

MEASURING TRUST IN ADVERTISING:  
DEVELOPMENT AND VALIDATION OF THE ADTRUST SCALE

by

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(Under the Direction of Leonard N. Reid and Karen Whitehill King)

ABSTRACT

The reported study was conducted to develop a reliable and valid scale to measure the construct of trust in advertising. A multi-stage research project was conducted: (1) general consumer and advertising expert interviews were conducted to identify initial items; (2) a survey of 260 college students was executed to assess reliability of the scale; (3) a survey of 259 non-student adults was performed to test the reliability and validity of the scale; and (4) the development of a 20-item Likert format scale (the ADTRUST scale) to capture and measure the concept of trust in advertising. The ADTRUST scale showed high reliability and demonstrated concurrent, convergent, discriminant, and nomological validity.

The research found that trust in advertising is a multi-dimensional construct with four distinct components: *Reliability*, *Usefulness*, *Affect*, and *Willingness to Rely On*. Thus, the construct of trust in advertising should be operationalized as the combination of (a) consumer perception of reliability and usefulness of advertising, (b) consumer affect toward advertising, and (c) consumer willingness to rely on advertising.

The ADTRUST scale proved itself to be a valid measure of trust in advertising in the context of two different media: broadcast media and print media. Consumer trust in advertising,

measured with the ADTRUST scale, varies across specific advertising media types. Five ad-media were examined: television, newspapers, radio, magazines, and the Internet. The results of ANOVA indicate that trust in advertising is significantly lower for Internet advertising than for the other media types. Across all five media investigated, media credibility was consistently associated with media-specific ad-trust, indicating that trust in a medium and trust in advertising in that medium are directly related.

The significance of the results is discussed in relation to the research literature.

Implications of the findings are discussed and limitations and suggestions for future research are presented.

Index words: Trust, Advertising, Scale Development

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## **DEDICATION**

This dissertation is dedicated to my parents who have always trusted and encouraged me.

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## CHAPTER 1

### INTRODUCTION TO THE RESEARCH

#### **Introduction**

Trust has been recognized as an important element of human relations, communication, and marketing transactions. As Gambetta (1988) pointed out, trust pervades the most diverse social situations, from private individual lives to international affairs, as a fundamental ingredient and an unavoidable dimension of social interaction. Recognizing the importance of trust, research in sociology, psychology, communication, and marketing has examined the conceptual and measurement dimensions of trust and the role of the construct in human interaction and effective communication.

Trust is also important for effective advertising (MacKenzie and Lutz, 1989). Advertising serves many communication functions (Sheth, 1974); however, a primary function that society has assigned to advertising is the role of informing consumers about products, services, and ideas, to help them weigh one choice against another (Sandage, 1973). Carey (1960, p.14) defines advertising as market information and suggests advertising's basic institutional function is to facilitate judgment and free choice on the part of the consumer by providing relevant information. Nelson (1974, p.54) agrees with advertising's value as an information source by postulating that advertising reduces monopoly power and consumer ignorance by increasing the amount of information available for consumer search. However, crucial to fulfillment of this function is the premise that consumers judge the information

delivered by advertising as useful in their decision making processes. Consumers must have trust in ad-conveyed information for advertising to function most effectively as an information source.

Despite the research in other disciplines, trust has been the subject of little systematic study in advertising. Credibility, a related construct to trust, has long been studied in the context of advertising, but literature suggests that credibility and trust are distinct constructs which have different conceptual characteristics (Doney and Cannon, 1997; Hovland, Janis, and Kelly, 1953; Lewis and Weigert, 1985a; Ohanian, 1990; Swan, Trawick, Rink, and Roberts, 1988). The two constructs will be discussed in more detail in Chapter 2.

According to *Random House Webster's Unabridged Dictionary* (1998), trust is defined as assured reliance, confident dependence, and confident anticipation. In the research literature, which is reviewed in Chapter 2, trust has been defined as “a willingness to behave based on expectation about the behavior of others” (Luhman, 1988), “an expectancy that the word, promise, verbal or written statement of another can be relied upon” (Rotter, 1967), or “a willingness to rely on an exchange partner in whom one has confidence” (Moorman, Deshpandé, and Zaltman, 1993). The literature on trust often suggests that trust has several components not typically included in credibility: confidence in the trusted party's integrity, competence, benevolence and reliability; mutual emotional investment; and willingness to rely on the trusted party (e.g., Doney and Cannon, 1997; Johnson-George and Swap, 1982; Larzelere and Huston, 1980; McAllister, 1995). The under-explored conceptual and measurement issue of trust in advertising calls for a more systematic investigation.

## **Objectives of the Research**

The research reported in this dissertation was undertaken in an attempt to construct a valid and reliable measure of trust in ad-conveyed information. The specific objectives of the study are:

1. To explore the meaning and scope of the *trust in advertising* construct and to investigate if trust in advertising is a unique construct different from other similar advertising constructs.
2. To develop a reliable and valid scale that measures trust in advertising by following systematic measurement development processes.
3. To examine the role of trust in advertising in predicting other advertising-related response variables.

A multi-stage research design, modeled after Churchill (1979), was employed. As described in Chapter 4, in the identification stage, an initial pool of items, hypothesized as indicators of trust in advertising was formulated based on a preliminary definition of trust in advertising. For diagnostic purposes, trust in advertising was preliminarily conceived as “a consumer’s confidence that advertising is a reliable source of product/service information and one’s willingness to act on the basis of information conveyed by advertising.” As described later, the proposed definition incorporates in its conceptualization a three-part structure (cognitive, emotional, and behavioral dimensions) consisting of seven components of trust. The initial pool of items and the preliminary definition were then evaluated for content validity through consumer and expert interviews. In the reliability stage, a student survey was conducted, and the data were split into two data sets. The first half of the data was analyzed using exploratory factor analysis and internal consistency analysis to select items for the next phase. Then, the second

half of the data set was analyzed using confirmatory factor analysis to verify and validate the structure of the items proposed from the first data set. In the validity stage, new data were collected through a survey of non-student adults and analyzed to examine construct validity. Exact details on the study's methodology are presented in Chapter 4.

### **Theoretical Importance**

From a theoretical perspective, development of a reliable and valid scale will serve to bring standardization to the study of trust in advertising as a topic and to promote future research. Many trust-related constructs have been measured in the context of attitude toward advertising in general (see Appendix A); however, lack of an established measurement leads to several problems.

First, there is no consistency among the researchers as to the number and types of dimensions that trust in advertising comprises. Furthermore, the measurements do not cover the entire scope of the trust construct. Even though various items have been used to measure trust in advertising, they have mostly focused on evaluating the integrity of advertising (e.g., falsity/deception and manipulation). Literature on trust in social psychology, relationship marketing and e-commerce suggests that trust is a multidimensional construct and is more than just believing that the trusted party is not deceptive or manipulative. Trust often includes belief in the trusted party's ability to fulfill promise, benevolence and predictability. Current measurements of trust in advertising focusing on the integrity of advertising only deal with a part of trust.

The other common element between all of these scales is the lack of established validity. In addition, the scales used in studies are sometimes only a single-item or ad hoc questions that

have not been validated. There are few validated multi-item measurements for trust in advertising which have been tested for internal reliability and validity either. Most of the scales were developed conceptually without empirical testing. While most theorists describe trust as a multi-dimensional construct, single-item measures and the ad hoc scales commonly treat trust as a single dimension. The use of various invalidated measures limits the value of research because findings are not comparable across studies and the multidimensionality of trust is not represented.

### **Practical Importance**

From the practical perspective, development of a valid and reliable measurement for trust in advertising will be beneficial to advertising practitioners. Many consumer surveys have reported that there is a consistent tendency for consumers to distrust advertising and view advertised messages with skepticism (e.g., Calfee and Ringold, 1994). Consumer distrust of advertising is of great importance because it impedes advertising credibility and, as a result, reduces its marketplace effectiveness. For more efficient marketing communication, advertising practitioners need to understand what causes consumers to trust or distrust advertising and to find a way to improve the level of trust in advertising messages. Despite this importance, research to date has not fully explored the concept or measurement of trust in advertising.

### **Organization of the Research**

This chapter has described the importance of the construct of trust in advertising and the current problems of measuring the construct. Chapter 2 reviews the relevant research literature on trust across various disciplines such as social psychology, sociology, management, marketing and advertising. In Chapter 3, the construct of trust in advertising is conceptualized and the

study's research questions and hypotheses are presented. Chapter 4 describes the procedure for constructing a scale to measure trust in advertising and presents the details of the research methodology. Chapter 5 reports analytical computations and the results of the data analyses. Chapter 6 summarizes and discusses the key research findings, offers empirical and practical implications from the research, and makes suggestions for future research.

## **CHAPTER 2**

### **REVIEW OF RESEARCH AND CONSTRUCT DEFINITIONS**

In this chapter, prior research on trust across various disciplines is presented. Relevant research studies are reviewed focusing on the conceptualizations and operationalizations of trust. In the next chapter, a conceptualization of trust in advertising is presented based on the conclusions drawn from the review of prior literature.

#### **Trust, the Interdisciplinary Construct**

The concept of trust has long been considered vital to the effective functioning of all levels of human relations: nations, organizations, groups, dyads, and individuals (Butler, 1986). Rotter (1967) claims that a high expectancy that others can be relied upon is an important variable in the development of adequate social relationships. Lewis and Weigert (1985a:968) contend that trust is “indispensable in social relationships.” Zucker (1986:56) adds to this, saying that trust is “vital for the maintenance of cooperation in society and necessary as grounds for even the most routine, everyday interactions.”

Recognizing the importance of trust in social life, the construct has been investigated over several decades in a variety of different disciplines, including sociology, psychology, management, and business. As investigated from different disciplinary perspectives, trust has been defined in various ways, both conceptually and operationally. Sociologists often define trust as “social good” which is embedded in social relationships among actors (e.g., Granovetter,



1985; Lewis and Weigert, 1985a). Psychologists commonly conceptualize trust as an individual's personal traits such as propensity to trust (e.g., Rotter, 1967). Social psychologists and organizational management researchers frame the construct in the context of interpersonal relationships as a state of mind which is affected by situation specific factors (e.g., Mayer, Davis, and Schoorman, 1995; McAllister, 1995).

The wide diversity in the research on trust seems to make trust investigators uncomfortable. For example, a sociologist Luhman (1980: 8) complains that trust research seems theoretically unintegrated and incomplete. Zucker (1986: 56) criticizes that "the definitions proposed unfortunately have little in common." Shapiro (1987: 624) agrees that the considerable attention to trust results in "a confusing potpourri of definitions applied to a host of units and levels of analysis." More recently, Hosmer (1995) agrees, saying "there appears to be widespread agreement on the importance of trust in human conduct, but unfortunately there also appears to be equally widespread lack of agreement on a suitable definition of the concept."

Recognizing the diversity of trust research, scholars have attempted to synthesize and categorize interdisciplinary research on this topic. For instance, Hosmer (1995) assesses trust in the contexts of (a) individual expectations, (b) interpersonal relationships, (c) economic exchange, (d) social structures, and (e) ethical principles. Drawing on the work of Worchel (1979), Lewicki and Bunker (1995a, b) categorize the works on trust into three groups: (a) trust as an individual difference; (b) trust as an institutional phenomenon and (c) trust as an expectation of another party in a transaction. Gefen, Karahanna and Straub (2003) review the prior definitions of trust along with the measures used to suggest that trust has been measured as (1) a set of specific beliefs on the trustee, (2) a general belief that another party can be trusted or

the willingness to be vulnerable to the actions of another, (3) feelings of confidence and security in the caring response of the other party, or (4) a combination of these elements.

To explore the meaning of trust in advertising, this present research first refers to the dictionary definition of trust and then reviews the conceptualizations and operationalizations of trust proposed in the prior literature. The literature will be reviewed within the contexts of (1) personality theories, (2) societal perspectives, (3) interpersonal relationships, and (4) economic transactions. This categorization generally follows the classification of Lewicki and Bunker (1995a, b) because their groupings appear to reflect the characteristics of different types of trust and specific perspectives of each discipline as well. Trust as an individual difference is mostly accepted among personality theorists; trust has been seen as an institutional phenomenon among sociologists. Social psychologists and organizational science researchers generally conceptualize trust as individual expectation in interpersonal relationships. Marketing researchers see trust in the context of economic transactions.

### **Definition of Trust in Dictionary**

According to *Random House Webster's Unabridged Dictionary* (1998:2031), trust is defined as follows:

**Noun.** 1. Reliance on the integrity, strength, ability, surety, etc. of a person or thing.  
2. Confident expectation of something.

**Verb.** 1. To have trust or confidence in; rely on or depend on.  
2. To believe.  
3. To expect confidently.  
4. To commit or consign with trust or confidence.  
5. To permit to remain or go somewhere or to do something without fear of consequences.

**Synonyms.** certainty, belief, faith, assurance, confidence.

All the above definitions of trust imply that trust is the confident expectation based on some positive aspects of another person or future event. The list of synonyms including confidence, reliance and dependence suggests that trust is not a “hopeful” expectation but “assured reliance” or “confident anticipation”.

### **Conceptualizations and Operationalizations of Trust in Other Disciplines**

#### **Trust as individual difference: Personality psychologist’s view**

One approach to studying trust is to view trust as a personal trait, developed through social interactions. In this view, trust is conceptualized as an individual’s personality whether one is predisposed to trust or distrust other people in general, i.e., propensity to trust. Trust is often defined as generalized expectancies that behaviors or words of others can be relied on, and the object of trust is not a specific other but other people in general. Thus, trust has been seen as a relatively stable personality characteristic.

Rotter’s (1967, 1971, and 1980) work on trust is the most representative in dispositional theories of trust and has been very influential in conceptualizing trust in other disciplines (e.g., Zaltman and Moorman, 1988). He (1967) defines trust as “an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon” (p.651). Based on social learning theory, he contends that individuals have different experiences on other people’s fulfillment of their promises, i.e., the reinforcement history of previous social interactions, and that, consequently, people develop different expectancies that such reinforcements will occur when something is promised by other people. He further suggests that to some degree, such expectancies that promises of other social agents will be kept, and generalizes from one social agent to another. Consequently, one would differ

in generalized expectancy that the oral or written statements of other people can be relied upon. His view conceptualizes trust as an individual's psychological traits which result from one's previous experiences.

Based on his definition of trust, Rotter (1967) developed the Interpersonal Trust Scale (ITS) to measure people's trust in a wide variety of social objects. ITS is a self-report inventory that consists of 25 Likert format items. Individual items deal with the credibility of social agents such as parents, teachers, politicians, journalists, and salespersons (e.g., "Most salesmen are honest in describing their products"); general expectancy on others' motive and reliability (e.g., "It is safe to believe that in spite of what people say, most people are primarily interested in their own welfare"); and general skepticism about society (e.g., "Hypocrisy is on the increase in our society").

Several personality researchers have developed self-report personality inventories incorporating constructs similar to trust. These include the Trust-Defensiveness subscale of the Comrey Personality Scale (Comrey, 1970); the Trust in Humanity subscale of Personal Orientation Dimensions (Shostrom, 1975); and the Trustworthiness subscale of Philosophies of Human Nature (Wrightsmann, 1974). Even though the authors do not provide an explicit definition of trust, all of these measures imply that personality researchers see trust as faith in humanity. The aforementioned measures broaden the construct to incorporate general optimism and confidence in the trustworthiness and honesty of people in general.

Heretick (1981) criticizes Rotter's ITS on the grounds that the scale does not have discriminant validity from the construct of locus of control. According to Heretick, even though Rotter's concept of interpersonal trust is related to expectancies about the interpersonal environment, the score of Interpersonal Trust Scale, which is supposed to measure interpersonal

trust, has relatively high correlations with the score of Rotter's (1966) Internal-External Locus of Control Scale which is supposed to measure the construct of locus of control. Accordingly, Heretick (1981) attempts to develop a measure of trust which is psychometrically independent of measures of locus of control. Defining trust as an individual's expectancies concerning the motives of other individuals, he developed a six-item Trust-Suspicion (T-S) scale to measure trust that includes items reflecting expectation on other's honesty and selfishness, and general caution of other's trustworthiness.

More recently, Omodei and McLennan (2000) developed the scale of Global Interpersonal Mistrust-Trust (Global IMTM) measuring individuals' global interpersonal mistrust. In the literature, global interpersonal mistrust is conceptualized as a general mistrust of the motives of others in situations related to one's well-being; a general tendency to view others as mean, selfish, malevolent, or unreliable people who are not to be depended on to treat one well (i.e., a negative cognitive orientation toward others)

Although all the scales discussed above treat trust as a uni-dimensional construct without underlying factors, the individual items seem to reflect several distinct elements of trust. For example, even though Rotter (1967) does not argue multi-dimensionality of his ITS, the items in the scale apparently measure three different elements of trust: credibility of social institutions, belief in the sincerity of others, and caution. In addition, when researchers operationalize the definition in the individual scale, the construct of trust has often been broadened to include item content concerned with fearfulness, cynicism, caution, optimism, or confidence in social institutions (Omodei and McLennan, 2000).

### **Trust as social relationships: A sociological view**

Unlike psychologists who typically define trust as a psychological event within an individual, sociologists conceptualize the construct as a social good which is necessary for all levels of social relationships. For example, sociologist Blau (1964:99) describes trust as “essential for stable social relationships.” The philosopher Sissela Bok (1978:26) claims trust is a social good, saying “when [trust] is destroyed societies falter and collapse.” The common thread among these views is that trust is indispensable in social relationships and that trust is applicable to the relations among people rather than to their psychological states taken individually.

Luhmann (1979) attempts to explain why trust is essential to social life by arguing that trust functions as a tool for “the reduction of complexity.” According to him, modern society is full of complexity and unpredictable events. Thus, people need to reduce this complexity to manageable proportions because they do not have the ability to rationally predict all future events. Trust is a functional alternative to rational prediction for the reduction of complexity. Through trust, people reduce their perceived social complexity through a belief that may, at times, be irrational, and that rules out the risk of undesirable but possible future behaviors on the part of the trusted party.

A common assertion in sociology is that trust is a socially rational expectation, directed by formal requirements and informal obligations. Zucker (1986) states that trust is a set of social expectations shared by everyone involved in an economic exchange. Trust includes the beliefs that all participants follow the social rules and that legitimate social processes are appropriately functioning. Thus, trust in social relationships can be developed based on prior history of experiences between the trustor and the trustee, but also based on the belief of the institutional arrangement (e.g., bureaucratic organizations, the professions, and laws) which has

been established to support the trust. Shapiro (1987: 626) defines trust as “a social relationship in which principals...invest resources, authority or responsibility in another to act on their behalf for some uncertain future return.” Shapiro argues that since principals are not always able to monitor the performance of the agent on whom they depend, they need a social control framework to maintain the trust. Thus, guardians of trust including institutional arrangements and structural constraints have been developed to insure the agent’s fidelity. Barber (1983) conceptualizes trust as expectations that social actors have of one another in social relationships and social systems. He specifies and proposes three expectations involved in fundamental meanings of trust: expectations (1) of the persistence and fulfillment of natural and moral social orders; (2) of technically competent role performances from partners in interaction; (3) that people will carry out their duties to place others’ interests before their own (e.g., fiduciary obligations). Similar to Barber (1983), Lieberman (1981) also states that trust in fiduciary relationships is based on a belief in the professional’s competence and integrity.

However, Lewis and Weigert (1985a:970) criticize the conceptualization of trust as expectations as too rational and cognitive-centered. They suggest that “trust is based on a cognitive process which discriminates among persons and institutions that are trustworthy, distrusted, and unknown. In this sense, we cognitively choose whom we will trust and we base the choice on what we take to be ‘good reasons,’ constituting evidence of trustworthiness. However, knowledge alone can never cause us to trust. The manifestation of trust on the cognitive level of experience is reached when social actors no longer need or want any further evidence or rational reasons for their confidence in the objects of trust.” Accordingly, Lewis and Weigert (1985a) suggest that trust consists of three distinct dimensions: cognitive, emotional, and behavioral bases. The cognitive base means evidence of another party’s trustworthiness, i.e.,

good reasons to trust. The affective base refers to an emotional bond among all participants in the relationship. The behavior base of trust is the undertaking of a risky course of action on the confident expectation. Lewis and Weigert (1985a) argue trust is a mix of feeling and rational thinking, and thus to exclude one or the other from the analysis of trust may misconceptualize trust as blind faith (without any cognitive base) or a rationally calculated prediction (without an emotional base).

This macro perspective of trust provides useful background for understanding how trust develops and functions in social relationships. However, rare is the attempt to investigate trust in social settings through empirical studies. Thus, it is hard to find how trust is operationalized and measured in the sociological approach.

### **Trust in an interpersonal relationship with specific others**

Another research approach to trust is to investigate the construct in the context of an interpersonal relationship with a specific other person. Interpersonal trust in a specific other can occur in two different contexts: an intimate personal relationship and a business/working relationship (Lewicki and Bunker, 1995a).

While personality psychologists conceptualize interpersonal trust as a personal characteristic, which is basically context-free and a stable psychological trait, trust in specific others has commonly been conceptualized as a state of mind which is closely related to situational factors of trust, including a trustee's personality and perceived credibility, or a trustor's confidence in their relationship. Accordingly, researchers in this perspective have concentrated on identifying the characteristics of the trustworthy party and the other situational elements constituting trust in interpersonal relationships.



### Trust in intimate personal relationships

Several self-report inventories to measure trust of specific individuals have been developed. Larzelere and Huston (1980) suggest two attributions as pertinent aspects of interpersonal trust: the partner's benevolence and honesty. Benevolence refers to the extent to which an individual believes a partner is genuinely interested in the other's welfare or only in his or her own welfare. Honesty is understood as the extent to which an individual can believe the partner's statement on his or her future intentions. Thus, Larzelere and Huston (1980) conceptualize that "trust exists to the extent that a person believes another person to be benevolent and honest." Larzelere and Huston (1980) also argue that while benevolence and honesty are conceptually distinct, they are operationally inseparable because these two constructs are so intertwined in interpersonal relationships (e.g., if a partner's honesty is questioned then his benevolence is also doubtful). With this notion, they propose the Dyadic Trust Scale which has eight Likert format items measuring a partner's perceived benevolence and honesty.

