance, Environment, and Culture (Khoo, 1998).

Hypothesis H5 is also not supported as the ‘Social Image’ variable has a negatively significant impact on $A_{TV}$ instead of a positive one. However, this result is consistent with Mittal’s (1994) finding whereby the subjects did not find television advertising useful in helping them improve their social image. The variable ‘good for economy’ is a positive and significant predictor of attitude towards advertising in general ($A_{G}$), thus supporting hypothesis H6. This finding is in line with existing findings about people’s belief that advertising in general contributes positively to the economy (Bauer and Greyser, 1968; Andrews, 1989). Finally, the variable ‘Materialism’ has a negative and significant influence on $A_{G}$, hence hypothesis H7 is supported. Our results thus support Pollay and Mittal’s (1993) finding that consumers blamed advertising in general for contributing towards materialism.

In summary, our results show that $A_{MEDIA}$ remains as a separate construct in the consumer’s mind and that $A_{TV}$ and $A_{G}$ are mutually reinforcing. This means that one’s attitude towards advertising in general may actually be a reflection of one’s attitude towards television advertising, which is independent of attitude towards print advertising. Thus, deteriorating attitudes towards advertising on the whole could possibly be attributed more to the negative associations that people have towards television advertising specifically. The negative and significant impact of television advertising on print advertising shows that one’s attitude towards print advertising is affected by one’s general attitude towards advertising, indirectly through one’s attitude towards television advertising.

The only robust variables that withstood the measurement problem in the proposed model are ‘product information,’ ‘hedonic/pleasure,’ ‘materialism,’ and ‘good for the economy.’ This appears consistent with Muehling’s (1987) suggestion that belief dimensions underlying attitudes towards advertising in general may be fewer than commonly believed.
Discussion and implications

Our findings show that media effects should not be ignored when determining consumer’s attitude towards advertising. Although we are not able to achieve a perfect fit for the proposed model, our estimation supports our proposition that $A_{\text{MEDIA}}$ is indeed an important construct in the study of $A_G$.

Theoretical and managerial implications

Many studies have examined other antecedents to $A_{\text{AD}}$, such as ad perceptions, but few studies have focused on attitude towards advertising in general and its underlying determinants (Duvarsula et al., 1993). As suggested by Duvarsula et al. (1993), ‘[a] clear understanding of attitude towards advertising in general is needed before one can fully examine the many theoretical relationships proposed in models of attitude towards the ad’ (1993: 627). To gain a better understanding of consumers’ attitude towards advertising, this study has shown that there is a need to be media-specific in future studies on attitude towards advertising, to distinguish between attitudes towards television and print advertising, and attitude towards advertising in general.

This study suggests that focusing on $A_{TV}$ or $A_{\text{PRINT}}$, instead of $A_G$, would be more appropriate in understanding consumers’ attitude towards advertising as an antecedent of $A_{\text{AD}}$. This is because $A_{\text{MEDIA}}$ affects message and Ad execution involvement, which have been found to be moderating variables of $A_{\text{AD}}$ (Lutz et al., 1983; Gardner, 1985; MacKenzie et al., 1986; Homer, 1990). The medium in which a persuasive message is presented has been found to be an important moderator of message elaboration and of persuasion effects (Krugman, 1965; Chaiken and Eagly, 1983; Mehta, 2000). Although researchers studying Ad attitude effects have used different media (primarily print or television), variation in effects across media generally has not been assessed (Brown and Stayman, 1992).

The results of this study reinforce the traditional view of print as a good source for product information and television as a source for entertainment. Thus, the determining factor of whether a person likes print advertising is dependent on whether he perceives that there is relevant product information. Advertisers should strive primarily in print ads to provide consumers with relevant information and not make appeals based on value systems or even focus extensively on providing entertaining effects. Likewise, people like television advertising because of its entertainment value. According to Calfe and Ringold (1994), it is entirely possible that the efficacy of sellers in devising methods for overcoming what appears to be baseline suspicion about the truthfulness and motives of advertisers have increased over time. This could certainly be said of television advertising which, given the tools of sight, sound and movement, could focus on being more original, amusing and entertaining than print advertising. As such, there is a possibility that the entertainment value of television advertising (as supported via hypothesis H3) might have confounded the respondents’ perception about how television advertising could be deceptive (as shown in the non support for hypothesis H4).
The finding of a significantly negative reciprocal relationship between $A_{TV}$ and $A_{PRINT}$ in the presence of a significantly positive reciprocal relationship between $A_{TV}$ and $A_G$ and non-significant relationship between $A_{PRINT}$ and $A_G$ is interesting. It suggests a closer relationship between $A_{TV}$ and $A_{PRINT}$ than we had thought. The results imply that unless the medium is specifically mentioned in a survey about attitude towards advertising, consumers’ negative $A_G$ could be because of negative $A_{TV}$ and positive $A_{PRINT}$ (since the latter two are inversely related), or consumers’ positive $A_G$ could be because of positive $A_{TV}$ and negative $A_{PRINT}$. Hence, any survey on attitude towards advertising has to be clear in its instructions to the respondents whether the survey is about attitude towards advertising in general (which in our framework is an abstract level construct), or attitude towards specific advertising medium in particular. This set of relationships could provide a clue to explaining the ambivalence of people’s attitude towards advertising in the absence of media considerations. For instance, Calfe and Ringold (1994) observed that six decades of survey data focusing on consumer attitudes towards advertising in toto consistently indicate that ‘about 70% of consumers think that advertising is often untruthful, it seeks to persuade people to buy things they do not want, it should be more strictly regulated, and it nonetheless provides valuable information’ (1994: 228). If these public surveys had focused on an attitude towards advertising structure as we have hypothesized, it could be clearer which of these ‘enduring beliefs’ (Calfe and Ringold, 1994) are part of general advertising attitude and which are attributable to specific advertising medium effects. This will certainly help scholars, regulators and practitioners interested in monitoring advertising beliefs.