Some scholars conceptualize that interpersonal trust is a multidimensional construct. Johnson-George and Swap (1982) suggest that interpersonal trust may consist of a trustee's reliability and emotional trust. Reliability refers to the extent that one believes a trustee will keep promises and commitments. Emotional trust is related to one's confidence in the relationship. With high emotional trust, one would be confident that he or she is free from criticism and embarrassment from the trustee. Rempel, Holmes and Zanna (1985) identify three dimensions of interpersonal trust: predictability, dependability, and faith. Predictability of a partner's behavior is related to the amount of past experience in the relationship and the degree of consistency and stability of behavior exhibited. Dependability refers to dispositional attributions made to the partner that he or she is dependable or reliable. Faith is understood as an

emotional security of the partner, which makes individuals feel their partner will be responsive in the future and enables them to go beyond the available evidence. Considering that the predictability, dependability, and faith dimensions require varying amounts of time and emotional investment to accomplish it, Rempel et al. (1985)'s trust model implies that trust is developmental with hierarchical stages, beginning with predictability, then dependability, and finally faith. Rempel and his colleagues do not consider these components to be mutually exclusive; however, they expect that the dominance of one element over another would affect the quality of the relationship. For example, in mature forms of a relationship, faith and dependability would explain interpersonal trust better whereas in relatively short-term relationships, predictability may be a dominant basis of trust.

#### Trust in professional relationships in organizations

A number of researchers have studied trust in interpersonal relationships in organizations. Trust has been considered a key facilitator of group accomplishment; one of the most significant elements in managerial problem solving; and an important factor affecting knowledge sharing in organizations (e.g., Chowdhury, 2005; Ferres, Connell, and Travaglione, 2004; Granovetter, 1985; Nigro, 1969; Zaheer, McEvily, and Perrone, 1998; Zand, 1972).

There are a variety of definitions of interpersonal trust within organizations. Hosmer (1995) states that trust is the reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group or firm to recognize and protect the rights and interests of all others engaged in a joint behavior or economic exchange. Mayer et al. (1995) conceptualizes that trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. Mishra (1996) suggests

more specific attributes of the trustee, saying that trust is one party's willingness to be vulnerable to another party based on the belief that the latter party is competent, open, concerned and reliable. McAllister (1995), Mayer and Davis (1999), and Albrecht and Travaglione (2003) add "willingness to act" as a critical feature of trust. Consistent with prior definitions, Ferres et al. (2004) define trust as the trustworthiness of individuals as well as employees' willingness to act on perceptions of trustworthiness. The common theme of these definitions is that trust is a willingness to rely on the trustee under conditions of the trustor's personal vulnerability and dependence.

Such conceptualizations lead to the multidimensional understanding of trust. Trust has been implicitly considered a unidimensional construct in other research approaches (e.g., Larzelere and Huston, 1980; Rotter, 1967). Mishra (1996) contends that such unidimensional conceptualizations and operationalizations fail to discriminate trust from other related constructs such as cooperation and familiarity. Accordingly, he proposes four sub-dimensions of trust: a trustee's competence, openness, concern, and reliability. Butler and Cantrell (1984) suggest five elements of trust in interpersonal relationships within organizations: (1) integrity: honesty and truthfulness of the trustee; (2) competence: technical and interpersonal knowledge and skills required to do one's job; (3) consistency: reliability, predictability, and good judgment in handling situations; (4) loyalty: benevolent motives or willingness to protect and save face for a person; and (5) openness: mental accessibility or willingness to share ideas and information freely. Mayer et al. (1995) and Mayer and Davis (1999) add "benevolence" to the factors of trustworthiness. Here, benevolence refers to the extent to which a trustee is believed to want to do good to the trustor.

While the aforementioned researchers have concentrated on investigating the multidimensionality of trust in terms of attributes of the trustworthy party, other researchers have attempted to examine the multidimensionality of trust in a broader context. For example, McAllister (1995) distinguishes between two different forms of interpersonal trust: cognition-based trust, grounded in individual beliefs about peer reliability and dependability, and affect-based trust, grounded in reciprocated interpersonal care and concern. Proposing the model of initial formation of trust, McKnight, Cummings and Chervany (1998) contend that trust consists of trusting belief and trusting intention. According to their model, trusting beliefs include benevolence belief, competence belief, honesty belief and predictability belief; trusting intention is a function of these four trusting beliefs.

### **Trust in economic transactions: Business and marketing perspectives**

Numerous studies (for detail, see Swan, Bowers, and Richardson (1999)'s review) have examined trust in economic transactions. Trust is considered crucial in many economic activities that can involve undesirable opportunistic behavior. There seems a consensus that trust plays a central role in buyer/seller relationships in industrial marketing settings (e.g., Anderson and Narus, 1990; Ganesan, 1994; Morgan and Hunt 1994) and in consumer/seller relationships in relational retail marketing (e.g., Johnson and Grayson, 2005; Kennedy, Ferrell and LeClair, 2001; Young and Albaum, 2003).

Trust in an economic transaction setting is often defined with the words “confidence”, “credibility”, “competence”, “benevolence”, “risk” and “willingness to rely on.” Crosby, Evans and Cowles (1990) define trust in a salesperson as “customer’s confident belief that the salesperson can be relied upon to behave in a manner that serves long-term customer interests.”

Morgan and Hunt (1994) conceptualize trust as confidence in an exchange partner's reliability and integrity which are associated with attributes including consistent, competent, honest, fair, responsible, helpful and benevolent. Doney and Cannon (1997) propose the perception of credibility and benevolence as the elements of trust. Moorman et al. (1992) and Ganesan (1994) bring "willingness to rely on" into the trust definition. Moorman and his colleagues (1992; 1993) define trust as a willingness to rely on an exchange partner in whom one has confidence. They emphasize that behavioral intention is a critical facet for trust to exist, because if one believes that a partner is trustworthy and yet is unwilling to rely on that partner, the trust is limited.

Even though trust has been frequently treated as a cognitive process, the affective dimension of trust has also been taken into account. Several researchers include "likeability or positive affect toward the party" as an affective component of trust (Andaleeb and Anwar, 1996; Doney and Cannon, 1994; Hawes, Mast and Swan, 1989; Swan et al., 1988). Likeability is generally defined as the extent to which a trusted party is friendly, pleasant, and likeable (Andaleeb and Anwar 1996). Others consider affective trust as an emotional security or confidence in the relationships (e.g., Johnson and Grayson, 2005; Swan et al., 1988; Young and Albaum, 2003). Swan et al. (1988) explicitly contends that trust consists of the emotion of a buyer feeling secure about relying on the salesperson and beliefs about the trustworthiness of a salesperson. Young and Albaum (2003) define trust as an evolving affective state including both emotional and cognitive elements that emerge from the perceptions of competence and a positive, caring motivation in the relationship partner.

The affective dimension of trust has been emphasized more in the context of consumer trust toward the salesperson or the corresponding firm. It has been considered that a consumer's

trust in a company or a salesperson has different characteristics from trust between firms due to power asymmetry between an individual consumer and the corresponding firm. Trust between firms can be labeled “calculative trust” mostly based on the previous performance and contractual safeguards (Ganesan, 1994; Williamson, 1993). However, transactions between a consumer and a firm often involve fewer contractual safeguards, and difficulties in getting enough knowledge on the corresponding firm makes a consumer more vulnerable. Thus, some “faithful confidence” is a necessary condition of consumer trust in the firm or in the sales representative (Williamson, 1993). Consumer confidence in the corresponding transaction partner results from the feelings generated by the level of care and concern the partner demonstrates (Johnson and Grayson, 2005), or a positive, caring motivation in the relationship partner (Ball, Coelho and Machas, 2004; Young and Albaum, 2003).

There is not agreement on whether trust in a business relationship is a unitary or multidimensional concept. Trust has been often treated as a unidimensional construct (e.g., Anderson and Weitz, 1989; Gefen et al., 2003; Guenzi, 2002; Kennedy et al., 2001; Moorman et al., 1992; 1993; Morgan and Hunt 1994; Zaheer et al., 1998), using a limited number of items (e.g., Anderson and Narus, 1990). Doney and Cannon (1997) suggest that even though trust can be conceptualized by two distinct concepts in business relationships (i.e., credibility and benevolence), the concepts may be so intertwined that in practice they are operationally inseparable. On the contrary, Ganesan (1994) and Ganesan and Hess (1997) explicitly identify the major dimensions of trust as benevolence and credibility. Ganesan (1994) assessed the dual dimensionality of trust through confirmatory factor analysis and reported the acceptance of the two-dimensionality model of benevolence and credibility. Swan et al. (1988), and Young and Albaum (2003) stress that trust consists of a cognitive dimension and an affective dimension.

Cummings and Bromiley (1996) developed the Organizational Trust Inventory to measure trust in business relationships, with a multidimensional definition of trust: keeping commitments, negotiating honestly and avoiding taking excessive advantage. More recently, McKnight, Choudhury and Kacmar (2002) developed a trust measure for e-commerce. They conceptualized trust in Web vendors as trusting beliefs and trusting intentions. Johnson and Grayson (2005) suggest a hierarchical multidimensionality for trust: cognitive-affective-behavioral trust.

### **Trust-Related Constructs and Its Measurement in Advertising**

Trust has rarely been investigated in the context of advertising. Although a few published studies have measured trust, (e.g., trust in product information sources, Boush, Kim, Kahle and Batra, 1993), or trust in online pharmaceutical information (Menon, Deshpande, Perri, and Zinkhan, 2002), it is hard to find thoughtful discussions of conceptualizations and measurements of the construct in advertising research. Trust has occasionally been treated as the same as “accuracy” (Menon, Deshpande, Perri, and Zinkhan, 2002), and measured with a non-diagnostic single measure (e.g., trust absolutely-don’t trust at all, Boush et al., 1993).

Instead of trust, credibility, a related concept, has been the focus of much attention in advertising research. With recognition of the influence of credibility on effective advertising, many researchers have attempted to conceptualize and measure the construct in a variety of contexts: source credibility, advertising credibility, and ad content credibility.

### **Source credibility**

Credibility of the source of product information has been an important concern among advertisers and advertising researchers. Source credibility in advertising research has been studied in two categories: endorser credibility and advertiser credibility.

Research on endorser credibility heavily depends on the source credibility model originally developed by Hovland and his colleagues. Hovland, Janis and Kelly (1953) identify expertise and trustworthiness as two dimensions of source credibility. Expertise is defined as the extent to which a communicator is perceived to be a source of valid assertions (Hovland et al., 1953) and the ability to provide accurate information coming from the knowledge, experience, training or skills a source possesses (Erdogan, 1999). Trustworthiness refers to the consumer's confidence or belief in the communicator for carrying messages in an unbiased and honest manner (Hovland et al., 1953; Ohanian, 1990). Ohanian (1990) adds to source credibility the source attractiveness dimension, which is defined as affection for the source as a result of the source's physical appearance and behavior (Erdogan, 1999; Ohanian, 1990). Endorser credibility is often measured by the semantic differential items, for instance: "experienced-unexperienced", "knowledgeable-unknowledgeable", and "qualified-unqualified" for expertise; "honest-dishonest", "dependable-undependable", and "trustworthy-untrustworthy" for trustworthiness; and "attractive-unattractive", "beautiful-ugly", and "plain-elegant" for attractiveness (Lafferty and Goldsmith, 1999; Ohanian, 1990).

Other research has examined advertiser credibility, where the advertiser who manufactured the advertised product is seen as a source of the communication (e.g., Hammond, 1987; Lafferty and Goldsmith, 1999; MacKenzie and Lutz, 1989; Newell and Goldsmith, 2001). Similar to endorser credibility, advertiser credibility is considered composed of expertise and trustworthiness. Expertise is understood as the extent to which consumers feel that the firm has the knowledge or ability to fulfill its claims and trustworthiness as whether the firm can be trusted to tell the truth or not (Newell and Goldsmith, 2001). Vanden Bergh, Soley and Reid (1981) include attractiveness and likeability in the elements of a credible advertiser, along with



trustworthy, prestigious, competent, competitive, and familiar. Haley (1996) interviewed general consumers about organizational sponsorship of advocacy advertising and reported that consumers perceive the credibility of an advertiser in terms of trustworthiness, expertise and attractiveness.

### **Advertising credibility**

MacKenzie and Lutz (1989:51) define advertising credibility as “consumer’s perceptions of the truthfulness and believability of advertising in general, not simply the particular ad in question.” They measured this construct with three items: convincing-unconvincing, believable-unbelievable, and biased-unbiased. Their conceptualization and measurement of advertising credibility suggest that the construct refers to consumer’s generalized beliefs in the integrity of advertising claims.

Rare have been attempts to measure advertising credibility with diagnostic, multi-item scales or to treat this construct as separate and distinct. In most cases, advertising credibility has been measured with a non-diagnostic single item (e.g., Calfee and Ringold, 1994) or with subscales of a measurement for attitude-toward -advertising-in-general (e.g., Alwitt and Prabhaker, 1994; Bauer and Greyser, 1968; Ducoffe, 1996; Muehling, 1987; Pollay and Mittal, 1993; Reid and Soley, 1982; Sandage and Leckenby, 1980; Shavitt, Lowrey and Haefner, 1998; Wolin, Korgaonkar and Lund, 2002; Yang, 2003). The frequent items measuring advertising credibility include: most advertising is believable, ads usually present a true picture, and ads are reliable sources of information.

More recently, Obermiller and Spangenberg (1998) approached the construct of advertising credibility from an opposite direction, which they called “advertising skepticism.”

They define skepticism toward advertising in general as “the tendency toward disbelief of advertising claims” (p. 60) and developed a 9-item Likert format scale to measure consumer skepticism toward advertising. Even though the authors did not explicitly mention the relationship between advertising skepticism and advertising credibility, the conceptual similarity to advertising credibility (i.e., belief or disbelief of advertising claims) and the similar items to the measures of advertising credibility (e.g., advertising is generally truthful, advertising is truth well told) suggest that advertising skepticism is not an unique construct from advertising credibility but the same construct which views advertising credibility from another way.

### **Ad content credibility**

Ad content credibility has been considered a key attribute of effective advertising because consumers will not act in the desired manner unless they accept or believe ad claims.

MacKenzie and Lutz (1989: 51) define ad content credibility as “the extent to which the consumer perceives claims made about the brand in the ad to be truthful and believable.”

Beltramini and Evans (1985) developed a scale to measure believability of advertised product performance claims. Ten adjective bi-polar pairs without any assumption of dimensionality comprised their believability scale: believable, trustworthy, convincing, credible, reasonable, honest, unquestionable, conclusive, authentic, likely. O’Cass (2002) utilized this scale to measure political advertising believability in Australian context. However, believability of ad claims has still been often measured by single item such as believable vs. unbelievable (e.g., Haan and Berkey, 2002).

### **Conclusions from the Literature on Trust**

From the previous theoretical and operational definitions of trust, several conclusions can be drawn about the nature of trust (for the summary of the prior conceptualizations of trust, see Appendix B).

First, trust is a positive expectation. It can be a generalized expectation on the reliability of other individuals or groups (Rotter, 1967); a set of social expectations shared by actors in relationships that social rules and institutional arrangements work properly (Barber, 1983; Lewis and Weigert 1985b; Shapiro, 1987; Zucker, 1986); and expectations on the specific other that the trustee will act to generate a desirable outcome to one another (Gambetta, 1988; Insko et al., 2005; Rempel et al., 1985). Trust refers to positive expectations with regard to an event whose occurrence is not detrimental to the individual (Deutsch, 1958). Thus, trust is strongly linked to overall optimism about desirable events taking place (Golembiewski and McConkie, 1975).

Second, trust is associated with confidence. Researchers generally agree that trust results from the confidence in the party's trustworthiness (e.g., McAllister, 1995; Moorman et al., 1993; Morgan and Hunt, 1994) and in the strength and security of the trusting relationship (Rempel et al., 1985; Swan et al., 1988). Firm beliefs about the party's trustworthiness and confidence in the relationship are formed based on past experiences with the trustee (Hosmer, 1995).

Third, trust is inseparable from vulnerability. Literature indicates that trust only exists with vulnerability and uncertainty. When one can have complete information and can control his or her partner's action, there is no reason to trust the partner (Deutsch, 1958; Hall, Dugan, Zheng and Mishra, 2001). In that case, one "predicts" the other's future behaviors based on simple economic rationality rather than "trusts" the individual (Lewis and Weigert, 1985a). As Deutsch (1958) points out, "to trust" implies that when trust is not fulfilled, the trusting individual will

suffer an unpleasant consequence. Based on this notion, trust is an intention to accept vulnerability based upon positive expectations of the intentions or behavior of another in a risky situation (Rousseau, Sitkin, Burt and Camerer 1998).

Fourth, trust is composed of cognitive, affective, and conative elements. Although discussion on the components of trust is heavily concentrated on the cognitive beliefs about the trustworthy partner, considerable literature has shown that affective process and the behavioral intention of trust, along with cognitive beliefs, must be present for trust to exist (Johnson and Grayson, 2005; Lewis and Weigert, 1985a). Cognitive trust without an emotional base is not different from a rational prediction; emotional trust without a cognitive content is simple faith. Beliefs on the trustworthiness of the partner without being willing to rely on that partner indicate limited trust.

Fifth, the comparative strength and importance of the cognitive versus the emotional base of trust vary depending on the type of social relationship (Lewis and Weigert, 1985a). The emotional content of trust is typically high in long-established primary-group relationships (Johnson-George and Swap, 1982; Rempel, Homes and Zanna, 1985), and the cognitive base of trust is more extensive and continuing in the formation of trust relationships in secondary groups (e.g., business relationships, social systems). Considering consumer trust in advertising is trust in a social institution which is similar to a trust relationship in a secondary group, it can be implied that trust in advertising is based more on cognitive elements than affective and emotional elements.

Sixth, trust has rarely been examined in advertising contexts. However, research on source credibility suggests that credibility has three dimensions: expertise, trustworthiness and

attractiveness, which might be parallel to the competence, integrity and likeability dimensions of trust (for the summary of the trust-related measures in advertising, see Appendix A).

In the next chapter, trust in advertising is conceptualized and discussed. The discussion is followed by the study's research questions and hypotheses.

## **CHAPTER 3**

### **CONCEPTUALIZATION, RESEARCH QUESTIONS AND HYPOTHESES**

#### **Conceptualizing Trust in Advertising**

##### **Preliminary definition of trust in advertising**

Guided by prior literature, trust in advertising is preliminarily conceptualized as “a consumer’s confidence that advertising is a reliable source of product/service information and one’s willingness to act on the basis of information conveyed by advertising.” This definition is consistent with the prior trust conceptualization that trust consists of cognitive, emotional, and behavioral dimensions (e.g., Barber, 1983; Lewis and Weigert, 1985a; Luhmann, 1979; Mishra, 1996). It also is inclusive of the seven components of trust that have been most frequently identified in past research. Following are discussions of the three-part dimensional nature of trust in advertising and the seven components.

##### **Three-part dimensional nature of trust in advertising**

The definition of trust encompasses not only people’s beliefs about objects, but also their willingness to use knowledge as the basis for action (Luhman, 1979). As documented in the trust literature, numerous researchers have conceptualized trust as a composition of a trusting belief and a trusting behavioral intention (e.g., Lewis and Weigert, 1985a; Luhman, 1979; McAllister, 1995; McKnight et al., 1998; Moorman et al., 1993). In agreement with the prior conceptualizations, the current study proposes that trust in advertising is composed of beliefs

about advertising's trustworthiness and willingness to act on the information conveyed in advertising.

It should be pointed out that trust in advertising as conceived here incorporates behavioral intent (i.e., a willingness to rely on advertising) rather than an actual behavior (i.e., relying on advertising). Many scholars have suggested that trusting behaviors (e.g., cooperation or reliance) without confidence in others' trustworthiness may result from situational factors (e.g., power or control) rather than actual trust in others (Lewis and Weigert, 1985a; Moorman et al., 1992; Pearce, 1974). In the case of advertising, lack of an alternative source of product information might force consumers to rely on the information provided by advertising. With limited alternative information sources (e.g., such as *Consumer Reports*, friends who have used the product before, or a new feature on the product), a consumer might have no choice but to use and accept information from advertising, even though he or she does not have confidence in the trustworthiness of the ad-supplied information. Thus, the willingness to act on advertising would be a more appropriate indicator of trust in advertising than actual trusting behavior. Trust in others is in part responsible for trusting behavior.

The proposed definition of trust in advertising takes into account confidence, an emotional element of trust. It has been well documented that trust is composed of cognition and emotion dimensions (Johnson-George and Swap, 1982; Johnson and Grayson, 2005; Lewis and Weigert, 1985a; Rempel et al., 1985; Swan et al., 1988; Young and Albaum, 2003). The cognition dimension involves an individual's evaluation of the trustworthy attributes of the trusted object such as reliability, benevolence or honesty. The emotional base involves an individual's feeling to judge the trusted object, e.g., emotional security or confidence: Do I feel confident that advertising is reliable? Confidence in the party results from the firm belief that the

party is reliable and has high integrity (Altman and Taylor, 1973; Larzelere and Huston, 1980; Morgan and Hunt, 1994; Rotter, 1971). Thus, it is proposed that trust in advertising includes consumer beliefs about the reliability of advertising and that this confidence results from those beliefs.

### **Components of trust in advertising**

Various components of trust have been proposed and identified by previous studies. Among those identified, seven components have most frequently appeared and seem relevant to trust in advertising: integrity, reliability, benevolence, competence, confidence, likeability, and willingness to rely on. The seven were used in the identification stage of this research as literature-defined pool-items and are presented below relative to the study's preliminary conceptualization of trust in advertising.

A dictionary defines *integrity* as "adherence to moral and ethical principles" (*Random House Webster's Unabridged Dictionary*, 1998, p.990). Scholars have measured *integrity* as a perception of the party's moral character, basic honesty, truthfulness, and sincerity (e.g., Butler and Cantrell, 1984; Larzelere and Huston, 1980; McKnight et al., 2002). Consistent with prior conceptualizations, the present study defines *integrity* as a consumer's perception of honesty, truthfulness and the morality of advertising.

*Reliability* refers to a consumer's belief that advertising keeps its promise. *Reliability* has been measured using the labels of reliability, dependability, credibility and consistency (e.g., Butler and Cantrell, 1984; Johnson-George and Swap, 1982; McKnight et al., 2002; Rempel et al., 1985). If a consumer perceives advertising as reliable, one believes that advertising is



sincere about the claims it made for the advertised product or service and that the claims are usually fulfilled.

*Benevolence* pertains to a consumer's belief that advertising concerns consumers' interests, and that advertising is guided or motivated by favorable and positive intentions toward the consumer welfare, not by the advertiser's interests only (e.g., Andaleeb, 1992). *Benevolence* includes a consumer's perception of an advertiser's favorable motives and that the source is not acting opportunistically or manipulatively to make a profit. Thus, those who believe in the benevolence of advertising are more likely to think that advertising tries to benefit consumers not only to make a profit for advertisers.

The dictionary defines *competence* as "having suitable or sufficient skill, knowledge, experience or ability to do something" or "good enough or suitable for something" (*Random House Webster's Unabridged Dictionary*, 1998, p.417). *Competence* refers to groups of skills, expertise, and characteristics required for doing the job successfully. From a consumer's point of view, the primary function of advertising is to provide consumers with product or service related information. Hence, in terms of advertising, *competence* can be defined as advertising's usefulness as a good source of product information.

The first four beliefs (*integrity*, *reliability*, *benevolence*, and *competence*) together comprise a cognition base of trust (e.g., McKnight et al., 2002). *Integrity*, *reliability* and *benevolence* all reflect ethical traits. However, *benevolence* relates to the party's altruistic motives and is based on good will (Mayer et al., 1995), whereas *integrity* and *reliability* refer to adhering to a promise and not lying, which may be held for utilitarian, rather than altruistic reasons (McKinight et al., 2002).

*Confidence* and *likeability* have been considered as emotional bases of trust. *Confidence* has been often measured as emotional security or faith (e.g., Chaudhuri and Holbrook, 2002; Johnson-George and Swap, 1982; Lewis and Weigert, 1985b; McAllister, 1995; Moorman et al., 1992; Rempel et al., 1985; Young and Albaum, 2003). In terms of advertising, *confidence* can be defined as a consumer's feeling that relying on advertising is safe. *Likeability* has not appeared as much as other elements, but the literature suggests that feelings of trust are related to liking (e.g., Swan et al., 1988). *Likeability* has been considered to include attractiveness, feeling of liking, enjoyability, and positive affection (e.g., Ganesan, 1994; Haley, 1996; Ohanian, 1990; Young and Albaum, 2003). *Likeability* of advertising is not hypothesized to include friendship or love, which have been previously studied as an emotional base of trust, because in the context of trust in advertising, those emotions are arguably irrelevant to an economic transactional activity like advertising.

*Willingness to Rely On* is considered a behavioral component of trust. As discussed above, trust involves a willingness to take a risk by relying on the trustee's words or actions. In the context of advertising, risk includes undesirable outcomes of relying on advertising for making purchase decisions: financial loss due to the purchase of unsatisfactory products or services, or social-emotional loss resulting from a peer-group's negative judgments to selection or use of the wrong brand. Thus, *willingness to rely on* advertising can be specified as willingness to take a potential loss by using information conveyed in advertising.

### **Trust, credibility, and attitude toward advertising: different constructs**

This research postulates that trust in advertising is conceptually distinct from *advertising credibility*. Advertising credibility has often been defined as consumers' perceptions of the

truthfulness and the believability of advertising in general (MacKenzie and Lutz, 1989; Obermiller and Spangenberg, 1998). The items frequently used to measure advertising credibility include: advertising is generally truthful, ads usually present a true picture, and most advertising provides consumers with essential information. Such conceptualizations and measurements mostly focus on advertising's integrity, but do not typically deal with benevolent intents of advertising. Moreover, rare is the consideration of a consumer's feeling toward or a willingness to rely on advertising as an input of the decision making process. Broadly speaking, advertising credibility deals with only a part of trust in advertising; thus, advertising credibility may be a necessary condition for trust in advertising, but is not sufficient to argue that one trusts advertising.

*Attitude toward advertising in general* is another construct closely related to trust in advertising. It can be conceptually argued that trust in advertising may be a basis for some aspect of attitude toward advertising, but there are many dimensions other than trust on which an individual evaluates advertising. Indeed, measurements of a consumer's attitude toward advertising in general include items capturing content unrelated to trust in advertising as well as items reflecting trust in advertising (e.g., Alwitt and Prabhaker, 1994; Bauer and Greyser, 1968; Ducoffe, 1996; Muehling, 1987; Pollay and Mittal, 1993; Reid and Soley, 1982; Sandage and Leckenby, 1980; Shavitt et al., 1998; Wolin et al., 2002; Yang, 2003). For example, Pollay and Mittal (1993) developed a set of comprehensive measures of attitude toward advertising, including a consumer's beliefs about advertising's social and economic role (e.g., advertising results in lower prices; advertising promotes undesirable values), which are not considered to be relevant to measuring trust in advertising.

On the other hand, the measurements of attitude toward advertising are not able to cover the entire scope of trust in advertising. As discussed before, trust in advertising is composed of cognition, affect, and behavioral intent whereas the current measurements of attitude toward advertising principally focus on the cognitive beliefs about advertising. Thus, although some facets of trust in advertising might overlap with attitude toward advertising in general, it is arguable that the two constructs are distinct and separate constructs (see Figure 2-1 for the relationship among trust in advertising, advertising credibility, and attitude toward advertising).

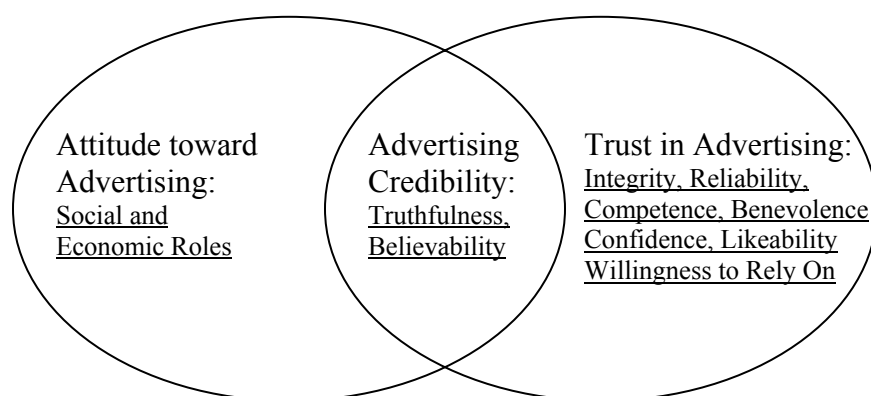


Figure 2-1. Relationships among Trust in Advertising, Attitude toward Advertising, and Advertising Credibility

### **Definition summarized**

For the development of a valid and reliable measurement of trust in advertising, the construct has been defined conceptually and operationally. The preliminary definition reflects the idea that trust is a multidimensional construct involving cognitive, affective and behavioral dimensions. It was further proposed that seven trust components are reflected in the preliminary definition (i.e., *integrity, reliability, benevolence, competence, confidence, likeability* and *willingness to rely on*), and that trust in advertising is conceptually different from two similar

constructs, advertising credibility and attitude-toward-advertising. Following are the research questions and hypotheses addressed in the study.

### **Research Questions and Hypotheses**

As previously noted, five research questions and five hypotheses were posed to examine the proposed conceptualization of trust in advertising and the convergent, discriminant, and nomological validity of the construct. Following are the research questions and hypotheses.

#### **Trust: Empirical determination**

Although the above conceptualization and operationalization were logically driven from prior empirical studies on trust, past advertising research provides limited empirical support for the proposed definition of trust in advertising, including its structure and components. Thus, a multi-part research question was asked and addressed to empirically determine the validity of the hypothesized definition of trust in advertising, its dimensional nature, and its underlying components:

*RQ 1. a. What is trust in advertising? b. Is trust in advertising a unidimensional construct or multi-dimensional construct? c. If it is multi-dimensional, what are components of trust in advertising?*

#### **Construct validation**

One way to assess the validity of a measurement instrument is to check if the measurement is concurrent to some other criterion. Concurrent validity can be obtained by assessing the measurement instrument's ability to distinguish between groups that it should be

able to distinguish between. This research employed a single non-diagnostic item measuring consumer trust in advertising as a criterion to validate the developed scale, which is referred to throughout as the ADTRUST scale. If the ADTRUST scale can distinguish the group that exhibited high trust in advertising on the single item and the group that exhibited low trust in advertising on the single item, it can be said that the ADTRUST scale has concurrent validity. Thus, the following research question was addressed:

*RQ 2. Is the developed measurement of trust in advertising able to distinguish the groups who indicated different levels of trust in advertising on a non-diagnostic single measure of trust in advertising?*

Examining construct validity is the essential part of developing a valid measurement instrument. Construct validity refers to the correspondence between a construct which is at an unobservable and conceptual level, and a purported measure of it which is at an operational level (Peter, 1981). Construct validity can be demonstrated by showing the measurement is related to other concepts derived from theoretical frameworks (Wimmer and Dominick, 2000).

A useful distinction for further exploration of construct validity is between trait and nomological validity (Campbell, 1960; Peter, 1981). Drawing on Campbell (1960)'s work, Peter (1981) partitions construct validity into trait validity and nomological validity. Trait validity is investigated by considering that the construct is different from other constructs which are delineated, by a theory, different from the construct of interest (Peter 1981). Convergent validity and discriminant validity are examples of trait validity. Nomological validity refers to the degree to which a measure of a construct is useful for making observable predictions derived from theoretical propositions. To determine if the measurement of trust in advertising satisfies

construct validity, convergent, discriminant and nomological validity of the measurement were examined in this research.

Convergent validity is based on the correlation between responses obtained by maximally different methods of measuring the same construct (Campbell and Fiske, 1959). Campbell and Fiske (1959) argue that convergent validity can be obtained when the entries in the validity diagonal of a Multitrait-Multimethod (MTMM) matrix are significantly different from zero and sufficiently large. To examine the convergent validity of the proposed measurement of trust in advertising, the following research question is addressed:

*RQ 3. Is the developed measurement of trust in advertising significantly and sufficiently correlated with other measurements of trust in advertising?*

Discriminant validity can be obtained by demonstrating that a measure does not correlate very highly with another measure from which it should differ (Campbell, 1960). In the prior section, it was argued that trust in advertising is related to, but conceptually distinct from attitude toward advertising and advertising credibility. To claim discriminant validity of the measurement of trust in advertising, the measurement should demonstrate a significant difference from the measurements of attitude toward advertising and advertising credibility. Thus, the question is asked:

*RQ 4. Is the developed measurement of trust in advertising significantly different from the measurements of attitude toward advertising and advertising credibility?*

Nomological validity refers to the fact that hypothesized constructs such as trust in advertising should be related to other constructs in hypothesized ways derived from the theory in which the construct is embedded. These relationships should form the nomological net for that particular set of constructs (Churchill, 1979; DeVillis, 1991; Peter, 1981). Based on past

research, five relationships were tested between trust in advertising and other theoretically variables.

MacKenzie and Lutz (1989) suggest that perception of the credibility of advertising as an institution (i.e., advertising credibility) influences perception of the credibility of individual advertisements (i.e., ad credibility), which further influences attitude toward the ad. Obermiller and Spangenberg (1998) claim that consumer skepticism toward advertising in general is negatively correlated with attitude toward the ad (e.g., perceived believability, likeability and usefulness of the ads). Thus, it is hypothesized that:

*Hypothesis 1. Consumer trust in advertising in general will be significantly and positively correlated with trust in ads.*

*Hypothesis 2. Consumer trust in advertising in general will be significantly and positively correlated with attitude toward ads.*

Research on ad avoidance has shown that attitude toward advertising in general is correlated with exposure to advertisements. Specifically, research on TV commercials has found that zipping or zapping TV commercials occurs merely on the basis of the knowledge that commercials are ads (e.g., Abernethy, 1991; Cronin and Menelly, 1992; Mord and Gilson, 1985). This finding implies that consumers respond more to advertising in general than to specific advertisements, and that a consumer's attitude toward advertising in general can have an influence on ad avoidance behavior.

Other empirical evidence suggests that trust-related beliefs are more closely related to ad avoidance. James and Kover (1992) claim that those who have positive perceptions of the trustworthiness and usefulness of advertising tend to spend more time looking at advertisements.



Lee and Lumpkin (1992) state that ad avoidance is negatively related to one's belief in the informational value of advertisements. Based on these prior findings, it is hypothesized that:

*Hypothesis 3. Consumer trust in advertising in general will be significantly and negatively correlated with ad avoidance.*

The positive relationship between beliefs and behaviors has been commonly assumed in *Theory of Reasoned Action*-based consumer studies (Sheppard, Hartwick, and Warshaw, 1998). Prior research has confirmed a strong correlation among beliefs, behavioral intentions and actual behaviors (e.g., Sheppard et al., 1998). Extending this reasoning to the construct of trust, several trust studies theorize that trust and trusting behaviors are closely related in a positive way (Mayer et al., 1995; McKinght et al., 2002). Grayson and Ambler (1999) investigated the factors affecting advertisers' use of marketing services provided by their advertising agencies. The study found that advertisers' trust in their advertising agencies was a significant predictor of the use of marketing services (i.e., trusting behavior) provided by the advertising agencies.

In the context of advertising, trusting behavior is considered a consumer's use of information conveyed in advertising when making purchase decisions. Obermiller and Spangenberg (1998) provide evidence that consumers with high advertising skepticism use less advertising information than consumers with low advertising skepticism. Based on these prior findings, it is hypothesized:

*Hypothesis 4. Consumer trust in advertising in general will be significantly and positively correlated with use of information conveyed in advertising on making purchase decisions.*

Advertising involvement is often defined as a person's perceived relevance of advertising based on inherent needs, values, and interests (Zaichkowsky, 1985; 1994). Zaichkowsky (1986)

identified personal perceptions of the object as one of antecedents of involvement. She argued that whether one is involved with the object is affected by a person's inherent value system along with unique experiences with a particular object, i.e., personal perception on the object.

Extending this notion to advertising, it can be argued that perception of advertising, such as trust in advertising, can have an influence on advertising involvement. Thus, the following relationship is hypothesized:

*Hypothesis 5. Consumer trust in advertising in general will be significantly and positively correlated with advertising involvement.*

Research comparing attitudes toward advertising across different media generally indicates that consumers have different attitudes toward advertising depending on the advertising medium. For instance, print ads are perceived as more enjoyable and informative than broadcast ads; television and radio commercials are rated more offensive and annoying than print ads (Haller, 1974; Sumasundaran and Light, 1991). The differences in attitudes toward advertising across media suggest that there might be differences in consumer trust in advertising by specific advertising media. Thus, if the developed measure could validly assess consumer trust in advertising across different media, the developed measure would enlarge its scope from a measure of trust in advertising in general to a measure of trust in advertising for specific media.

Thus the study asked:

*RQ 5. a. Can the developed measurement of trust in advertising in general validly measure trust in specific advertising media? b. Does trust in advertising vary across different media? c. In which medium, advertising is most trusted?*

If trust in advertising varies across different media, factors affecting such differences are also of interest. Of the possible factors, media credibility is examined herein as a variable which

may affect trust in advertising. Research has shown that audience credibility perceptions vary by medium, and that the more credible the particular medium, the more it is relied on as a primary information source (e.g., Gaziano and McGrath, 1986; Johnson and Kaye, 1998). Flanagin and Metzger (2000) suggest that overall media credibility affects the credibility of information delivered by specific media. Based on these findings, the study asked:

*RQ 6. Are consumer perceptions of a medium's credibility associated with trust in advertising for that medium?*

To investigate the research questions and hypotheses, a multi-stage of research was designed. Chapter 4 will describe the exact details of the research methods that were used in each stage.

## CHAPTER 4

### RESEARCH METHODS

#### **Overview**

To develop a measurement instrument to assess the construct of trust in advertising (i.e., ADTRUST scale), a multi-stage research design was employed. The design was modeled after Churchill (1979), and encompassed his recommended eight steps for developing valid measures of marketing constructs:

1. Specify domain of construct.
2. Generate a sample of items from literature reviews, surveys, and insight.
3. Collect initial data.
4. Purify the measure by assessing reliability and dimensionality.
5. Collect new data.
6. Reassess reliability.
7. Assess construct validity.
8. Develop norms.

Figure 4-1 diagrams the research design of this study. As shown, Churchill's eight steps were expanded to ten, and the research was executed in three stages: (1) the identification stage, (2) the reliability stage, and (3) the validation stage. In the identification stage, the domain of the construct was specified through review of the trust research literature (Step 1). Next, an initial pool of items, hypothesized as indicators of trust in advertising, was formulated through reviewing prior literature, dictionary and thesauri, and interviews with consumers (Step 2). In

Step 3, the content validity of the items was evaluated by advertising experts, and the initial items were developed and identified for the reliability stage of the research.

In the reliability stage, a student survey was conducted and the data were split in half (Step 4). The first half of the data was analyzed using exploratory factor analysis to explore structures of the construct and to identify appropriate items for construct measurement. Internal consistency coefficients were measured to determine the reliability of the identified factors (Step 5). Then, the second half of the data set was analyzed using confirmatory factor analysis to verify and validate the structure of the measurement items proposed in the first data set (Step 6).

In the validation stage, a new data set was collected by a survey of non-student adults (Step 7). These data were analyzed using confirmatory factor analysis to reassess the reliability and dimensionality of the scales (Step 8). Concurrent validity of the scales was examined by testing if the ADTRUST scale is able to discriminate between the groups who indicated different levels of trust in advertising on another scale of trust in advertising. To test convergent and discriminant validity, the relationships among trust in advertising, attitude toward advertising in general, and advertising credibility were investigated through a Multitrait Multimethod matrix (MTMM), confirmatory factor analysis and exploratory factor analysis. Finally, nomological validity was examined by testing the hypothesized relationships between trust in advertising and other constructs which it should relate to.

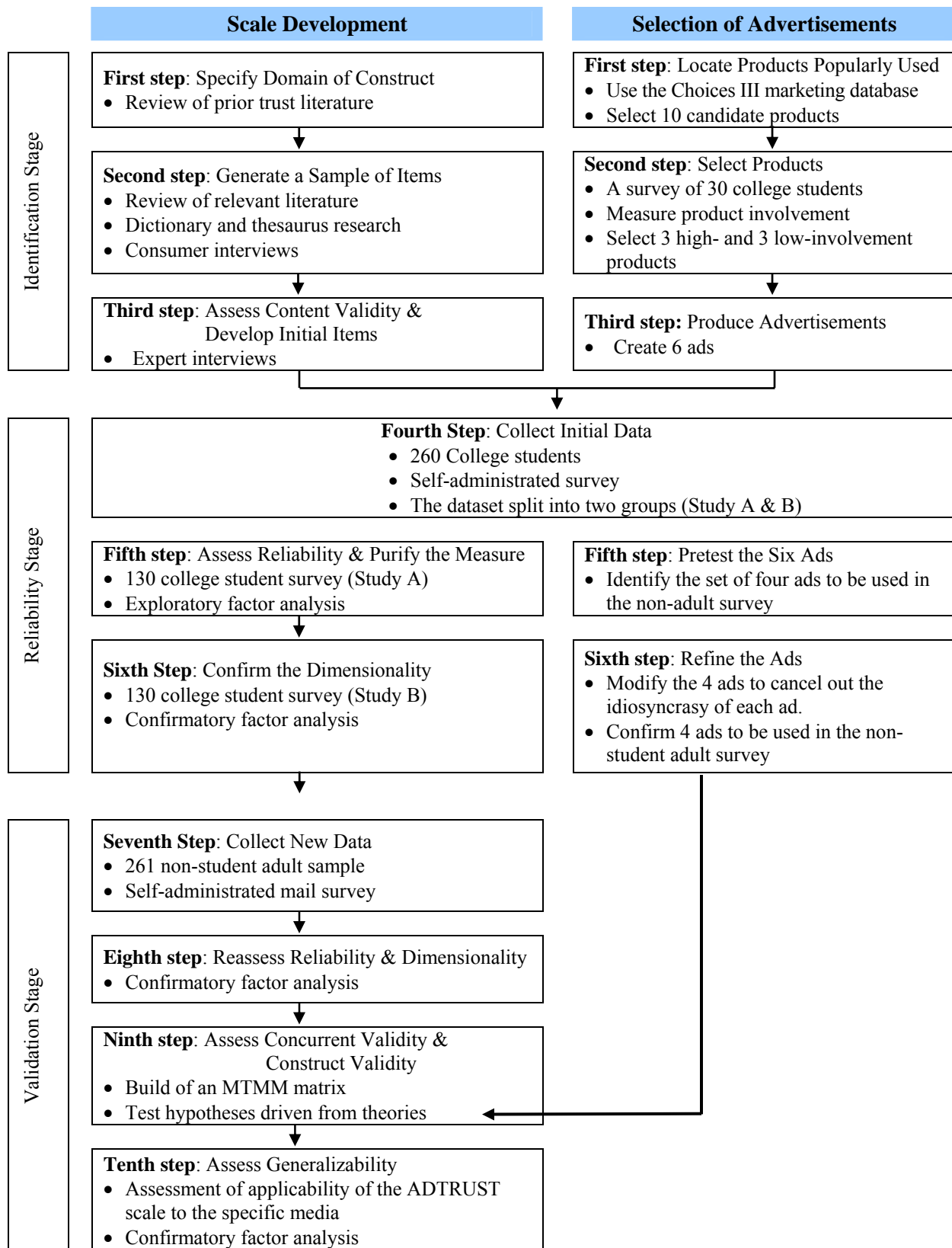


Figure 4-1 Research Framework

Step 10 was undertaken to test the generalizability of the developed ADTRUST scale by examining if the measurement validly assesses trust in advertising in the context of different media. To examine measurement generalizability, data on the modified ADTRUST scale from the non-student adults were factor analyzed for each medium: TV advertising, newspaper advertising, radio advertising, magazine advertising, and Internet advertising (Step 10).

Two out of five hypotheses tested in the ninth step were addressed to examine the relationships between consumer trust in advertising and consumer response to a series of advertisements. As shown in Figure 4-1, the six steps in the identification and reliability stages of the research were executed to select advertisements for hypotheses testing. First, the Choices III marketing database (Choices III, 2005) was reviewed to locate products relevant to most American adults. Then, a student survey was conducted to identify three high- and three low-involvement product categories. Next, advertisements for six fictitious brands were developed for the selected product categories. The advertisements were included in the student survey questionnaire (i.e., the fourth step of scale developments) and the questionnaire pre-tested for ad creative quality, brand familiarity, ad familiarity, and product involvement (Step 5). From the process, a set of four advertisements was identified and selected. The selected advertisements were further refined to cancel out the idiosyncrasies of each ad, and the developed ad-set included in the adult questionnaire (non-student) to test hypotheses pertaining to the relationships between consumer trust in advertising and consumer response to the four developed ads (Step 6).

## **Identification Stage: Qualitative Study (Steps 1, 2, and 3)**

### **Step 1. Construct domain**

Guided by prior literature, trust in advertising is preliminarily defined as a two-part construct: (1) consumer confidence that advertising is a reliable source of product/service information and (2) willingness to act on the basis of information conveyed by advertising. Here, national consumer advertising is the research focus, not individual advertisements or specific type of media advertising (e.g., TV advertising or newspaper advertising).

Advertising varies in terms of its functions and purposes: national advertising vs. local advertising, or consumer advertising vs. business advertising (Lane, King, and Russell, 2004). The present study acknowledges the variations in advertising, but focuses on national consumer advertising as the object of measurement to place an evaluative parameter on the study's respondents. Here, national consumer advertising is defined as advertising for brands or services that are distributed in most or all regions of the U. S. The coverage of advertising need not be national, it may be regional. National consumer advertising is normally associated with general brand information whereas local retail advertising often includes price, return policies, store locations, and hours of operation (Lane et al., 2004).