Advertising institutions have been apprehensive of deteriorating attitudes towards advertising in general, as this leads to greater skepticism about advertising. Our findings about the relationships among $A_{TV}$, $A_{PRINT}$, and $A_G$, and the different personal and macro-level constructs supporting each of the three attitudinal measures may give more diagnostic insights when studying such attitudinal trends. For instance, if results show that $A_G$ is negative, then according to our framework, $A_{TV}$ should be negative since the two constructs are positively related. However, since $A_{TV}$ and $A_{PRINT}$ are negatively related while $A_G$ and $A_{PRINT}$ have no reciprocal relationship, hence much of the negativity about $A_G$ could be attributed to $A_{TV}$. A review of the factors contributing to the negative $A_{TV}$ may then help advertisers to understand more about consumer’s beliefs about advertising.

Advertisers may argue that consumers’ preference for particular media may not be important. Instead, what is more important is that consumers like the ad (that is they have a positive $A_{AD}$) as this positively affects attitude towards the brand. However, since message involvement is one of the moderating variables of $A_{AD}$, consumers with a positive attitude towards print advertising are more likely to be highly involved with the message, regardless of the product in question. This will lead to a higher chance of recognition. The same argument applies to $A_{TV}$. Hence, more focus on $A_{MEDIA}$ than on $A_G$ may be desirable in understanding consumers’ attitude towards specific ads. This focus is needed particularly in view of the prevalence of newer form of advertising media such as the internet. In the area of
internet advertising, some researchers have recognized that there are many different formats of online advertising which could complicate the consumers’ perception of what constitutes online advertising affect, and have proposed that instead of asking consumers about attitude towards online advertising in general, a new construct called attitude towards online advertising format \( (A_{\text{FORMAT}}) \) be used (Burns and Lutz, 2006). For instance, Burns and Lutz (2006), in a study of six online advertising formats (e.g. pop-ups, banners, skyscrapers), have found that \( A_{\text{FORMAT}} \) is significantly related to attitude towards the ad and that ‘the nature of the online ad format is an important characteristic that influences online advertising response’ (2006: 53).

Finally, our study which uses Singaporean (Asian) students as subjects shows that their reactions to the attitude and belief statements are in line with those of their western counterparts in Pollay and Mittal’s (1993) study. This indicates some support for the cross-cultural applicability of extant constructs relating to advertising attitudes and beliefs, albeit among student subjects.

Limitations and future research

Several factors may influence the external validity of this study. First, the use of student samples may not be adequate and representative of the general population. In fact, several researchers have challenged the validity of research using student samples (Soley and Reid, 1983; Sears, 1986; Wells, 1993). However, the student sample is representative of the demographic make-up of the consumers in a young country like Singapore. Given our student sample, our work could only be considered as exploratory in nature. Perhaps future research could be conducted on non-student samples.

The inclusion of questions on attitudes towards print and television advertising and advertising in general in the same questionnaire may cause some problems as the respondents may be making forced comparisons. The use of Pollay and Mittal’s (1993) questionnaire posed a constraint as only three items were used in each belief constructs. This suggests opportunities to develop new items for the various constructs. Future research could involve a replication of the current study with new indicators, to further strengthen the robustness of the structural model.

More than two decades have passed since Zanot’s (1984) report of a negative trend in public opinion about advertising during the 1960s and 1970s, but as mentioned in the introduction, much ambivalence about consumer’s attitude towards advertising remains. Meanwhile, new advertising media such as the internet (with its many formats), mobile phones and iPods have appeared. Perhaps future public survey on advertising attitudes could use the structural framework proposed so that attitude towards advertising in general need not be confounded by the effect of subjects relating to different media of advertising when they are evaluating beliefs about advertising. In view of the direct relationship discovered between \( A_{\text{TV}} \) and \( A_{\text{C}} \), and in view of the finding that ‘more skeptical consumers respond more positively to emotional appeals than to informational appeals’ (Obermiller et al., 2005), future research could examine how different execution of television adver-
Advertising could influence both $A_{TV}$ and $A_{AD}$, and subsequently $A_{AD}$. It would also be interesting to extend the proposed framework to examine how attitude towards advertising in general is linked to attitude towards the new advertising media mentioned. Finally, future research could also focus on cross-cultural comparisons of such attitudinal constructs which will help us to understand global advertising beliefs.

Note

1 We thank an anonymous reviewer for raising this possibility.

References


Are we measuring the same attitude?
Soo Juan Tan and Lily Chia


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