The definition of trust in advertising in the present study is limited to trust in the product- or service-related information conveyed in advertising. Advertising communicates not only messages about products or services, but also social/cultural messages such as social norms, judgments, and values. Advertising reflects existing life patterns (e.g., Brown, 1981; Peterson, 1975), adopts popular beliefs (Holbrook, 1987; Pittatore, 1983), and presents a picture of the way we would like to see ourselves (Belk & Pollay, 1985). Consequently, consumers may exhibit trust not only in featured product-relevant information, but also the social norms and values



presented in advertising. Here, the term “information” in the study’s preliminary definition of trust in advertising refers to the information relevant to advertised products or services.

## Step 2. Generate a sample of items

### Review of relevant literature

As noted earlier, it is hypothesized that trust in advertising consists of seven elements: *integrity, reliability, benevolence, competence, likeability, confidence, and willingness to rely on*. Dictionaries, thesauri, and the relevant literature in the areas of psychology, sociology, interpersonal communication, management, marketing, and advertising were reviewed to identify words and phrases associated with the elements of trust.

The process resulted in 412 items. The 412 items were reduced to an initial list of 43 adjectives that had been frequently utilized in past research or were judged to describe each trust element. Table 4-1 presents the 43 words categorized by association with the hypothesized elements.

Table 4-1. Initial Items Developed from Literature

Hypothesized Element	Items				
Integrity	Honest Objective	Truthful Ethical	Credible Factual	Believable	
Reliability	Reliable	Dependable	Responsible		
Competence	Informative Expert	Accurate Valuable	Effective Useful	Complete Utilitarian	Educational
Benevolence	Altruistic Kind	Consumer-oriented Helpful		Benevolent	
Confidence	Confident	Safe	Risky		
Likeability	Positive Friendly	Enjoyable Respectful	Likeable Good		
Willingness to rely on	Stimulating Actionable	Encouraging Precipitating	Motivating Reinforcing	Engaging Persuasive	Moving Influential

### Consumer interviews: explore more sample items

To further explore word-associated items of trust, in-depth interviews were conducted with a convenience sample of 20 consumers. The interviewing protocol included a card sorting task.

Each respondent was first asked two questions: (a) whether he/she trusted advertising in general and why or why not; and (b) to define trust in advertising in his/her own words. The first question attempted to explore the elements affecting consumer trust in advertising; the second question aimed to identify the definition of the construct from the consumer perspective.

Next, the respondents were asked write as many words or phrases associated with trust in advertising as they could on blank index cards. Each respondent was then instructed to combine self-identified words with the 43 words identified from the literature review, and to sort the cards into two groups: (1) one group was labeled relevant to trust in advertising and (2) the other group was labeled irrelevant to trust in advertising.

Next, the respondents were asked again to sort the words relevant to trust in advertising into like-groups (i.e., words that have the same associated meaning). The respondents were instructed to make as many or as few groups as they deemed necessary as long as the words or phrases were associated with each other and related to trust in advertising. After sorting the cards, the participant was asked to describe each card-group.

Based on these interviews, the list of initial items was modified. First, four additional items were added: respondents identified “clear”, “timely”, “unbiased”, and “misleading” as relevant to trust in advertising (misleading was associated with trust in advertising in a negative way). Second, items which were unfamiliar or had mixed interpretations to the respondents were dropped. For example, some of the respondents needed assistance to understand what

“altruistic” and “utilitarian” meant. Some of them positively associated “stimulating” with trust in advertising; others negatively associated “stimulating” with the trust construct. As a result, the original list was reduced to a list of 42 adjectives, and used in the study’s next step: expert examination of the content validity of each item. Table 4-2 presents the retained 42 items categorized by association with the hypothesized elements.

Table 4-2. Items Developed from Consumer Interviews

Hypothesized Element	Items				
Integrity	Honest	Truthful	Credible	Believable	
	Objective	Ethical	Factual	<u>Misleading *</u>	<u>Unbiased</u>
Reliability	Reliable	Dependable	Responsible		
Competence	Informative	Accurate	Effective	Complete	Educational
	Expert	Valuable	Useful	<u>Clear</u>	<u>Timely</u>
Benevolence	Kind	Consumer-oriented		Benevolent	Helpful
Confidence	Confident	Safe	Risky		
Likeability	Positive	Enjoyable	Likeable		
	Friendly	Respectful	Good		
Willingness to rely on	Encouraging	Motivating	Engaging	Moving	
	Actionable	Reinforcing	Influential		

\* Underlined items were added based on the consumer interviews

### Step 3. Assess content validity and develop initial items: Expert interviews

A panel of six advertising experts, composed of three advertising professors and three advertising practitioners, was interviewed to further assess the content validity of the identified items. First, the validity of both the hypothesized definition and the elements of trust in advertising were examined. The experts were asked: (a) to define trust in advertising in general and (b) to identify components of trust in advertising. Next, they were asked to evaluate the study’s hypothesized definition and the hypothesized elements of trust in advertising.

All agreed that the proposed definition reflected the construct of trust in advertising, and that the seven elements were legitimate components of the trust-in-advertising construct. No additional elements of trust in advertising were suggested by the advertising experts.

Next, the open-card sorting technique described in Step 2 was performed by the experts to further refine the content validity of the trust construct: (1) index cards were completed; (2) self-produced and literature-identified cards were combined and sorted into relevant/irrelevant to trust categories; and (3) word-relevant to trust in advertising cards were sorted into like-groupings.

An item was retained if a majority of the experts evaluated it as an appropriate measure of trust in advertising (i.e., with 50 percent or more agreement) and if the interpretation of the item was consistent across the expert panel. The process reduced the list to a set of 33 words.

The 33-word list was used to develop 33 Likert format statements. The Likert format was selected because it was the most frequently used scale format in past research on trust<sup>1</sup> and is more easily understood by consumers than the bi-polar adjective format (Flynn, 1993). To insure that identified adjective were accurately reflected, the statements used the exact adjectives in describing advertising with no modification. For instance, “honest” was used in the statement: “Information conveyed in national advertising is honest.”

Comments from the consumer and expert interviewees suggested that items describing behavioral intention (e.g., motivating, encouraging, engaging, and moving) need to specify the actions or behaviors individuals are willing to engage in when they see trust in advertising. Thus, items with specific behaviors were developed from the interviews (e.g., “I am willing to consider the ad-conveyed information when making purchase related decision”, “I am willing to

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<sup>1</sup> Among the past trust-related research reviewed, 39 studies employed the Likert format scales whereas 17 studies utilized bi-polar semantic differential format scales.

recommend the product or service that I have seen in ads to my friends or family”) to reflect the behavioral component of the preliminary definition of trust in advertising.

Following is the developed set of the 33 Likert-format statements (Table 4-3). In the fourth step of the study, a questionnaire with the 33 statements was administered to a student sample to test the reliability and dimensionality of the measurement.

Table 4-3. Initial Items from Expert Interviews

Hypothesized Element	Items
Integrity	<u>Information conveyed in national advertising is...</u> Honest          Truthful          Credible          Believable Ethical          Factual          Misleading          Unbiased
Reliability	<u>Information conveyed in national advertising is...</u> Reliable          Dependable          Responsible
Competence	<u>Information conveyed in national advertising is...</u> Informative          Accurate          Complete Valuable          Useful          Clear          Timely
Benevolence	<u>Information conveyed in national advertising is...</u> Benevolent          Consumer-oriented          Benefits consumers Helps people make the best decisions
Confidence	I have confidence in ad-conveyed information. It is safe to trust ad-conveyed information.
Likeability	<u>Information conveyed in national advertising is...</u> Positive          Enjoyable          Likeable          Good
Willingness to rely on	<u>I am willing to...</u> Rely on ad-conveyed information when making purchase related decisions. Make important purchase related decisions based on ad-conveyed information. Consider the ad-conveyed information when making purchase related decision. Search for more information on the product or service that I have seen in ads, if I am interested in. Recommend the product or service that I have seen in ads to my friends or family.

## **Selection of sample advertisements**

Concurrent with the item development phase of the research, another series of studies was conducted to generate test advertisements. The studies were conducted for use in a non-student adult survey to test the construct validity of the developed scale. As described later, the adult survey was executed in the Validation Stage of the research.

### Choices III marketing database

Obermiller and Sangenberg (1998) suggest that products in test ads should have at least some relevance for study participants. Following their suggestion, the Choices III Simmons marketing database of media and markets (Choices III, 2005) was used to identify products and services that are relevant to most Americans.

Twenty-eight products and services were identified as being purchased or used by more than 50 percent of Americans, aged 18 or older. Of those 28, ten products and services were considered gender neutrality; five of the ten were defined as high-involvement product categories; the other five were defined as belonging in low-involvement product categories. To test the high/low involvement categorization, the following study was conducted.

### Student survey: High/Low involvement categorization

A survey of students was conducted to establish the product involvement of the ten products and services. Thirty undergraduates participated in the survey and were asked: (a) about their usage and purchase of the ten products/services (i.e., current use, frequency of use, and purchase behavior) and (b) required to rate the 10 products/services on five 7-point semantic differential scales measuring product involvement: relevant/irrelevant, important/unimportant, means nothing/means a lot to me, boring/interesting, little to lose if I choose the wrong brand/a

lot to lose if I choose the wrong brand. The measures were modified from Zaichkowsky (1985) and Vaughn (1986).

Table 4-4. Selection of Product Category Based on Product Involvement (n=30)

Product	Current or Frequent User (%)	Purchase (%)	Mean Involvement Score	Select
Toothbrushes	97	97	23.2	Low Involvement
Mobile phones	93	83	27.9	High Involvement
Mobile Phone services	90	76	28.3	High Involvement
Auto insurance	87	62	27.4	High Involvement
Athletic Shoes	84	97	25.4	Not Selected
Mouthwash	67	83	18.7	Low Involvement
Breakfast Cereal	63	90	20.0	Low Involvement
Credit Card	60	48	23.3	Not Selected
Bottled water	57	86	19.7	Not Selected
Vegetable Juice	20	62	15.0	Not Selected

Table 4-5. Mean Differences between High- and Low-Involvement Product Categories (n=30)  
(Student Survey: Second Step of Selection of Advertisements)

Product	Mean Differences		Sig.
Mobile Phone services	Toothbrushes	5.17	p≤.001
	Mouthwash	9.63	p≤.001
	Breakfast Cereal	8.37	p≤.001
Mobile phones	Toothbrushes	4.70	p≤.01
	Mouthwash	9.17	p≤.001
	Breakfast Cereal	7.90	p≤.001
Auto Insurance	Toothbrushes	4.23	p≤.001
	Mouthwash	8.70	p≤.001
	Breakfast Cereal	7.43	p≤.001

Two criteria were used to select the product categories for *the validation stage*: (1) relevance to the participants and (2) the level of involvement (see Table 4-4). Products or services used and purchased by over 60 percent of the respondents were considered to have a

high level of relevancy to the participants. As a result, *auto insurance*, *athletic shoes*, *toothbrushes*, *breakfast cereal*, *mobile phones*, *mobile phone services*, and *mouthwash* were selected as the product categories.

To determine high- versus low-involvement products, the overall involvement score distribution was used (Zaichkowsky 1985). A median involvement score (26.0) was selected as the break point for the involvement-groups. This procedure resulted in the following involvement scores: auto insurance (27.4), mobile phones (27.9), and mobile phone services (28.3) were identified as high-involvement product categories; toothbrushes (23.2), breakfast cereal (20.0), and mouthwash (18.7) as low-involvement product categories; and athletic shoes (25.4) as medium-involvement product categories. All of the high-involvement products had significantly higher involvement scores than the low-involvement products (see Table 4-5). As a result, the six high/low involvement products and services were chosen as the to-be-advertised-objects.

#### Development of test advertisements

One of the major concerns for research validity is the number of ads used to measure consumer response. Prior advertising studies which measured consumer response have used a varying number of test ads: from 13 ads (Obermiller and Spangenberg, 1998) to two ads (Derbaix and Pecheux, 2003). Studies investigating the general response to political ads have included anywhere from six to ten test ads (e.g., Banwant and Bystrom, 2005; Tedesco, 2002). Based on the median number of ads used in prior studies, six advertisements, were chosen as an appropriate number of ads to measure the response tendencies of the study's participants.

To achieve a greater level of exposure-realism, real ads for the selected product categories were selected from British consumer magazines. British ads were selected to



eliminate respondent ad/brand familiarity. Advertisements for global brands were excluded because global brands may run the same advertisements across different local market areas (e.g., the U.S. and the U.K.),

Six advertisements for the six local British brands were located, and the ads were modified from British English to American English and the actual brand names were replaced with fictitious brand names. As a result, six one-page, black-and-white, print advertisements were created for six fictitious brands of products and services.

### **Reliability Stage: Student Survey (Steps 4, 5 and 6)**

To examine the reliability and dimensionality of the identified 33 trust items, initial data were collected through a student survey (Step 4). The data were split in half (Study A & Study B). The first half of the data was analyzed using an exploratory factor analysis to explore structures of the construct and to identify appropriate items to measure the construct (Step 5). Then, the second half of the data set was analyzed using confirmatory factor analysis to verify and validate the structure of the measurement items proposed from the first data set (Step 6). The exact details of the statistical procedure and the results of the exploratory factor analysis and the confirmatory factor analysis are reported in Chapter 5.

Additionally, the student survey was conducted to achieve two other goals: (1) to determine whether the six developed ads could be used to examine consumer response and (2) to determine if the number of ads (i.e., 6) could be reduced without negatively affecting the validity of the research. To accomplish the goals, the six ads were evaluated on the following response dimensions: consumer trust in the developed ads, consumer attitude toward the developed ads, brand and ad familiarity of the developed ads, and consumer product involvement in the

developed ads. The scores of the ads were compared to one another in effort to select a reduced number of advertisements. The procedure and results of ad selection process are presented later after the following description of the procedural details of the student survey.

### Student respondents

A total of 265 college students, enrolled in the same journalism class, participated in the survey. 260 usable instruments were completed.

Table 4-6 presents the characteristics of the student sample. The sample consisted of 74 males (28.5%) and 186 females (71.5%). Their ages ranged from 18 to 33 years with a median age of 20 years old. The sample was split into two groups by random selection: 130 respondents for the exploratory factor analysis and 130 respondents for confirmatory factor analysis. These two groups were not significantly different by gender or age.

Table 4-6. Characteristics of Student Survey Respondents

		Total (n=260)	Study A (n=130)	Study B (n=130)
Gender (%)	Male	28.5	29.2	27.7
	Female	71.5	70.8	72.3
Age	Range	18~33	19~33	18~25
	Median	20	20	20

### Questionnaire

Appendix D presents the questionnaire used in the student survey. The questionnaire included: (a) the 33 trust in advertising items developed in the item identification stage of the research, (b) demographic-related questions, (c) the six developed advertisements, (d) questions measuring trust in the developed ads and attitude toward the developed ads, and (e) manipulation checks for brand and ad familiarity, and product involvement of the advertised brands.

Additional validation variables were also included and measured in the questionnaire: attitude toward advertising in general, advertising credibility, advertising involvement, use of advertising information, advertising avoidance, media credibility, and trust in different advertising media. The validation variable scores were not used to test the hypotheses in this phase; however, the scores were analyzed to pre-test reliability of the validation variable scales used later in the adult survey of the Validation Stage. Individual items of the validation measures are presented in the adult survey section of this chapter. Following are descriptions of the measured variables.

#### Trust in advertising

To measure consumer trust in advertising, each respondent was asked to indicate his or her level of agreement on the 33 seven-point Likert-format statements developed through the prior item identification phase of the research (1=strongly disagree, 7=strongly agree).

#### Trust in the ads and attitude toward the ads

Consumer trust in the ads was measured by the respondents' level of agreement with the statement (1=strongly disagree, 7=strongly agree): I trust the information conveyed in this ad. Attitude toward the ads was assessed by asking respondents to evaluate each of the six advertisements on five 7-point semantic differential scales: extremely believable/not at all believable, extremely useful/not at all useful, extremely irritating/not at all irritating, extremely enjoyable/not at all enjoyable, and extremely favorable/not at all favorable. Measures were taken from Mitchell and Olson (1981), MacKenzie et al. (1986), Muehling (1987), Burton and Lichtenstein (1988), and Olney et al. (1991).

To check if the number of ads could be reduced without negatively affecting valid ad-response, three different sets of advertisements were generated: all six ads (Set A); a set of

mouthwash, breakfast cereal, mobile phone, and auto insurance ads (Set B); and a set of toothbrush, breakfast cereal, mobile phone service, and auto insurance ads (Set C). Sets B and C each had two high- and two low-involvement products and services. To cancel out order effects, exposure sequence to the ads was rotated. Only one of the three ad-sets was included in each questionnaire for participant evaluation (e.g., trust in the ads and attitude toward the ads).

#### Manipulation checks

To assess brand and ad familiarity, the respondents were asked to indicate whether they had seen an ad before (Yes/No), and to rate how familiar they were with the advertised brand on a 7-point semantic differential scale (extremely familiar/not at all familiar).

The manipulation check for product involvement was executed by asking the respondents to rate each advertised product or service on five 7-point semantic differential scales: relevant/irrelevant; important/unimportant; means nothing/means a lot to me; boring/interesting; little to lose if I choose the wrong brand/a lot to lose if I choose the wrong brand. The product involvement measures were taken from Zaichkowsky (1985) and Vaughn (1986). The manipulation check results are reported in the later section, Selection of Ads: Confirmation of the Four Advertisements.

#### Demographic characteristics

Respondent gender, age, and major of study were collected. Respondents were asked to write down their age and major and to put a mark on the gender category indicating male or female.

## Procedures

The student survey was administered as an in-class research project. The subjects were told that they were participating in a study examining consumer perceptions of advertising. They were informed that their participation was entirely voluntarily and that they would get an extra course credit for participating in the study. After reading a consent statement and signing it, the students were given the survey material to complete. After the participants completed the survey, the materials were collected and the subjects were thanked for participating.

### Selection of ads: confirmation of the four advertisements

The manipulation check revealed that the respondents were unfamiliar with the ads and also with the fictitious brands. Almost all respondents answered that they had not seen the ads before, and more than 85 percent of respondents indicated that they were not familiar with the fictitious brands (Table 4-7).

Table 4-7. Manipulation Checks for Advertisements (Student Survey)

	Ad Unfamiliarity (%) <sup>a</sup>	Brand Unfamiliarity (%) <sup>b</sup>
Toothbrush (n=190)	98.4	84.6
Mouthwash (n=186)	100.0	93.8
Breakfast Cereal (n=251)	100.0	90.0
Mobile Phone Service (n=189)	100.0	91.8
Mobile Phone (n=188)	99.0	92.3
Auto Insurance (n=246)	100.0	96.5

<sup>a</sup> percent of respondents who answered not having seen the ad before

<sup>b</sup> percent of respondents who indicated 1 to 3 on a 7 point scale (1=not familiar at all, 7=absolutely familiar).

Table 4-8 presents the high/low involvement scores for the product categories. The high/low involvements ratings were statistically different at  $p \leq .05$  for the product categories, except for auto insurance and toothbrush.

Table 4-8. Mean Differences between High- and Low-Involvement Product Categories (Student Survey)

Product	Mean Differences	
Mobile Phone Service	Toothbrush	.92 ***
	Mouthwash	1.30 ***
	Breakfast Cereal	1.31 ***
Mobile Phone	Toothbrush	.93 ***
	Mouthwash	1.37 ***
	Breakfast Cereal	1.41 ***
Auto Insurance	Toothbrush	.15 n.s.
	Mouthwash	.54 ***
	Breakfast Cereal	.61 ***

\*\*\*  $p \leq .001$

Table 4-9 compares trust in the ads and attitude toward the ads across the three different sets of advertisements: the original set of six ads (Set A); a set of four ads comprised of ads for breakfast cereal, auto insurance, mobile phone services, and mouthwash (Set B); and a set of four ads including toothbrush, mobile phone, breakfast cereal, and auto insurance ads (Set C).

Table 4-9. Trust in and Attitudes toward the Ads

	Total (n)	Toothbrush (n)	Mobile Phone (n)	Breakfast Cereal (n)	Auto Insurance (n)	Mobile Phone Service (n)	Mouthwash (n)
<u>Trust in the ads</u>							
6 ads (A)	3.96 (168)	4.22 (127)	4.39 (124)	4.59 (124)	2.99 (122)	3.75 (127)	3.76 (123)
4 ads (B)	3.75 (60)	n/a	n/a	4.41 (63)	2.97 (61)	3.74 (62)	3.83 (63)
4 ads (C)	3.82 (60)	4.06 (63)	4.19 (64)	4.53 (64)	2.68 (63)	n/a	n/a
Total	3.87 (238)	4.17 (190)	4.32 (188)	4.53 (251)	2.91 (246)	3.75 (189)	3.78 (186)
<u>Attitude toward the ads</u>							
6 ads (A)	3.85 (129) <sup>a</sup>	4.18 (129)	4.43 (129)	4.21 (129)	2.99 (129)	3.74 (129)	3.57 (129)
4 ads (B)	3.45 (65) <sup>ab</sup>	n/a	n/a	4.01 (65)	2.85 (65)	3.50 (65)	3.44 (65)
4 ads (C)	3.80 (66) <sup>b</sup>	4.18 (66)	4.37 (66)	4.01 (66)	2.72 (66)	n/a	n/a
Total	3.74 (260)	4.18 (195)	4.41 (195)	4.09 (260)	2.89 (260)	3.66 (194)	3.53 (194)

<sup>a, b</sup> the pairs significantly different at the level of  $p \leq .01$

First, the influence of number of exposed ads (i.e., exposure context) on individual ad evaluations was tested. The results for the individual ads show that the respondents' trust in and attitude toward the ads were not significantly different across the different number in the ad exposure contexts. For example, trust in the mobile phone ad was 4.39 in the six ads exposure context (Set A), and 4.19 in the four ad exposure context (Set C). The difference was not statistically significant at  $p \leq .05$ . Moreover, attitude toward the mobile phone ad was 4.43 in Set A and 4.37 in Set C, was not significantly different ( $p \leq .05$ ). Likewise, the scores of trust in and attitude towards the other five ads were not significantly different across Sets A, B, and C.

Second, the average ad-trust and attitude toward the ad scores for each set were compared. The average ad-trust scores of Sets B and C were not significantly different from the average score of Set A (3.75, 3.82, and 3.96, respectively). With respect to the attitude toward the ads, Set C (3.80) was evaluated as favorable as Set A (3.85), whereas the score of Set B (3.45) was significantly less than both Set A and C ( $p \leq .01$ ). Based on these results, it was judged that Set C could work as well as Set A in examining consumer responses to ads.

To further investigate the substitutability of Set C for Set A (set of six ads), the ad-trust scores and attitude toward the ad for individual ads were compared to the average scores for the six ads. Consumer trust in the auto insurance ad was significantly less than the total average score of trust in the six ads (auto insurance 2.91, total mean 3.87, mean difference = -.96,  $p \leq .01$ ), and attitude toward the auto insurance ad was less favorable than the average score of attitude toward the six ads (auto insurance 2.89, total mean 3.74, mean difference = -.85,  $p \leq .01$ ). These results suggest that the auto insurance ad may not have an equal level of creative quality compared to the other ads, which can affect respondents' ad evaluation. Taking the finding into

consideration, the auto insurance ad was replaced with the mobile phone service ad, a product from one of the high-involvement categories.

The procedure resulted in a set of four advertisements for use in the Validation Stage of the research: toothbrushes, breakfast cereal, mobile phones, and mobile phone services. Toothbrushes and breakfast cereal were chosen to represent low-involvement product categories; mobile phones and mobile phone services were selected to represent the high-involvement product category.

#### Production of advertisements

The four selected advertisements were modified to control for creative quality. Specifically, the ads were adjusted to create consistent format: a visual image in the 70 percent upper portion of each ad and verbal copy messages in the 30 percent lower portion. The type font was limited to Arial Unicode, and letter sizes used were 9 or 10 in body copy (headline copy, brand logo, and tag line copy were larger). All of the ads were one-page, black-and-white, same-size, magazine advertisements.

#### **Validation Stage: Non-Student Adult Survey (Steps 7, 8, 9, and 10)**

To reassess the reliability of the ADTRUST scale developed by the student survey (Step 4) of the Reliability Stage, a non-student, adult survey was conducted to accomplish the following: to examine the concurrent validity of the ADTRUST scale; to test the convergent and discriminant validity of the scale; to determine the nomological validity of the scale by testing hypotheses driven by theory (Step 9); and to assess the generalizability of the scale to specific advertising media (Step 10).



## **Respondents**

A sample of 600 non-student, adults was randomly drawn from University of Georgia (UGA) staff members. In past research, college staff members have been used to develop scales because they are general consumers that are easily accessed by academic researchers (e.g., Zaichkowsky 1985). The UGA community is composed of more than 6,700 non-faculty employees: 3,559 administrative or professional personnel and 3,323 for technical, clerical, crafts, or maintenance personnel (University of Georgia, 2006). The UGA staff is distributed across the cities of Athens, Tifton, Griffin, Eatonton, and Atlanta, allowing data collection from a variety of regions in Georgia.

The list from which the sample of 600 was drawn was obtained from the Office of Institutional Research (OIR) at UGA. The list of all UGA staff members' addresses was first entered into an SPSS program. Then, a sample of 600 staff members was randomly selected using the random selection technique provided in SPSS 13.0. Sample characteristics are presented at the end of this chapter.

## **Questionnaire**

The questionnaire administered to the adult sample contained 225 questions to measure the following variables: (a) trust in advertising; (b) attitude toward advertising in general; (c) advertising credibility; (d) advertising involvement; (e) ad avoidance; (f) use of advertising information; (g) trust in TV, radio, newspaper, magazine, and Internet advertising; (h) perceived credibility of mass media; (i) trust in the developed ads ; (j) attitude toward the developed ads; and (k) demographic characteristics of the adult respondents.

As mentioned earlier, a definition of national advertising was provided in the instructions to frame the subject for the respondents. The instructions emphasized that national consumer advertising referred herein to an institution of advertising, not to individual advertisements. Following are descriptions of the specific variables and measures of the adult sample questionnaire.

Trust in advertising ( $A_{TRUST}$ )

To measure consumer trust in advertising, each respondent was asked to indicate his or her level of agreement with 21 seven-point ad-trust statements developed through exploratory and confirmatory factor analysis of the student survey data (the ADTRUST scale). The 21 statements were formatted as Likert scales.

For the purpose of developing a Multitrait-Multimethod (MTMM) matrix, the ad-trust construct was measured using bi-polar semantic differential scales. The semantic differential scales were generated to be parallel to the Likert-formatted ADTRUST scales. For example, a Likert item that asked each respondent to rate “information conveyed in national advertising is honest” on a 7 point-scale was transformed to a bi-polar semantic differential item: “considering national consumer advertising, ad-conveyed information is extremely honest/not at all honest” where 7 represents “extremely honest” and 1 represents “not at all honest.”

To test the concurrent validity of the developed ADTRUST scale, the trust in advertising construct was assessed with a non-diagnostic single item. Respondents were asked to indicate how much he or she trusted the information conveyed in advertising on a seven point-scale with anchors of “not trust at all/absolutely trust.”

### Attitude toward advertising in general ( $A_G$ )

Attitude toward advertising in general was measured by two different scale-types for use in the MTMM matrix: Likert format scales and semantic differential scales. The two measurement instruments were adopted from past scales that have been widely cited by advertising researchers (Bauer and Greyser, 1968; Sandage and Leckenby, 1980). Table 4-10 presents the items used to measure attitude toward advertising in general.

The  $A_G$  scale, adopted from Bauer and Greyser (1968), consisted of seven Likert format statements pertaining to advertising's social and economic functions. Respondents were instructed to rate each of the seven statements by placing a check mark in one of seven spaces, where 1 meant "strongly disagree" and 7 meant "strongly agree."

Table 4-10. Measurement Items for Attitude toward Advertising in General

Likert Format (Bauer and Greyser, 1968)	Semantic Differential Format (Sandage and Leckenby, 1980)
<ul style="list-style-type: none"> <li>• Advertising is essential</li> <li>• Most advertising insults the intelligence of the average person</li> <li>• In general, advertising results in lower prices</li> <li>• Advertising often persuades people to buy things they shouldn't buy</li> <li>• In general, advertisements present a true picture of the product being advertised</li> <li>• Advertising helps raise out standard of living</li> <li>• Advertising results in better products for the public</li> </ul>	<p>Overall, advertising is...</p> <ul style="list-style-type: none"> <li>• Good-Bad</li> <li>• Strong-Weak</li> <li>• Valuable-Worthless</li> <li>• Necessary-Unnecessary</li> <li>• Clean-Dirty</li> <li>• Honest-Dishonest</li> <li>• Sincere-Insincere</li> <li>• Safe-Dangerous</li> </ul>

The  $A_G$  scale, adopted from Sandage and Leckenby (1980), consisted of eight seven-point semantic differential scales: four pairs of adjectives focused on attitude toward advertising as an institution, the other four pairs focused on attitude toward advertising as instruments of the institution. Respondents were asked to indicate their attitude toward advertising by marking the eight seven-point semantic differential scales.

### Advertising credibility ( $A_{\text{CRED}}$ )

Advertising credibility was measured by two scale sets for entry in the MTMM matrix: Likert format scales and semantic differential format scales. Respondents were asked to answer a set of nine seven-point Likert format statements adopted from Obermiller and Spangenberg (1998) and a set of 10 seven-point semantic differential scales adapted from Beltramini and Evans (1985). Table 4-11 presents the items used to measure advertising credibility.

Obermiller and Spangenberg's (1998) *Advertising Skepticism Scale* was originally developed to measure advertising skepticism. However, their definition of advertising skepticism (i.e., "consumers' general tendency to regard ad claims as more or less believable") suggests that advertising skepticism is not unique and different from advertising credibility. Advertising credibility has been defined as "consumers' perceptions of the truthfulness and believability of advertising in general" (MacKenzie and Lutz, 1989), indicating that the measure of advertising skepticism is applicable to measuring advertising credibility. Beltramini and Evans's (1985) *Advertising Claim Believability Scale* measures "consumers' perceived believability of product performance claims." The scale, like the advertising skepticism scale, is applicable to measuring advertising credibility as it contains similar descriptors.

Table 4-11. Measurement Items for Advertising Credibility

Likert Format (Obermiller and Spangenberg 1998)	Semantic Differential Format (Beltramini and Evans 1985)
<ul style="list-style-type: none"> <li>• We can depend on getting the truth in most advertising</li> <li>• Advertising's aim is to inform the consumer</li> <li>• Advertising is informative</li> <li>• Advertising is a reliable source of information about the quality and performance of products</li> <li>• Advertising is truth well told</li> <li>• I've been accurately informed after viewing most advertisements</li> <li>• Most advertising provides consumers with essential information</li> <li>• In general, advertisements present a trust picture of the product being advertised.</li> </ul>	<ul style="list-style-type: none"> <li>• Believable-unbelievable</li> <li>• Trustworthy-untrustworthy</li> <li>• Convincing-not convincing</li> <li>• Credible-not credible</li> <li>• Reasonable-unreasonable</li> <li>• Unquestionable-questionable</li> <li>• Conclusive-inconclusive</li> <li>• Authentic-not authentic</li> <li>• Honest-dishonest</li> <li>• Likely-unlikely</li> </ul>

To further assure applicability of the advertising skepticism and advertising believability scales for measuring advertising credibility, 10 graduate students familiar with the credibility literature evaluated the face validity of the two measurements. All of the participants agreed that the *Advertising Skepticism Scale* and *Advertising Claim Believability Scale* were suitable measures of advertising credibility.

#### Ad avoidance

Ad Avoidance was measured by asking each respondent to complete five seven point-scales with the anchors “never/always”: how often they “switch TV channels,” “switch radio channels,” “flip past ad pages in a magazine,” “skip ads in the newspaper,” and “avoid ads on the web by using blocking pop-ads, scrolling down, and closing pop-up windows.” The measures were taken from Speck and Elliot (1997), Obermiller and Spangenberg (1998), and Cho and Cheon (2004).

#### Use of advertising information

Use of advertising information was measured by having each respondent complete two seven-point scales with anchors of “never/always”: (a) rely on information from ads to make purchase related decisions and (b) use information from ads for important purchase decisions. The measures were taken from Obermiller and Spangenberg (1998) and Shavitt et al. (1998).

#### Advertising involvement

Advertising involvement was measured by scales adopted from Zaichkowsky’s (1994) *Advertising Involvement Scale*. The respondents were asked to rate their involvement with national advertising on 10 seven-point bi-polar semantic differential scales: important-unimportant; boring-interesting; relevant-irrelevant; exciting-unexciting; means nothing-means a lot to me; appealing-unappealing; fascinating-mundane; worthless-valuable; involving-

uninvolving; not needed-needed. The answers for negative items (e.g., important-unimportant, relevant-irrelevant) were reverse coded.

#### Trust in advertising in a specific medium

To measure consumer trust in advertising in specific media, the developed ADTRUST scale was modified for TV, radio, newspaper, magazine, and the Internet. Statements were adjusted for each specific medium in the following manner: “information conveyed in national advertising is...” in the original ADTRUST scale was transformed to “information conveyed in national newspaper advertising is...”, or “information conveyed in national TV advertising is...”.

Participants were asked to answer the questions pertaining to two media only to avoid respondent fatigue. The order and combination in which the media pairs were presented in the questionnaires were counterbalanced to control for order and combination effects. Participants were instructed to evaluate a medium only if he or she had used it in the past six months.

#### Media credibility

Respondents were also asked to rate the perceived credibility of the information conveyed by five different mass media (i.e., the media credibility of TV, radio, newspaper, magazine, and the Internet). Information delivered by each medium was evaluated with four bipolar semantic differential scales: extremely believable/not at all believable, extremely accurate/not at all accurate, extremely fair/not at all fair, and extremely in-depth/not at all in-depth (e.g. Bucy, 2003; Flanagin and Metzger, 2000; Johnson and Kaye, 1998; Kioussis, 2001). Each respondent was asked to indicate if he or she had used each medium in the past six months before answering the questions to document response validity.

### Trust in the developed ads

As Obermiller and Spangenberg (1998) pointed out, a measure of a global characteristic (e.g., trust in advertising as an institution) should not be expected to predict with accuracy the response to every specific object (e.g., an individual ad) because a variety of other variables (e.g., message strategy, visual images, product type, or advertiser credibility) may have an influence on the relationship between trust in advertising in general and trust in a specific ad. The general beliefs, however, should be able to predict tendencies (Obermiller and Spangenberg, 1998).

Thus, the set of four different ads was presented to each respondent to measure his or her general tendency to trust ads. The exposure sequence to the ad-set was rotated to cancel out order effects. Respondents were instructed to look at and read each ad and then to rate their trust in ad-conveyed information by each ad by indicating on a single seven-point Likert scale: "I trust the information conveyed in this ad". The same question was repeated for the four ads. The question was presented on a page immediately following each ad page and the respondents were instructed not to go back to the preceding ad.

### Attitude toward the developed ads

Attitude toward the ads was measured by asking respondent to evaluate each of the four developed ads. This assessment of attitude toward the ad employed five seven-point semantic differential scales: extremely believable/not at all believable, extremely useful/not at all useful, extremely irritating/not at all irritating, extremely enjoyable/not at all enjoyable, and extremely favorable/not at all favorable. Measures were taken from Mitchell and Olson (1981), MacKenzie et al. (1986), Muehling (1987), Burton and Lichtenstein (1988), and Olney et al. (1991).

The questions measuring attitude toward the ads were presented on a separate page immediately following the page containing the ad and respondents were instructed not to turn the page back to the ad.

#### Manipulation check

As explained earlier, the four advertisements featured two high-involvement and two low-involvement fictitious brands. To ensure successful manipulation, the respondents were asked about brand familiarity and product involvement. Familiarity was measured by asking the respondents if they had seen each individual ad before, and to rate how familiar they were with the advertised brand on a seven-point semantic differential scale (extremely familiar/not at all familiar). Product involvement was measured by asking the respondents to rate each advertised product/service on five seven-point semantic differential scales: relevant/irrelevant; important/unimportant; means nothing/means a lot to me; boring/interesting; little to lose if I choose the wrong brand/a lot to lose if I choose the wrong brand. The measures for product involvement were taken from Zaichkowsky (1985) and Vaughn (1986).

The manipulation check revealed that the respondents were unfamiliar with the ads and also with the fictitious brands. Almost all respondents answered that they had not seen the ads before, and more than 90 percent of respondents indicated that they were not familiar with the fictitious brands (Table 4-12).

Table 4-12. Manipulation Checks for Advertisements (Non-Student Adult Survey)

	Ad Unfamiliarity (%) <sup>a</sup>	Brand Unfamiliarity (%) <sup>b</sup>
Toothbrush (n=253)	97.6	91.4
Breakfast Cereal (n=251)	99.2	93.4
Mobile Phone Service (n=252)	99.6	92.6
Mobile Phone (n=252)	99.6	92.2

<sup>a</sup> percent of respondents who answered not having seen the ad before

<sup>b</sup> percent of respondents who indicated 1 to 3 on a 7 point scale (1=not familiar at all, 7=absolutely familiar).



Table 4-13. Mean Differences between High- and Low-Involvement Product Categories (Non-Student Adult Survey)

High-Involvement Product	Low-Involvement Product	Mean Differences
Mobile Phone Service	Toothbrush	.45 ***
	Breakfast Cereal	.61 ***
Mobile Phone	Toothbrush	.21 *
	Breakfast Cereal	.42 ***

\*  $p \leq .05$  \*\*\*  $p \leq .001$

Table 4-13 presents the high/low involvement scores for the product categories. The high/low involvements ratings were statistically different at  $p \leq .05$  for the product categories.

#### Demographic characteristics

The last section of the questionnaire administered to the adult sample included questions about respondent age, gender, level of education, household income, and race. Age was collected by having the respondents write the year they were born in a provided space. Gender, education, race, and household income were collected through closed-in questions with pre-selected attributes for each variable.

The questionnaire ended by thanking the respondents for completing the task and instructing them to return the completed survey to the researcher for a cash incentive.

#### **Questionnaire pretest**

The 260 students, recruited for the student survey in the reliability phase, were asked to complete the initial version of the questionnaire. The participants were instructed to provide comments or suggestions about problematic instructions, questions and measures. No major problems were uncovered by the pretest; however, some minor word changes were made.

**Data collection procedure**

The final questionnaire was administrated in two mailing waves and three reminder emails. In the first wave, a survey packet was mailed to the 600 UGA staff members via the campus mail system. Each survey packet included a cover letter with instructions, questionnaire, and a return envelope. A cover letter contained the information that the respondent would be mailed a \$3 check when they completed and returned the questionnaire to the researcher. About two weeks after the first mailing, the first reminder was sent to non-respondents through the UGA e-mail system. Four weeks after the first mailing, a second wave of questionnaires was mailed to non-respondents. Two weeks later, the second reminder was e-mailed to encourage non-respondents to participate. The final e-mail was sent about two weeks later. Returns were accepted by two weeks following the final reminder. “Thank you” notes and the promised \$3 checks were mailed to the respondents upon the arrival of the completed questionnaires.

**Return rates**

The two mailing waves and the three reminders generated 261 returns: 259 usable and 3 incomplete questionnaires. The first mailing yielded 172 completed questionnaires. Fourteen completed questionnaires were returned after the first reminder email. The second mailing produced 50 complete questionnaires and the second reminder e-mail generated 11. The final reminder email yielded 12. Twenty survey packets were returned due to undeliverable addresses and 15 were returned from respondents who refused to participate.

The gross return rate of the survey was 43.5 percent. The adjusted return rate was 45 percent, excluding the 20 undeliverable returns from the 600 original mailings.

## Sample characteristics

Table 4-12 presents the demographic characteristics of the adult respondents and of the population from which the sample was drawn (i.e., UGA staff members). The population profile was obtained from the Office of Institutional Research (OIR) at UGA. Chi-square tests were conducted to examine differences between gender, age, and race of the survey respondents and of the population. Information on education and income of the population was not available. Thus, the two characteristics were excluded from the sample/population comparisons.

Table 4-12. Characteristics of Non-Student Adult Survey Respondents

		Respondents		Population		Z-score	X <sup>2</sup>
		N	%	n	%		
Gender	Male	81	32.1	2382	40.4	-2.58*	7.136**
	Female	171	67.9	3508	59.6	2.58*	
	Total	252	100.0	5890	100.0		
Age	Under 25	38	15.3	1008	17.1	-0.55	6.963
	30 – 39	62	24.9	1330	22.6	0.71	
	40 – 49	59	23.7	1683	28.5	-1.48	
	50 – 59	67	26.9	1507	25.6	0.40	
	60 over	23	9.2	362	6.2	0.93	
	Total	249	100.0	5890	100.0		
Race	White	211	83.7	4575	77.7	1.86	41.172***
	Black	21	8.3	1069	18.1	-3.05*	
	Asian	5	2.0	102	1.6	0.12	
	Hispanic/Latino	5	2.0	93	1.7	0.09	
	Other/ Mixed	10	4.0	51	0.9	0.96	
	Total	252	100.0	5890	100.0		
Education	Less than high school	2	.8	n.a.	n.a.	n.a.	n.a.
	High school graduate	27	10.7				
	Some college	73	29.0				
	Bachelor's degree	81	32.1				
	Graduate degree	69	27.4				
	Total	252	100.0				
Income	75,000 more	70	28.8	n.a.	n.a.	n.a.	n.a.
	55,000 – 74,999	47	19.3				
	35,000 – 54,999	57	23.5				
	15,000 – 34,999	65	26.7				
	Less than 14,999	4	1.6				
	Total	243	100.0				

\*  $p \leq .05$  \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$

The survey respondents were similar to the population in terms of age. Though people in their thirties and sixties or above are overrepresented in the sample relative to the population, the proportion of age groups was not significantly different across the two groups ( $X^2=6.963$ ,  $df=4$ ).

The survey respondents were significantly different from the population by gender and race. Thirty-two percent of the respondents were male and 68 percent were female; 40 percent of the population was male and 60 percent was female. The differences of the proportions were statistically significant at the .05 level of significance ( $X^2=7.136$ ,  $df=1$ ).

There was also a significant difference between the two groups on race ( $X^2=41.172$ ,  $df=4$ ). Whites were overrepresented in the survey; 84 percent of the survey respondents were white whereas 78 percent of the population was white (z-score=1.86). Blacks were underrepresented in the survey compared to the population; 18 percent of the population was black but only eight percent of the respondents were black (z-score=3.05).

As shown in the table, the respondents were well-educated and their household incomes varied, but with similar proportions. Fifty-nine percent of the respondents have completed a college or graduate degree, and 29 percent have some college education.

## **CHAPTER 5**

### **RESEARCH RESULTS**

Chapter 3 presented the six research questions and five hypotheses posed to examine the study's conceptualization of trust in advertising and the concurrent, convergent, discriminant, and nomological validity of the developed measure of the ad-trust construct (i.e., ADTRUST scale). In this chapter, the results of the research are presented in correspondence with the research questions and hypotheses.

#### **Results of Reliability Stage: The Student Survey**

As discussed in Chapter 4, literature reviews and in-depth interviews identified seven trust components with 33 initial items of the ad-trust construct (the initial ADTRUST scale). To empirically verify the hypothesized definition of trust in advertising, its dimensional nature, and its underlying components, the following research question was asked:

- RQ1. a. What is trust in advertising? b. Is trust in advertising a unidimensional construct or multi-dimensional construct? c. If it is multi-dimensional, what are components of trust in advertising?

As previously described, an exploratory factor analysis and a confirmatory factor analysis of the 33 items were conducted using the student survey data administered in the fourth step (see Figure 4-1 in Chapter 4). First, an exploratory factor analysis was undertaken to assess the reliability and dimensionality of the initial items. Then, a confirmatory factor analysis was

performed to reassess and confirm the structure of the items revealed from the exploratory factor analysis.

### **Exploratory factor analysis**

The initial 33 items were factor analyzed from the first half of the student sample (n=130). For the factor analysis, principal component analysis and a promax (oblique) rotation method were utilized. A promax rotation was considered more appropriate than a varimax (orthogonal) rotation for the following reasons: (1) a promax rotation would more accurately reflect the structure of the data (Gerbing and Anderson, 1988); (2) prior literature suggested that each of the hypothesized dimensions might be related to each other (Doney and Cannon 1997; Larzelere and Huston, 1980; Lewis and Weigert 1985a); and (3) the results of the correlation analysis among the dimensions showed the dimensions were significantly correlated.

The initial factor analysis resulted in a rotated factor pattern consisting of seven factors with eigen-values greater than 1. The explained variance for the 7-factor solution was 65.1 percent of the total variance. In order to purify the scale and reduce the number of items, items with loadings of 0.3 or greater on more than one of the factors were eliminated (Ohanian, 1990). Items with communalities of less than .50 were further removed as not having sufficient explanation (Hair et al., 1998). The retained items were factor analyzed again to produce a 6-factor solution with 66.0 percent of the total variance. To further refine the list, the same criteria used in the initial factor analysis were again applied. Twenty-two items were retained to be factor analyzed. Finally, five factors with eigen-values greater than 1 emerged. The 5-factor solution of 22 items explained 68.7 percent of the total variance. Each of the items loaded on

one of the factor with factor loadings of 0.6 or greater. Table 5-1 presents the final 5-factor solution.

Table 5-1. Exploratory Factor Analysis of Trust in Advertising from Student Data (Study A)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Reliability	Usefulness	Affect	Willingness to rely on	Information quality
Honest	.96				
Truthful	.87				
Factual	.83				
Dependable	.78				
Ethical	.78				
Credible	.76				
Reliable	.72				
Accurate	.65				
It is safe to trust advertising	.66				
Valuable		.83			
Useful		.82			
Good		.68			
Helps the best decisions		.60			
Positive			.75		
Enjoyable			.74		
Likeable			.68		
Willing to make important purchase related decisions based on ad-conveyed information				.85	
Willing to rely on ad-conveyed information when making purchase related decisions				.77	
Willing to consider ad-conveyed information when making purchase related decisions				.72	
Willing to recommend the product or service seen in ads to friends or family				.70	
Clear					.94
Complete					.74
Variance Explained (%)	38.97	6.68	5.59	12.03	5.37
Cronbach's Alpha	.93	.81	.73	.84	.63

The names of each factor were determined reflecting the nature of the items loaded:

*Reliability, Usefulness, Affect, Willingness To Rely On, and Information Quality.* Factor 1,

*Reliability*, reflects consumer perceptions that information conveyed in advertising can be relied on and has the quality of being reliable. Items that loaded on the *Reliability* factor are: honest, truthful, factual, dependable, ethical, credible, reliable, accurate, and safe. Factor 2, *Usefulness*, reflects consumer evaluation of whether information delivered by advertising is useful and valuable for making purchase-related decisions. The third factor, *Affect*, contained items related to consumer emotional attitudes toward advertising: positive, enjoyable, and likeable. Factor 4, *Willingness to Rely On*, reflects consumer willingness to use information received from advertising when making purchase-related decisions. Finally, Factor 5, *Information Quality*, contained two items reflecting consumer evaluation of the completeness and clarity of the information conveyed in advertising.

To check the reliability of each of the five factors, internal consistency coefficients (Cronbach's alpha) were assessed. The alpha score for Factor 1 was .93; Factor 2 was .81; Factor 3 was .73; Factor 4 was .84; and Factor 5 was .63. The first four factors achieved a high level of reliability. The alpha score of the last factor was slightly lower than .70, the recommended level of reliability (Hair et al., 1998); however, because the fifth factor contained only two items, and the nature of this factor analysis is exploratory, the alpha score of the factor was deemed acceptable (Hair et al., 1998)

### **Confirmatory factor analysis**

Confirmatory factor analysis was performed on the second half of the student sample (n=130) to evaluate whether new data would confirm the proposed structure of the ADTRUST scale of the exploratory factor analysis. LISREL 8.0 software was used to test whether



discriminant validity existed among the factors and also whether the specified items were sufficient in their representation of the constructs (i.e., reliability).

#### Overall model fit

The 5-factor model was confirmatory factor analyzed by specifying the 22 items to load on the factors determined in the exploratory factor analysis. Results showed an adequate fit with the data: chi-square=415.34 with 199 degree of freedom ( $p \leq .05$ ), CFI=.95, NFI=.91, NNFI=.94, and SRMR=.076. All items loaded to the specified factors with loadings of .50 or greater, with the exception of “ethical.” The item had a weak loading of .48 and was removed from the list of items to purify the measure.

The 5-factor model with the 21 retained items was again subjected to confirmatory factor analysis (see Table 5-2). The results of the assessment of the overall model fit were: chi-square=377.99 with 179 degree of freedom ( $p \leq .05$ ), CFI=.95, NFI=.92, NNFI=.92, and RMSR=.076. All items loaded with loadings of .60 or greater on the specified factors. The results indicate that the five-factor model with the specified 21 items adequately fit the data.

#### Reliability of the factors

To measure the reliability of the five factors, Cronbach’s alphas were calculated. Factors 1, 2, and 4 showed a high level of internal consistency: Factor 1,  $\alpha = .92$ ; Factor 2,  $\alpha = .81$ ; and Factor 4,  $\alpha = .77$ . The alphas for Factors 3 and 5 were slightly less than the .70 threshold ( $\alpha = .67$ , .69, respectively) (Hair et al., 1998). Following Hair et al.’s (1998) and Fornell and Larcker’s (1981) recommendations, construct reliability and average variance extracted (AVE)<sup>2</sup> were also calculated. All five factors showed adequate construct reliability ranging from .70 to .92, and all exceeding the .70 threshold. The values of the average variance extracted for the five factors are:

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<sup>2</sup> Average Variance Extracted is the percentage of total variance of the data accounted for by the construct.

Factor 1=.60, Factor 2=.51, Factor 3=.43, Factor 4=.48, and Factor 5=.54. Factors 1, 2, and 5 exceeded the .50 threshold recommended by Fornell and Larcker (1981). Factors 3 and 4 showed slightly low AVEs (.43, .48, respectively). The results indicate that the items adequately represent the specified factors, indicating sufficient reliability of each of the five factors.

Table 5-2. Confirmatory Factor Analysis of Trust in Advertising from Student Data (Study B)

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Reliability	Usefulness	Affect	Willingness to rely on	Information quality
Honest	.90				
Credible	.88				
Truthful	.79				
Dependable	.75				
Reliable	.75				
Accurate	.75				
Factual	.69				
It is safe to trust advertising	.67				
Useful		.77			
Good		.74			
Valuable		.69			
Helps the best decisions		.66			
Likeable			.71		
Positive			.62		
Enjoyable			.62		
Willing to rely on ad-conveyed information when making purchase related decisions				.82	
Willing to make important purchase related decisions based on ad-conveyed information				.73	
Willing to recommend the products or service seen in ads to friends or family				.62	
Willing to consider ad-conveyed information when making purchase related decisions				.57	
Complete					.81
Clear					.65
Cronbach's Alpha	.92	.81	.67	.77	.69
Construct Reliability	.92	.81	.70	.78	.70
Average Variance Extracted	.60	.51	.43	.48	.54

### Discriminant validity of the factors

To measure the discriminant validity between the five factors, two tests were conducted following Anderson and Gerbing's (1988) recommendations: (1) a test of the confidence interval of the correlation between factors and (2) a chi-square difference test. To argue the discriminability between factors, the confidence interval ( $\pm 2$  standard errors) of the correlation estimate between the two factors should not include "1.0" (Anderson and Gerbing 1988). The results of a chi-square difference test should yield a constrained model (i.e. models with more factors) that exhibits a significantly improved chi-square from the less constrained model (i.e. models with fewer factors), indicating that the more-constrained model works better than the less-constrained model in explaining the data (Anderson and Gerbing, 1988; Joreskog, 1971).

Table 5-3. Correlation between Five Factors from Student Data (Study B)

	Reliability	Usefulness	Affect	Willingness to Rely on	Information Quality
Reliability	(.60) <sup>a</sup>				
Usefulness	.81 <sup>b</sup> [.86] <sup>c</sup>	(.51)			
Affect	.47[.59]	.64[.73]	(.43)		
Willingness to Rely on	.54[.65]	.69[.77]	.69[.77]	(.48)	
Information Quality	.72[.79]	.61[.71]	.54[.65]	.53[.64]	(.54)

<sup>a</sup> average variance extracted      <sup>b</sup> correlation coefficient ( $r$ )

<sup>c</sup> upper bound of confidence interval of  $r$

Table 5-3 shows the correlations and the upper bounds of the 95 percent confidence interval of the correlations. To illustrate, the upper bound of confidence interval was .86 for the *Reliability* and *Usefulness* correlation; .59 for the *Reliability* and *Affect* correlation; .65 for the *Reliability* and *Willingness To Rely On* correlation; and .79 for the *Reliability* and *Information Quality* correlation. The highest upper bound of the confidence interval of the correlations

among the five factors was .86 for the *Usefulness* and *Reliability* correlation. None of the confidence intervals included “1.” Based on the test of confidence interval of correlations, the discriminant validity of each of the five factors is supported.

In order to perform the chi-square test, several alternative models were estimated. One alternative model was a 3-factor model which combined both of the factors of *Reliability* and *Usefulness* into one factor, and also combined both of the factors of *Affect* and *Willingness To Rely On* into one factor, while treating *Information Quality* as a separate factor. *Reliability* and *Usefulness*, and *Affect* and *Willingness To Rely On* were each constrained into one factor due to the fact that each pair of factors was highly correlated ( $r = .89$  between *Reliability* and *Usefulness*,  $r = .69$  between *Affect* and *Willingness To Rely On*). A one-factor model assumed that all five factors were indeed one factor, treating the trust in advertising construct as a one-dimensional construct. A null model that assumes no systematic structure in the data was also estimated.

Table 5-4 shows the model fit indices for the competing four models and the chi-square differences among the models. The 5-factor model performed the best of the four models. The 5-factor model had the smallest chi-square value ( $X^2 = 377.99$ ,  $df = 179$ ), satisfying all the criteria of a good model fit on all indices: CFI=.95, NFI=.92, NNFI=.92, and RMSR=.076. The improvement in chi-square in the series of models was significant at all levels. The chi-square difference between the 5-factor and 3-factor models was 63.94 ( $p \leq .001$ ); the improvement in chi-square from the 1-factor model to the 5-factor model was 184.77 ( $p \leq .001$ ).

Based on this significant improvement in chi-square, it was determined that the 5-factor model is the most suitable to explain the data structure. In addition, it is determined that treating the individual factors as distinct factors is superior to lumping the factors together.

Table 5-4. Model Fit Indices<sup>3</sup> for Competing Models (Study B)

Model	$X^2$	$df$	$X^2$ Difference		CFI	NFI	NNFI	RMSR
Null (N)	4507.30	210	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
One factor (I)	562.76	189	N – I	3944.54 ***	.91	.88	.90	.094
Three factor (III) (Reliability/Usefulness, Affect/Willingness to Rely on, Information Quality)	441.93	186	N – III	4065.37 ***	.94	.90	.93	.079
Five factor (V)	377.99	179	N – V I – V III – V	4129.31 *** 184.77 *** 63.94 ***	.95	.92	.92	.076

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ , n.a.=not available.

To further examine the discriminability of the five factors, the five factors were subjected to confirmatory factor analysis using pair-wise testing. Every possible pairing of the five factors was developed. Two confirmatory factor analyses were performed on the items which belong to each of the pairs: 2-factor model and 1-factor model. The 2-factor model assumed that the two factors were separate and distinct from one another; the 1-factor model assumed that the paired two factors belong to the same underlying factor. It was estimated that a null model hypothesizing the items under the two factors did not have any systematic relationships.

Table 5-5 shows that in all the pairs, the 2-factor model performed better than the 1-factor model. To illustrate, the chi-square of the 2-factor model associated with *Reliability* and *Usefulness* factors was 124.28 ( $df=53$ ) and the chi-square of the 1-factor model of that pair was

<sup>3</sup> For the 24 goodness-of-fit measures available through statistical software program including LISREL and AMOS, there is presently no general agreement on which measures are preferred (Meyers, Gamst, and Guarino, 2006). Hu and Bentler's (1999) categorize the goodness-of-fit indices into a two-type scheme: absolute fit measures and relative fit measures. They suggest that the researcher needs to report at least one index of each category. Accepting their suggestion, the present research reports the likelihood ratio chi-square statistic ( $X^2$ ) and the root mean square residual (RMSR) as absolute fit measures; the comparative fit index (CFI), the normed fit index (NFI), and the non-normed fit index (NNFI) as relative fit measures. Because the researcher is predicting a close fit, a non-significant chi-square is preferred. However, the chi-square test is too sensitive to sample size, the chi-square test can return a statistically significant outcome even when the model fits the data reasonably well. Thus, the results of chi-square test should be considered with other fit indices. The smaller the RMSR, the better the fit; but there are no threshold levels established (Hair et al., 1998). A recommended acceptance level of CFI, NFI, and NNFI is a value greater than or equal to .90 (Hair et al., 1998).

156.39 ( $df=54$ ). The chi-square difference between the 1-factor model and the 2-factor model was significant ( $X^2$  difference= 32.11,  $df=1$ ,  $p \leq .001$ ), which indicates a significant improvement in chi-square from the 1-factor model to the 2-factor model.

Table 5-5. Chi-Square Test of Goodness of Fit (Study B)

Pair	Model	$X^2$	$df$	$X^2$ Difference		CFI	NFI	NNFI	RMSR
Reliability/ Usefulness	Null (N)	2382.71	66	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	156.39	54	N – I	2226.32 ***	.96	.93	.95	.063
	Two factor (II)	124.28	53	N – II I – II	2258.43 *** 32.11 ***	.97	.95	.96	.055
Reliability/ Affect	Null (N)	1579.35	55	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	159.48	44	N – I	1419.87 ***	.92	.90	.91	.087
	Two factor (II)	115.33	43	N – II I – II	1464.02 *** 44.15 ***	.95	.93	.94	.065
Reliability/ Willingness	Null (N)	1907.62	66	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	249.70	54	N – I	1627.92 ***	.89	.87	.87	.100
	Two factor (II)	167.22	53	N – II I – II	1740.40 *** 112.48 ***	.94	.91	.92	.089
Reliability /Information Quality	Null (N)	1672.09	45	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	115.48	35	N – I	1556.61 ***	.95	.93	.94	.058
	Two factor (II)	98.40	34	N – II I – II	1573.69 *** 17.08 **	.96	.94	.95	.047
Usefulness/ Affect	Null (N)	420.34	21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	69.91	14	N – I	350.43 ***	.86	.83	.79	.095
	Two factor (II)	43.91	13	N – II I – II	376.43 *** 26.00 ***	.92	.90	.87	.073
Usefulness/ Willingness	Null (N)	623.97	28	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	95.74	20	N – I	528.23 ***	.87	.85	.82	.085
	Two factor (II)	53.01	19	N – II I – II	570.96 *** 42.73 ***	.94	.92	.92	.066
Usefulness/ Information Quality	Null (N)	353.21	15	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	39.52	9	N – I	313.69 ***	.91	.89	.85	.080
	Two factor (II)	18.57	8	N – II I – II	334.64 *** 20.95 ***	.97	.95	.94	.053
Willingness/ Affect	Null (N)	414.17	21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	62.76	14	N – I	351.41 ***	.88	.85	.81	.082
	Two factor (II)	44.58	13	N – II I – II	369.59 *** 18.18 ***	.92	.89	.87	.082
Affect/ Information Quality	Null (N)	160.77	10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	26.64	5	N – I	134.13 ***	.86	.83	.71	.082
	Two factor (II)	3.59	4	N – II I – II	157.18 *** 23.05 ***	1.00	.98	1.01	.033
Willingness/ Information Quality	Null (N)	279.98	15	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	46.08	9	N – I	233.90 ***	.86	.84	.77	.090
	Two factor (II)	19.32	8	N – II I – II	260.66 *** 26.76 ***	.96	.93	.92	.048

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ , n.a.=not available.

Based on the significant chi-square difference, it is suggested that *Reliability* and *Usefulness* are distinct from one another. As in the case of *Reliability* and *Usefulness*, the improvements in chi-square from the 1-factor model to the 2-factor model were consistently significant among all of the pairs. The results indicate that the five factors possess enough discriminant validity to be treated as distinct factors.

### **Results of the Validation Stage: The Non-Student Adult Survey**

#### **Exploratory factor analysis**

To further verify the factor structure determined by the student sample of the study's reliability stage, the 21 items were analyzed again in an exploratory factor analysis with data obtained from a non-student adult sample. The 5-factor solution of the 21 items explained 79.5 percent of the total variance (see Table 5-6). All the items loaded with the factors suggested by the prior factor analyses, with an exception of one item, "it is safe to trust advertising." That item loaded on the *Reliability* factor in the student sample but loaded on the *Willingness To Rely On* factor in the non-student adult sample. The item was judged an ambiguous item and removed from the item-set, resulting in a total of 20 items.

Table 5-6. Exploratory Factor Analysis of Trust in Advertising  
from Non-Student Adult Data

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Reliability	Usefulness	Affect	Willingness to rely on	Information quality
Honest	1.01*				
Truthful	.79				
Factual	.55				
Dependable	.84				
Credible	.73				
Reliable	.63				
Accurate	.54				
It is safe to trust advertising				.55	
Valuable		.60			
Useful		.68			
Good		.44			
Helps the best decisions		.85			
Positive			.73		
Enjoyable			.93		
Likeable			.84		
Willing to make important purchase related decisions based on ad-conveyed information				.1.02	
Willing to rely on ad-conveyed information when making purchase related decisions				.90	
Willing to consider ad-conveyed information when making purchase related decisions				.51	
Willing to recommend the product or service seen in ads to friends or family				.84	
Clear					.78
Complete					.51
Variance Explained (%)	59.10	3.57	4.82	8.65	3.35
Cronbach's Alpha	.96	.88	.83	.90	.68

- Theoretically, a factor loading cannot exceed "1.0." However, when a item has extremely high correlation with other items, the SPSS software might generate a factor loading over than 1.

### Confirmatory factor analysis

#### Overall model fit

A second confirmatory factor analysis was performed to assess whether the five factors were valid in the non-student adult sample. The 20 items were specified to load on the factors



determined in the prior factor analyses. The results of the assessment of the overall model fit were: chi-square=682.82 with 160 degree of freedom ( $p \leq .05$ ), CFI=.96, NFI=.95, NNFI=.96, and RMSR=.066. As shown in Table 5-7, all of the items loaded on the specified factors with loadings of .60 or greater. The results indicate that the 5-factor model with the specified 20 items adequately fit the data.

Table 5-7. Confirmatory Factor Analysis of Five Factor Model--Non-Student Adult Data

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Reliability	Usefulness	Affect	Willingness to rely on	Information quality
Honest	.83				
Truthful	.90				
Factual	.85				
Dependable	.86				
Credible	.88				
Reliable	.91				
Accurate	.91				
Valuable		.86			
Useful		.84			
Good		.77			
Helps the best decisions		.78			
Positive			.66		
Enjoyable			.80		
Likeable			.90		
Willing to make important purchase related decisions based on ad –conveyed information				.91	
Willing to rely on ad-conveyed information when making purchase related decisions				.92	
Willing to consider ad –conveyed information when making purchase related decisions				.69	
Willing to recommend the products or service seen in ads to friends or family				.80	
Clear					.66
Complete					.77
Cronbach's Alpha	.96	.88	.83	.89	.68
Construct Reliability	.96	.89	.84	.90	.68
Average Variance Extracted	.75	.66	.63	.69	.51

### Reliability of the factors

To measure the reliability of the five factors, Cronbach's alphas were calculated. All of the factors, with the exception of *Information Quality*, exhibited a high level of internal consistency: Factor 1,  $\alpha=.96$ ; Factor 2,  $\alpha=.88$ ; Factor 3,  $\alpha=.83$ ; Factor 4,  $\alpha=.89$ ; Factor 5,  $\alpha=.68$ . The first four factors exhibited a high level of construct reliability, with alphas ranging from .84 to .96. Factor 5 had a value of .68, falling somewhat short of the recommended level of the .70 threshold. For the average variance extracted (AVE), the values of the five factors all exceed the .50 threshold recommended by Fornell and Larcker (1981). AVEs for each of the five factors are: Factor 1= .75, Factor 2= .66, Factor 3= .63, Factor 4= .69, and Factor 5= .51.

### Discriminant validity of the factors

To test the discriminant validity of the five factors, (1) a test of the confidence interval of the correlation between factors and (2) a chi-square difference test among the competing models were used (Anderson and Gerbing, 1988). Table 5-8 presents the correlations and the upper bounds of the confidence intervals of the correlations between the factors at the 95 percent confidence level. The upper bound of the confidence interval was .90 for *Reliability* and *Usefulness* correlation; .59 for *Reliability* and *Affect* correlation; .85 for *Reliability* and *Willingness to Rely On* correlation; and .97 for *Reliability* and *Information Quality* correlation. The highest upper bound of the confidence interval of the correlations among the five factors was .97 for *Reliability* and *Information Quality* correlation. The second highest upper bound of the confidence interval of the correlations was .91 for *Usefulness* and *Information Quality* factors. None of the confidence intervals included "1.", thus supporting the discriminant validity of each of the factors.

Table 5-8. Correlation between Five Factors from Non-Student Adult Data

	Reliability	Usefulness	Affect	Willingness to Rely on	Information Quality
Reliability	(.75) <sup>a</sup>				
Usefulness	.88 <sup>b</sup> [.90] <sup>c</sup>	(.66)			
Affect	.51[.59]	.63[.69]	(.63)		
Willingness to Rely on	.81[.85]	.80[.84]	.49[.58]	(.69)	
Information Quality	.97[.97]	.89[.91]	.48[.57]	.82[.86]	(.51)

<sup>a</sup> average variance extracted      <sup>b</sup> correlation coefficient ( $r$ )

<sup>c</sup> upper bound of confidence interval of  $r$

To further examine the discriminant validity of the five factors, model fit indices and chi-square differences between competing models were assessed. Six alternative models were hypothesized. Based on the extremely high correlations between the *Reliability*, *Usefulness*, and *Information Quality* dimensions ( $r=.88$  between *Reliability* and *Usefulness*,  $r=.97$  between *Reliability* and *Information Quality*, and  $r=.89$  between *Usefulness* and *Information Quality*), three 4-factor models were developed by combining every possible pair of the *Reliability*, *Usefulness*, and *Information Quality* factors (IV<sub>A</sub>, IV<sub>B</sub>, and IV<sub>C</sub>). In addition, a 3-factor model was estimated combining the *Reliability*, *Usefulness*, and *Information Quality* factors into one factor (III). A 1-factor model treating the ad-trust construct as a unidimensional construct was also estimated, and a null model that assumed no systematic structure in the data was considered.

Table 5-9 displays the goodness-of-fit indices of all seven competing models and the chi-square differences between the models. The hypothesized 5-factor model performed the best among the seven models. The 5-factor model had the smallest chi-square value ( $X^2=682.82$ ,  $df=160$ ) satisfying all the criteria of a good model fit on all indices: CFI=.96, NFI=.95, NNFI=.96, and RMSR=.066. However, the chi-square difference between the 5-factor and the 4-factor model combining *Reliability* and *Information Quality* was not significant ( $X^2$

difference=3.19,  $df=4$ ). The results indicate that (a) discriminant validity may not exist between the *Reliability* factor and the *Information Quality* factors and (b) the 4-factor model (*Reliability* and *Information Quality* combined) may work as well as the 5-factor model in terms of explaining the data structure.

Table 5-9. Model Fit Indices for Competing Models from Non-Student Adult Data

Model	$X^2$	$df$	$X^2$ Difference		CFI	NFI	NNFI	RMSR
Null (N)	16040.78	n.a.	n.a.		n.a.	n.a.	n.a.	n.a.
One factor (I)	1191.13	170	N – I	14849.65 ***	.94	.93	.93	.079
Three factor (III) • Reliability/Usefulness/ Information Quality, • Affect • Willingness to Rely On	802.36	167	N – III	15238.42 ***	.96	.95	.95	.071
Four factor (IV <sub>A</sub> ) • Reliability/Usefulness • Information Quality • Affect • Willingness to Rely On	800.44	164	N–IV <sub>A</sub>	15240.34 ***	.96	.95	.95	.071
Four factor (IV <sub>B</sub> ) • Reliability • Usefulness/ Information Quality • Affect • Willingness to Rely On	723.04	164	N–IV <sub>B</sub>	15317.74 ***	.96	.95	.96	.066
Four factor (IV <sub>C</sub> ) • Reliability/ Information Quality • Usefulness • Affect • Willingness to Rely On	686.01	164	N–IV <sub>C</sub>	15354.77 ***	.97	.96	.96	.065
Five factor (V)	682.82	160	N–V I–V III–V IV <sub>A</sub> –V IV <sub>B</sub> –V IV <sub>C</sub> –V	15357.96 *** 508.31 *** 119.54 *** 117.62 *** 40.22 *** 3.19 n.s.	.96	.95	.96	.066

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ , n.a.=not available.

In order to test further the discriminant validity of the five factors, the five factors were subjected to confirmatory factor analysis by pair-wise comparison. Every possible pair of the five factors was developed. In each of the pairs, the 2-factor model, which assumes that the paired two factors are separate from one another, was compared with the 1-factor model, which treats the paired two factors as one factor. It was estimated that a null model hypothesizing the items under the two factors did not have any systematic relationships.

Table 5-10 shows that the 2-factor model generally performed better than the 1-factor model. For example, the chi-square of the 2-factor model including *Reliability* and *Usefulness* factors was 324.38 ( $df=43$ ) and the chi-square of the 1-factor model involving *Reliability* and *Usefulness* was 419.73 ( $df=44$ ). The chi-square difference between the 1-factor model and the 2-factor model was significant ( $X^2$  difference= 95.35,  $df=1$ ,  $p \leq .001$ ). The significant improvements in the chi-square from the 1-factor model to the 2-factor model were consistently found across all of the pairs, with the exception of the *Reliability/Information Quality* pair.

The chi-square of the 2-factor model of *Reliability* and *Information Quality* was 214.29 ( $df=26$ ) and the chi-square of the 1-factor model was 214.97 ( $df=27$ ). The chi-square difference between the 1-factor model and the 2-factor model was not significant at the .05 significance level ( $X^2$  difference= 0.68,  $df=1$ ). The non-significant improvement in chi-square from the 1-factor model to the 2-factor model indicates that the *Reliability* and *Information Quality* factors are not separate and distinctive dimensions.

Based on the results of the chi-square test at the overall model level and the chi-square test at the paired factor level, it would appear that the *Reliability* and *Information Quality* factors are not discriminant from one another as separate factors.

Table 5-10. Chi-Square Test of Goodness of Fit from Non-Student Adult Data

Pair	Model	$\chi^2$	<i>df</i>	$\chi^2$ Difference		CFI	NFI	NNFI	RMSR
Reliability/ Usefulness	Null (N)	6686.40	55	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	419.73	44	N – I	6266.67 ***	.94	.94	.93	.051
	Two factor (II)	324.38	43	N – II I – II	6362.02 *** 95.35 ***	.96	.95	.93	.040
Reliability/ Affect	Null (N)	4594.98	45	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	545.07	35	N – I	4049.91 ***	.91	.90	.88	.098
	Two factor (II)	267.27	34	N – II I – II	4327.71 *** 277.8 ***	.95	.94	.93	.058
Reliability/ Willingness	Null (N)	6980.34	55	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	532.02	44	N – I	4668.32 ***	.93	.92	.91	.060
	Two factor (II)	280.38	43	N – II I – II	6699.96 *** 251.64 ***	.97	.96	.96	.046
Reliability /Information Quality	Null (N)	4559.96	36	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	214.97	27	N – I	4344.99 ***	.96	.95	.94	.036
	Two factor (II)	214.29	26	N – II I – II	4345.67 *** 0.68 n.s.	.96	.95	.94	.036
Usefulness/ Affect	Null (N)	1531.50	21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	247.45	14	N – I	1284.05 ***	.85	.84	.77	.110
	Two factor (II)	95.94	13	N – II I – II	1435.56 *** 151.51 ***	.95	.94	.91	.080
Usefulness/ Willingness	Null (N)	2647.19	28	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	199.34	20	N – I	2447.85 ***	.93	.92	.90	.060
	Two factor (II)	54.97	19	N – II I – II	2592.22 *** 144.37 ***	.99	.98	.98	.043
Usefulness/ Information Quality	Null (N)	1296.37	15	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	32.70	9	N – I	1263.67 ***	.98	.97	.97	.033
	Two factor (II)	27.06	8	N – II I – II	1269.31 *** 5.64 *	.99	.98	.97	.029
Willingness/ Affect	Null (N)	1452.61	21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	298.96	14	N – I	1153.65 ***	.80	.79	.70	.15
	Two factor (II)	72.84	13	N – II I – II	1379.77 *** 226.12 ***	.96	.95	.93	.082
Affect/ Information Quality	Null (N)	528.30	10	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	84.76	5	N – I	443.54 ***	.85	.84	.69	.099
	Two factor (II)	30.19	4	N – II I – II	498.11 *** 54.57 ***	.95	.94	.87	.040
Willingness/ Information Quality	Null (N)	1296.09	15	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	57.47	9	N – I	1238.62 ***	.96	.96	.94	.051
	Two factor (II)	41.68	8	N – II I – II	1254.41 *** 15.79 ***	.97	.97	.95	.041

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ , n.a.=not available.

## Model modification

### Overall model fit

To create a more parsimonious model, the original 5-factor model was modified into a 4-factor model: *Reliability* (combined *Reliability* and *Information Quality* factor), *Usefulness*, *Affect*, and *Willingness To Rely On*. The 20 items were subjected to confirmatory factor analysis again using the 4-factor model. The results of assessment of overall model fit were: chi-square=686.01 with 164 degree of freedom ( $p \leq .05$ ), CFI= .97, NFI= .96, NNFI= .96, and RMSR= .065. All of the items loaded with loadings of .60 or greater. The results indicate that the 4-factor model with the specified 20 items adequately fit the data. Table 5-11 presents the results of the confirmatory factor analysis.

### Reliability of the four factors

To measure the reliability of the four factors, Cronbach's alpha, construct reliability, and AVE were calculated for each factor. All of the factors exhibited a high level of internal consistency (alphas): Factor 1,  $\alpha=.96$ ; Factor 2,  $\alpha=.88$ ; Factor 3,  $\alpha=.83$ ; and Factor 4,  $\alpha=.89$ . Likewise, all four factors exhibited high construct reliability, with scores ranging from .83 to .95, and all exceeding the .70 threshold. For the average variance extracted, the values of all five factors were: Factor 1=.71, Factor 2=.66, Factor 3=.63, and Factor 4=.69. The results strongly support the reliability of the four factors.

Table 5-11. Confirmatory Factor Analysis of Four Factor Model  
From Non-Student Adult Data

Variable	Factor 1	Factor 2	Factor 3	Factor 4
	Reliability	Usefulness	Affect	Willingness to rely on
Honest	.83			
Truthful	.90			
Factual	.85			
Dependable	.86			
Credible	.88			
Reliable	.91			
Accurate	.91			
Clear	.65			
Complete	.75			
Valuable		.86		
Useful		.84		
Good		.77		
Helps the best decisions		.78		
Positive			.66	
Enjoyable			.80	
Likeable			.90	
Willing to make important purchase related decisions based on ad-conveyed information				.91
Willing to rely on ad-conveyed information when making purchase related decisions				.92
Willing to consider ad-conveyed information when making purchase related decisions				.69
Willing to recommend the product or service seen in ads to friends or family				.80
Cronbach's Alpha	.96	.88	.83	.89
Construct Reliability	.95	.89	.83	.90
Average Variance Extracted	.71	.66	.63	.69

#### Discriminant validity of the four factors

To measure discriminant validity, the confidence intervals of the correlation between factors and chi-square differences between competing models were tested. Table 5-12 reports the correlations and the upper bounds of the confidence intervals (+/-2 standard errors) of the



correlations between the four factors. The highest upper bound of confidence interval of the correlations among the four factors was .90 for the *Reliability* and *Usefulness* correlation. None of the confidence intervals included “1”, providing evidence of the discriminant validity of each factor.

Table 5-12. Correlations between Four Factors from Non-Student Adult Data

	Reliability	Usefulness	Affect	Willingness
Reliability	(.71) <sup>a</sup>			
Usefulness	.88 <sup>b</sup> [.90] <sup>c</sup>	(.66)		
Affect	.51[.59]	.63[.69]	(.63)	
Willingness	.81[.85]	.80[.84]	.49[.58]	(.69)

<sup>a</sup> average variance extracted      <sup>b</sup> correlation coefficient ( $r$ )

<sup>c</sup> upper bound of confidence interval of  $r$

To further examine the discriminability of the four factors, the four factors were subjected to confirmatory factor analysis by pair-wise comparison. In each of the pairs, two confirmatory factor analyses were performed: one on the 2-factor model and one on the 1-factor model. Table 5-13 shows that the 2-factor model consistently performed better than the 1-factor model. For example, the chi-square of the 2-factor model of the *Reliability* and *Usefulness* dimensions was 734.33 ( $df=64$ ) while the chi-square of the 1-factor model of *Reliability* and *Usefulness* was 837.25 ( $df=65$ ). The 2-factor model exhibited a significantly improved chi-square from the 1-factor model ( $X^2$  difference= 102.92,  $df=1$ ,  $p \leq .001$ ). Significant improvements in the chi-square from the 1-factor model to the 2-factor model were found across all possible pairs of the four factors. These results indicate that there is discriminant validity among the four factors.

Table 5-13. Chi-Square Test of Goodness of Fit from Non-Student Adult Data

Pair	Model	$\chi^2$	<i>df</i>	$\chi^2$ Difference		CFI	NFI	NNFI	RMSR
Reliability/ Usefulness	Null (N)	8111.59	78	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	837.25	65	N – I	7274.34 ***	.90	.90	.88	.091
	Two factor (II)	734.33	64	N – II I – II	7377.26 *** 102.92 ***	.92	.91	.90	.090
Reliability/ Affect	Null (N)	5579.93	66	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	736.50	54	N – I	4843.43 ***	.88	.87	.85	.110
	Two factor (II)	632.27	53	N – II I – II	4947.66 *** 104.23 ***	.89	.89	.87	.100
Reliability/ Willingness	Null (N)	8051.10	78	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	903.23	65	N – I	7147.87 ***	.89	.89	.87	.095
	Two factor (II)	721.92	64	N – II I – II	7329.18 *** 181.31 ***	.92	.91	.90	.110
Usefulness/ Willingness	Null (N)	2647.19	28	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	199.34	20	N – I	2447.85 ***	.93	.92	.90	.060
	Two factor (II)	54.97	19	N – II I – II	2592.22 *** 144.37 ***	.99	.98	.98	.043
Usefulness/ Affect	Null (N)	1531.50	21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	247.45	14	N – I	1284.05 ***	.85	.84	.77	.110
	Two factor (II)	95.94	13	N – II I – II	1435.56 *** 151.51 ***	.95	.94	.91	.080
Willingness/ Affect	Null (N)	1452.61	21	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	One factor (I)	298.96	14	N – I	1153.65 ***	.80	.79	.70	.150
	Two factor (II)	72.84	13	N – II I – II	1379.77 *** 226.12 ***	.96	.95	.93	.082

### Implication of the exploratory and confirmatory factor analyses

From the analyses, the construct of trust in advertising should be operationalized as a multi-dimensional construct composed of four separate and distinct factors: *Reliability*, *Usefulness*, *Affect*, and *Willingness To Rely On*. The confirmatory factor analyses indicate that the produced ADTRUST scale, comprised of 20 items representing the four factors, is an adequate measure of trust in advertising.

## **Construct validation**

To test whether the developed ADTRUST scale can validly measure trust in advertising, three validity tests were conducted using data from the non-student adult sample: concurrent validity; convergent and discriminant validity; and nomological validity.

### Concurrent validity

To test concurrent validity of the ADTRUST scale, the following research question was addressed:

RQ2. Is the developed measurement of trust in advertising (the ADTRUST scale) able to distinguish the groups who indicated different levels of trust in advertising on the non-diagnostic single measure of trust in advertising?

To answer the research question, a t-test was conducted on the scores of the ADTRUST scale between two groups: (a) one group who exhibited high trust in advertising on the single item measure of trust (higher-trust group) and (b) one group who exhibited low trust in advertising on the single item measure (lower-trust group). Each respondent was asked to indicate his/her level of trust in advertising on a 7-point semantic differential scale anchored on absolutely trust advertising/not at all trust advertising. Then, the respondents were divided into two sub-groups using a median split on the score of the single non-diagnostic item: lower-trust group and higher-trust group.

Table 5-14 reports the results of the t-test between the ADTRUST scores of higher-trust group and the lower-trust group. The average ADTRUST score of the lower-trust group was 3.12 whereas that of the higher-trust group was 4.18. The difference between the two groups is statistically significant (mean difference=1.06,  $p \leq .001$ ).

Table 5-14. T-test Between Groups with High- and Low Trust in Advertising

	N	M	SD	Mean Difference	Sig.
Low Trust	142	3.12	.879	1.06	p ≤ .001
High Trust	114	4.18	.879		

These results indicate that the ADTRUST scale scores differed in expected ways, discriminating between the higher-trust group and the lower-trust group. Based on the results, concurrent validity of the ADTRUST scale is supported.

#### Convergent and discriminant validity

To test the convergent and discriminant validity of the ADTRUST scale, two research questions were posed:

- RQ 3. Is the developed measurement of trust in advertising significantly and sufficiently correlated with other measurements of trust in advertising?
- RQ 4. Is the developed measurement of trust in advertising significantly different from the measurements of attitude toward advertising and advertising credibility?

Three tests were performed to address the two research questions: (a) an analysis of a Multitrait Multimethod (MTMM) matrix; (b) a confirmatory factor analysis involving trust in advertising, attitude toward advertising in general, and advertising credibility; and (c) an exploratory factor analysis involving the three constructs.

Analysis of a multitrait multimethod matrix. Development of an MTMM matrix requires measurement of at least two different traits using two different methods (Campbell and Fiske, 1959). This research measured three different traits: (a) trust in advertising ( $A_{TRUST}$ ), (b) attitude toward advertising in general ( $A_G$ ), and (c) advertising credibility ( $A_{CRED}$ ). Each of these traits was measured using two different methods: (a) a multi-item Likert scale, and (b) a multi-item semantic differential scale.

Trust in advertising was measured using both the Likert-formatted ADTRUST scale and the semantic differential version of the ADTRUST scale. The participants' responses to the 20 items of the ADTRUST scale were averaged to produce the Likert score of  $A_{TRUST}$  (L1). The responses to the 20 items of semantic differential version of the ADTRUST scale were averaged to obtain the semantic differential score of  $A_{TRUST}$  (S1). The Likert score of  $A_G$  (L2) was produced by averaging the responses to the seven scales of Bauer and Greyser (1968). The semantic differential score of  $A_G$  (S2) was obtained by averaging responses to the eight scales from Sandage and Leckenby (1980). Responses to the nine scales from Obermiller and Spangenberg (1998) were averaged to produce the Likert score of  $A_{CRED}$  (L3). The semantic differential score of  $A_{CRED}$  (S3) was obtained by averaging responses to the 10 semantic differential items scales adapted from Beltramini and Evans (1985). The correlation coefficients between the scores of each of the measures were entered into the MTMM matrix (Table 5-15).

Table 5-15. Correlations for the Multitrait-Multimethod Matrix

		Likert Scale			Semantic Differential Scale		
		$A_{TRUST}$ (L1)	$A_G$ (L2)	$A_{CRED}$ (L3)	$A_{TRUST}$ (S1)	$A_G$ (S2)	$A_{CRED}$ (S3)
Likert Scale	$A_{TRUST}$ (L1)	(.960)					
	$A_G$ (L2)	.687	(.604)				
	$A_{CRED}$ (L3)	.842	.683	(.919)			
Semantic Differential Scale	$A_{TRUST}$ (S1)	<u>.819</u>	.589	.683	(.961)		
	$A_G$ (S2)	.807	<u>.647</u>	.710	.835 (.894)		
	$A_{CRED}$ (S3)	.805	.590	<u>.726</u>	.834 .845 (.930)		

N=218.

Reliabilities of the each measure (i.e. reliability diagonal) are enclosed by parentheses

Monotrait-heteromethod correlations (i.e., validity diagonal) are underlined.

Heterotrait-monomethod correlations are enclosed by solid triangles.

Heterotrait-heteromethod correlations are enclosed by dashed triangles.

According to Campbell and Fiske's (1959) recommendations, convergent validity results when (a) coefficients in the reliability diagonal are consistently the highest in the matrix and (b) the monotrait-heteromethod coefficients are statistically significant and sufficiently large. If the monotrait-heteromethod correlations are insignificant or too low in magnitude, there is little basis to argue that the measures tap the same construct (Bagozzi and Yi, 1993). Establishment of convergent validity provides evidence that multiple measures of a construct obtained by multiple methods potentially indicate the same underlying construct (Peter 1981).

The MTMM matrix in Table 5-15 shows that coefficients in the reliability diagonals are the highest values in the matrix, with one exception –  $A_G$  measured by Likert format scales (L2). Five out of six reliability coefficients ranged from .89 to .96; the reliability of L2 was .604. Among them, the L1 and S1, the measures of primary interest in this research, exhibited the highest reliabilities ( $\alpha=.960$ , .961, respectively). Moreover, the monotrait-heteromethod correlations all differed significantly from zero ( $p \leq .001$ ). The correlations between L1 and S1 ( $r=.819$ ), between L2 and S2 ( $r=.647$ ), and between L3 and S3 ( $r=.726$ ) were all sufficiently large. The results indicate that the ADTRUST scale exhibits strong convergent validity.

Campbell and Fiske (1959) proposed three criteria to examine discriminant validity. The first criterion specifies that the monotrait-heteromethod coefficients should be higher than their corresponding heterotrait-heteromethod coefficients. The second criterion suggests that the monotrait-heteromethod coefficients should be higher than their corresponding heterotrait-monomethod coefficients. The final criterion specifies that the pattern of correlation among traits should be the same in both the monomethod and heteromethod blocks.

Examining the first criterion revealed that the monotrait-heteromethod coefficient associated with  $A_{TRUST}$  (L1-S1) was consistently higher than the corresponding heterotrait-

heteromethod coefficients:  $r = .819$  (L1-S1),  $r = .589$  (L2-S1),  $r = .683$  (L3-S1),  $r = .807$  (L1-S2), and  $r = .805$  (L1-S3). However, for  $A_G$  and  $A_{CRED}$ , inconsistent comparisons were found. The monotrait-heteromethod coefficient of  $A_G$  ( $r = .647$ ) was less than the correlations between L1 and S2 ( $r = .807$ ) and between L3 and S2 ( $r = .710$ ). The monotrait-heteromethod coefficient of  $A_{CRED}$  ( $r = .729$ ) was less than the correlation between L1 and S3 ( $r = .805$ ).

The MTMM matrix did not sufficiently pass the second discriminant validity criterion. The monotrait-heteromethod coefficient of  $A_{TRUST}$  ( $r = .819$ ) was less than the correlations between L1 and L3 ( $r = .842$ ), between S1 and S2 ( $r = .835$ ), and between S1 and S3 ( $r = .834$ ). The monotrait-heteromethod coefficient of  $A_G$  ( $r = .647$ ) was less than all heterotrait-monomethod coefficients associated with the trait of  $A_G$  (L2 or S2). The monotrait-heteromethod coefficient of  $A_{CRED}$  ( $r = .726$ ) was less than three of the four correlations associated with  $A_{CRED}$ :  $r = .842$  between L1 and L3;  $r = .683$  between L2 and L3;  $r = .834$  between S1 and S3; and  $r = .845$  between S2 and S3.

Table 5-16. Rank Order of Correlations in Monomethod and Heteromethod Boxes

		Rank order of correlation coefficients		
		$A_{TRUST}$ and $A_{CRED}$ , and $A_G$ and $A_{CRED}$	$A_{TRUST}$ and $A_G$ , and $A_{TRUST}$ and $A_{CRED}$	$A_{TRUST}$ and $A_G$ , and $A_G$ and $A_{CRED}$
$A_{TRUST}$ Likert Scale (L1)	Monomethod triangle	$r_{L1,L3} > r_{L2,L3}$	$r_{L1,L2} < r_{L1,L3}$	$r_{L1,L2} > r_{L2,L3}$
	Heteromethod triangle	$r_{L1,S3} > r_{L2,S3}$	$r_{L1,S2} > r_{L1,S3}$	$r_{L1,S2} > r_{L2,S3}$
$A_{TRUST}$ SD scale (S1)	Monomethod triangle	$r_{S1,S3} < r_{S2,S3}$	$r_{S1,S2} > r_{S1,S3}$	$r_{L1,L2} < r_{L2,L3}$
	Heteromethod triangle	$r_{S1,L3} < r_{S2,L3}$	$r_{S1,L2} < r_{S1,L3}$	$r_{S1,L2} < r_{S2,L3}$

Table 5-16 presents the rank order of correlations in monomethod and heteromethod triangles, providing evidence on the third criterion for discriminant validity. The pattern of correlations within the heterotrait-monomethod triangles for the Likert scale of  $A_{TRUST}$

( $r_{L1,L3} > r_{L2,L3}$ ;  $r_{L1,L2} > r_{L2,L3}$ ) generally matches the pattern of correlations within the lower heterotrait-heteromethod triangle ( $r_{L1,S3} > r_{L2,S3}$ ;  $r_{L1,S2} > r_{L2,S3}$ ). The pattern reveals that, measured by Likert scales, the correlations between  $A_{TRUST}$  and  $A_{CRED}$ , and between  $A_{TRUST}$  and  $A_G$ , are larger than the correlation between  $A_G$  and  $A_{CRED}$ .

The rank order of the correlations between the three traits flipped when the traits were measured by semantic differential scales. The heterotrait-monomethod triangles for the semantic differential scale of  $A_{TRUST}$  ( $r_{S1,L3} < r_{S2,L3}$ ;  $r_{S1,L2} < r_{S2,L3}$ ) matched the pattern of correlation within the upper heterotrait-heteromethod triangle ( $r_{S1,S3} < r_{S2,S3}$ ;  $r_{L1,L2} < r_{L2,L3}$ ). That pattern reveals that the correlations between  $A_{TRUST}$  and  $A_{CRED}$ , and between  $A_{TRUST}$  and  $A_G$ , are smaller than the correlation between  $A_G$  and  $A_{CRED}$  when the traits were measured by semantic differential scales. The inconsistent pattern of correlations indicates that the correlations among the traits are differentially impacted by methods, i.e., there might be a strong method effect.

In sum, analysis for the MTMM matrix support strong convergent validity of the ADTRUST scale, and partial support for discriminant validity of the ADTRUST scale. Convergent validity passed the two criteria with only a slight weakness for the  $A_G$  trait. Testing The ADTRUST scale effectively met the first criterion of discriminant validity, but it did not sufficiently meet the requirements of two criteria.

*Confirmatory factor analysis.* Two confirmatory factor analyses were conducted to test the discriminability of the ADTRUST scale from the measures for  $A_G$  and  $A_{CRED}$ : (a) one that included the ADTRUST scale and the seven Likert scales of  $A_G$  from Bauer and Greyser (1968) (hereafter,  $A_G$  Likert scale) and (b) one that included the ADTRUST scale and the nine Likert scales of  $A_{CRED}$  from Obermiller and Spangenberg (1998) (hereafter,  $A_{CRED}$  Likert scale). In each of the confirmatory factor analyses, the chi-square difference between the 1-factor model



and the 2-factor model was examined. For the pairing of the ADTRUST scale and the  $A_G$  Likert scale, the 2-factor model assumed that the ADTRUST scale and the  $A_G$  Likert scale reflected two distinct constructs; the 1-factor model assumed that the TRUST scale and the  $A_G$  Likert scale measured the same construct. As such, for the pairing of the ADTRUST scale and the  $A_{CRED}$  Likert scale, the 2-factor model and the 1-factor model were compared.

Table 5-17 presents the results of chi-square test of difference between the 1-factor model and the 2-factor model. In the CFA of the ADTRUST scale and the  $A_G$  Likert scale, the 2-factor model was a significantly better model of the data, as indicated by a chi-square difference ( $X^2=198.26, p \leq .001$ ). The improved chi-square from the 1-factor model to the 2-factor model suggests that the ADTRUST scale and the  $A_G$  Likert scale reflect two distinct constructs.

Table 5-17. Chi-square test of Goodness of Fit for the Models including Trust in Advertising ( $A_{TRUST}$ ), Attitude toward Advertising in General ( $A_G$ ) and Advertising Credibility ( $A_{CRED}$ )

Pair	Model	$X^2$	$df$	$X^2$ Difference			CFI	NFI	NNFI	RMSR
$A_{TRUST} / A_{CRED}$	Null (N)	30849.62	406	n.a.	n.a.			n.a.	n.a.	n.a.
	One factor (I)	1911.43	377	N – I	28938.19	***	.95	.94	.95	.073
	Two factor (II)	1713.17	376	N – II I – II	29136.45 198.26	*** ***	.96	.95	.94	.069
$A_{TRUST} / A_G$	Null (N)	19761.24	351	n.a.	n.a.			n.a.	n.a.	n.a.
	One factor (I)	1515.17	324	N – I	18246.07	***	.94	.93	.92	.072
	Two factor (II)	1490.14	323	N – II I – II	18271.1 25.03	*** ***	.94	.92	.93	.039

In the CFA of the ADTRUST scale and the  $A_{CRED}$  Likert scale, the 2-factor model had a significantly improved chi-square value ( $X^2=25.03, p \leq .001$ ), indicating that the two measures are distinct from one another. In sum, the chi-square tests support that the ADTRUST scale is distinct from the measures of both attitude toward advertising in general and also advertising credibility.

*Exploratory factor analysis.* As a more stringent test of discriminability between the ADTRUST scale and the A<sub>G</sub> Likert scale, an unconstrained principal component factor analysis was conducted. The exploratory factor analysis resulted in four factors explaining 65.9 percent of the total variance with an eigenvalue of 1 or greater.

Table 5-18. Exploratory Factor Analysis  
for Trust in Advertising and Attitude toward Advertising in General

Variables	Factor 1	Factor 2	Factor 3	Factor 4
Accurate <sup>a</sup>	.968			
Willing to rely on ad-conveyed information <sup>a</sup>	.934			
Complete <sup>a</sup>	.915			
Willing to make important purchase decisions based on ad-conveyed-information <sup>a</sup>	.890			
Factual <sup>a</sup>	.882			
Truthful <sup>a</sup>	.876			
Reliable <sup>a</sup>	.873			
Credible <sup>a</sup>	.853			
Honest <sup>a</sup>	.776			
Willing to recommend the products/services in ads to friends <sup>a</sup>	.753			
Dependable <sup>a</sup>	.734			
Helps people make the best decisions <sup>a</sup>	.694			
Advertising presents a true picture of the product <sup>b</sup>	.653			
Willing to consider ad-conveyed-information <sup>a</sup>	.622			
Clear <sup>a</sup>	.572			
Useful <sup>a</sup>	.541			
Valuable <sup>a</sup>	.454			
Enjoyable <sup>a</sup>		.933		
Likeable <sup>a</sup>		.913		
Positive <sup>a</sup>		.787		
Good <sup>a</sup>		.489		
Advertising raises our standard of living <sup>b</sup>			.786	
Advertising results in better products <sup>b</sup>			.715	
Advertising results in lower prices <sup>b</sup>			.608	
Advertising is essential <sup>b</sup>			.600	
Advertising persuades people to buy things they shouldn't buy <sup>b</sup>				.848
Advertising insults the intelligence <sup>b</sup>				.524

<sup>a</sup>. Items from the ADTRUST scale

<sup>b</sup>. Items from the scale of Attitude toward advertising in general

The results of the exploratory factor analysis revealed that the two measures are clearly different factors, supporting the discriminant validity of the ADTRUST scale from the A<sub>G</sub> scale.

As shown in Table 5-18, all of the ADTRUST items loaded on Factors 1 and 2; six out of 7  $A_G$  items loaded on Factors 3 and 4. Sixteen out of 20 ADTRUST items representing the factors, *Reliability*, *Usefulness*, and *Willingness To Rely On*, loaded on Factor 1; the other four ADTRUST items reflecting *Affect* of trust in advertising loaded on Factor 2. Four of the  $A_G$  Likert items on the social role of advertising loaded on Factor 3; the two  $A_G$  Likert items on the economic role of advertising loaded on Factor 4.

The “truthfulness” item (i.e., advertising presents a true picture of the product) was the only  $A_G$  Likert item that loaded on Factor 1 with the other ADTRUST items. As discussed in Chapter 3, the truthfulness item’s loading on Factor 1 is consistent with the prior conceptualization on the relationship between the constructs of trust in advertising and attitude toward advertising in general: the construct of trust in advertising and the construct of attitude toward advertising in general overlap in terms of advertising credibility. The results provide evidence that the ADTRUST scale and the  $A_G$  Likert scale are discriminant measures of associated, but separate, constructs.

To test the discriminant validity of the ADTRUST scale from the  $A_{CRED}$  Likert scale, an exploratory factor analysis, including the ADTRUST scale and the  $A_{CRED}$  Likert scale, was conducted using principal component extraction and promax rotation method. The exploratory factor analysis resulted in four factors that explained 71.4 percent of total variance.

As shown in Table 5-19, the 20 ADTRUST items loaded on all four factors; the nine  $A_{CRED}$  Likert items loaded on two out of the four factors. Factor 1 contained the items reflecting truthfulness and reliability of advertising, including five of the ADTRUST items and six of the  $A_{CRED}$  Likert items; Factor 2 consisted of eight ADTRUST items representing the quality of information conveyed in advertising and consumer willingness to rely on the ad-conveyed

information; Factor 3 contained items reflecting advertising's informativeness and usefulness, including three ADTRUST items and three A<sub>CRE</sub>D Likert items; finally, Factor 4 contained the four ADTRUST items representing emotional response to advertising.

Table 5-19. Exploratory Factor Analysis for Trust in Advertising and Advertising Credibility

Variables	Factor 1	Factor 2	Factor 3	Factor 4
Advertising presents a true picture of the product <sup>b</sup>	1.014*			
Advertising is truthful <sup>b</sup>	.964			
We can get the truth in advertising <sup>b</sup>	.883			
Advertising is truth well told <sup>b</sup>	.696			
Honest <sup>a</sup>	.692			
Advertising is a reliable source of information <sup>b</sup>	.688			
I've been accurately informed after viewing advertising. <sup>b</sup>	.674			
Truthful <sup>a</sup>	.627			
Dependable <sup>a</sup>	.549			
Credible <sup>a</sup>	.510			
Reliable <sup>a</sup>	.490			
Willing to recommend the products/services in ads to friends <sup>a</sup>		.863		
Willing to rely on ad-conveyed information <sup>a</sup>		.797		
Willing to make important purchase decisions based on ad-conveyed information <sup>a</sup>		.755		
Clear <sup>a</sup>		.736		
Complete <sup>a</sup>		.652		
Accurate <sup>a</sup>		.609		
Factual <sup>a</sup>		.497		
Willing to consider ad-conveyed -information <sup>a</sup>		.452		
Advertising is informative <sup>b</sup>			.860	
Advertising's aim is to inform the consumer <sup>b</sup>			.816	
Advertising provides essential information <sup>b</sup>			.743	
Helps people make the best decisions <sup>a</sup>			.538	
Valuable <sup>a</sup>			.531	
Useful <sup>a</sup>			.521	
Likeable <sup>a</sup>				.928
Enjoyable <sup>a</sup>				.869
Positive <sup>a</sup>				.830
Good <sup>a</sup>				.517

<sup>a</sup>. Items from the ADTRUST scale

<sup>b</sup>. Items from the scale of Advertising Credibility

\* Theoretically, a factor loading cannot exceed "1.0." However, when an item has extremely high correlation with other items, the SPSS software might generate a factor loading over than 1.

The factor analysis clearly indicates that the ADTRUST scale overlaps with advertising credibility in terms of reliability and usefulness. However, the ADTRUST scale included two other facets of attitudes toward advertising which advertising credibility did not account for: willingness to rely on and affect. The results of the exploratory factor analysis provide evidence that trust in advertising is distinct and separate from advertising credibility.

#### Nomological validity

To test the nomological validity of the ADTRUST scale, five hypothesized relationships between trust in advertising and other related ad-response variables were tested.

Hypothesis 1. Consumer trust in advertising in general will be significantly and positively correlated with trust in ads.

Hypothesis 2. Consumer trust in advertising in general will be significantly and positively correlated with attitude toward ads.

Hypothesis 3. Consumer trust in advertising in general will be significantly and negatively correlated with ad avoidance.

Hypothesis 4. Consumer trust in advertising in general will be significantly and positively correlated with use of information conveyed in advertising on making purchase decisions.

Hypothesis 5. Consumer trust in advertising in general will be significantly and positively correlated with advertising involvement.

As discussed in Chapter 4, all of the ad-response variables involved in the five hypotheses were measured with multiple items. The multi-item measures were averaged to create the summated score for each of the variables. Trust in advertising was measured by 20 ADTRUST items; scores for the items were averaged to generate the score of trust in advertising. The score of trust in the developed ads (the created ad-set) was obtained by averaging each respondent's trust in the four ads. A set of five semantic differential scales measured attitude

toward the individual ads in the test set of ads. The score of attitude toward individual ads was obtained by averaging the scores of the five questions, and the total average score of attitude toward the four ads were entered as the measure of attitude toward ads. The score of ad avoidance was obtained by averaging responses on the five ad avoidance items. The use of advertising information was measured by two items: the average of the two scores was entered as the measure of the use of advertising information. Advertising involvement was measured by 10 involvement items developed by Zaichkowsky (1985). The respondent responses to the 10 advertising involvement scales were averaged to produce the advertising involvement score.

Table 5-20. Correlations between Trust in Advertising and Other Validation Variables from Non-Student Adult Data <sup>a</sup>

	<i>M</i>	<i>SD</i>	Trust in Advertising	Advertising Involvement	Ad Use	Ad Avoid	Trust in Ads	Attitude towards Ads
Trust in Advertising	3.58	1.02						
Advertising Involvement	3.80	1.28	.622**	(.934) <sup>b</sup>				
Ad Use	3.42	1.27	.751**	.542**	(.867)			
Ad Avoidance	5.32	1.19	-.186**	-.288**	-.216**	(.800)		
Trust in Ads	3.55	1.03	.506**	.363**	.378**	-.077	(n.a.) <sup>c</sup>	
Attitude toward Ads	3.60	.92	.547**	.557**	.422**	-.166*	.721**	(.806~.863) <sup>d</sup>

\*\*  $p \leq .01$ , \*  $p \leq .05$  (2-tailed).

a Listwise N=214

b. Reliabilities of constructs (Cronbach's Alpha)

c. Since trust in the ad was measured by single items, reliability of the construct was not assessed.

d. Attitude toward the ad was measured on four different advertisements. The range of reliability were reported

Table 5-20 shows the correlations between trust in advertising and the five ad-response variables: trust in ads, attitude toward ads, ad avoidance, ad use, and advertising involvement. The correlation between trust in advertising and trust in ads in the ad-set was  $r = .506$ ,  $p \leq .01$ , indicating a positive relationship between trust advertising in general and trust in information conveyed in specific advertisements. The correlation between trust in advertising and attitude

toward ads of the ad-set was  $r=.547, p \leq .01$ , suggesting that the more trust in advertising, the more favorable are toward advertisements. The correlations for trust in advertising and ad use was  $r=.751, p \leq .01$ . These results suggest that those who exhibit more trust advertising are more likely to use information conveyed in advertising to make purchase-related decisions. The negative correlation between trust in advertising and ad avoidance ( $r=-.186, p \leq .01$ ) indicates that the relationship between trust in advertising and ad avoidance is negative, as hypothesized. Finally, trust in advertising and advertising involvement was positively and significantly correlated ( $r=.622, p \leq .01$ ).

In sum, all of the ad-response variables are significantly related to the ADTRUST scale as hypothesized. The five hypotheses are supported indicating the nomological validity of the ADTRUST scale.

### **Generalizability to contexts of specific advertising media**

To test the validity of the ADTRUST scale across different ad media, the following question was addressed:

RQ 5. a. Can the developed measurement of trust in advertising in general validly measure trust in specific advertising media?

Two different types of advertising media were considered: broadcasting media and print media. As discussed in Chapter 4, the original ADTRUST scale was modified to measure trust in advertising in specific ad-media: TV, radio, newspapers, magazines, and the Internet. The ADTRUST scale for broadcast media was developed by combining the ADTRUST scales for television advertising and radio advertising; the ADTRUST scale for print media was created by combining the ADTRUST scales for newspaper advertising and magazine advertising. The

Internet is neither a broadcast nor a print medium, and the number of the respondents for Internet advertising was insufficient for separate factor analysis. Thus, trust in Internet advertising was excluded from this phase of the research.

Table 5-21. Confirmatory Factor Analysis of Trust in Advertising in Broadcast Media

Variable	Factor 1	Factor 2	Factor 3	Factor 4
	Reliability	Usefulness	Affect	Willingness to rely on
Honest	.90			
Dependable	.91			
Credible	.81			
Complete	.53			
Factual	.70			
Accurate	.90			
Truthful	.83			
Reliable	.87			
Clear	.81			
Valuable		.81		
Good		.94		
Useful		.93		
Helps people make the best decisions		.57		
Likeable			.93	
Positive			.43	
Enjoyable			.79	
Willing to rely on ad-conveyed information when making purchase related decisions				.94
Willing to make important purchase related decisions based on ad-conveyed information				.90
Willing to consider ad-conveyed information when making purchase related decisions				.70
Willing to recommend the products/service that I have seen in ads to my friends or family				.89
Cronbach's Alpha	.97	.92	.87	.91
Construct Reliability	.95	.89	.78	.92
Average Variance Extracted	.66	.69	.56	.75



A confirmatory factor analysis was conducted on the adult dataset to explore if the ADTRUST scale with a 4-factor structure is supported in contexts of broadcasting and print ad-media, and whether the specified items are adequate in their representation of trust in broadcasting advertising and trust in print advertising (reliability).

Table 5-21 presents the results of the confirmatory factor analysis for the ADTRUST scale for broadcast media. The 4-factor model of 20 items was tested. The results of the assessment of the overall model fit revealed: chi-square=1060.00 with 164 degree of freedom ( $p \leq .05$ ), CFI=.93, NFI=.91, NNFI=.91, and RMSR=.099, indicating moderate fit with the data. All of the items loaded to the specified factor with loadings of .50 or greater with a one exception – “positive” (factor loading=.43). All four factors showed high Cronbach’s alphas, ranging from .87 to .97; adequate construct reliability ranged from .70 to .92; and strong AVEs ranged from .56 to .75. The results suggest that the ADTRUST scale with a 4-factor model is adequate for explaining trust in broadcast ad-media.

Table 5-22 presents the results of the confirmatory factor analysis of the ADTRUST scale for print media. The 4-factor model of the 20 ADTRUST items revealed that the ADTRUST scale is a good fit with the data: chi-square=713.24 with 164 degree of freedom ( $p \leq .05$ ), CFI=.95, NFI=.93, NNFI=.94, and RMSR=.074. All of the items loaded to the specified factor with substantial loadings that ranged from .52 to .96. Cronbach’s alphas for each of the factors ranged from .83 to .97; construct reliabilities ranged from .82 to .94; and AVEs ranged from .61 to .75. The overall model fit indices and construct reliability coefficients (i.e., Cronbach’s alpha, construct reliability, and AVE) indicate that the 4-factor model of the ADTRUST scale is an adequate measure of consumer trust in advertising in print media.

Table 5-22. Confirmatory Factor Analysis of Trust in Advertising in Print Media

Variable	Factor 1	Factor 2	Factor 3	Factor 4
	Reliability	Usefulness	Affect	Willingness to rely on
Honest	.84			
Dependable	.87			
Credible	.87			
Complete	.47			
Factual	.74			
Accurate	.89			
Truthful	.77			
Reliable	.90			
Clear	.84			
Valuable		.84		
Good		.96		
Useful		.93		
Helps people make the best decisions		.56		
Likeable			.94	
Positive			.52	
Enjoyable			.82	
Willing to rely on ad-conveyed information when making purchase related decisions				.94
Willing to make important purchase related decisions based on ad-conveyed information				.89
Willing to consider ad-conveyed information when making purchase related decisions				.78
Willing to recommend the products/service that I have seen in ads to my friends or family				.85
Cronbach's Alpha	.97	.90	.83	.92
Construct Reliability	.94	.90	.82	.92
Average Variance Extracted	.66	.70	.61	.75

A one-way ANOVA was conducted to answer RQ 5-b and -c:

RQ 5. b. Does trust in advertising vary across different media? c. In which medium, advertising is most trusted?

Consumer trust in advertising was compared for in each specific ad medium: television, radio, newspapers, magazines, and the Internet.

As shown in Table 5-23, the effect of media type on consumer trust in advertising is significant,  $F(4,373)=4.708$ ,  $p \leq .05$ . Post hoc analysis using the Tukey HSD post hoc criterion for significance reveal that the trust in advertising is significantly lower for Internet advertising ( $M=3.00$ ,  $SD=1.23$ ) than for the other media: TV ( $M=3.59$ ,  $SD= 1.12$ ), radio ( $M=3.56$ ,  $SD=1.07$ ), newspaper ( $M=3.70$ ,  $SD=1.00$ ), and magazine ( $M=3.74$ ,  $SD=1.09$ ) advertising.

Table 5-23. One-Way Between-Subjects ANOVA for the Media Advertising

	<i>M</i>	<i>SD</i>	<i>F</i>	<i>Sig.</i>
TV	3.59 <sup>a</sup>	1.11	4.708	$p \leq .001$
Radio	3.56 <sup>b</sup>	1.07		
Newspaper	3.70 <sup>c</sup>	1.00		
Magazine	3.74 <sup>d</sup>	1.09		
Internet	3.00 <sup>a,b,c,d</sup>	1.23		

<sup>a,b,c,</sup> and <sup>d</sup> are significantly different pairs at  $p \leq .05$

The results indicate that print advertising is more trusted than broadcasting advertising, and that magazine advertising is most trusted ad-medium by consumers, followed by newspaper advertising, TV advertising, and radio advertising. Internet advertising is the least trusted form of advertising. However, it should be noted that, other than Internet advertising, there are no significant differences in trust in advertising across TV, radio, newspaper, and magazine ad-media.

For closer examination of the relationships between trust in advertising and media type, two-way ANOVAs, including demographic variables (age, gender, education, and income) were conducted. As presented in Table 5-24, gender and age exhibited no direct or indirect effects on the trust in advertising in specific ad-media. Education exhibited a direct effect on the trust in media advertising without indirect effects,  $F(2,353) = 4.85$ ,  $p \leq .01$ .

Table 5-24. Two-Way ANOVA for the Relationship between Types of Media, Demographic Characteristics and Trust in Media Advertising

Source	SS	df	F	Sig.
Media*	21.826	4	4.532	p ≤ .05
Gender	.000	1	.000	n.s.
Media × Gender	3.219	4	.995	n.s.
Media	20.790	4	4.233	p ≤ .05
Age	1.031	4	.210	n.s.
Media × Age	14.071	16	.716	n.s.
Media	13.451	4	2.955	p ≤ .05
Income	2.903	2	1.275	n.s.
Media × Income	21.535	8	2.366	p ≤ .05
Media	24.960	4	5.302	p ≤ .001
Education	11.411	2	4.848	p ≤ .01
Media × Education	8.859	8	.941	n.s.

\*Variables: Attributes (N)

Media: TV (90), radio (65), newspapers (70), magazines (78), the Internet (59) advertising

Gender: Male (129) and Female (239)

Age: under 29 (47), 30s (97), 40s (93), 50s (98), and 60 over (27).

Income: less than \$ 34, 999(97; low), \$35,000-\$74,999 (150; medium), and \$75,000 over (105; high)

Education: high school graduate or less (152), some college or college graduate (112), and graduate degree (104)

Post hoc analysis using the Tukey HSD post hoc criterion for significance reveals that the trust in advertising was significantly higher in the low-educated group, completed high school or less, ( $M=3.72$ ,  $SD=1.15$ ), than in the highly-educated group, completed a graduate degree, ( $M=3.31$ ,  $SD= 1.12$ ).

The level of income exhibited two-way interactions with media-type,  $F(8,337) = 2.37$ ,  $p \leq .05$ . Figure 5-1 contains a plot of a two-way interaction between media type and level of education for the ad-trust in specific ad-media. The plot shows that the pattern of ad-trust in media is different depending on level of income. Respondents in the low-income group tended to exhibit more trust TV advertising and newspaper advertising than in radio advertising and magazine advertising. On the other hand, respondents in the high-income group exhibited more

trust in radio advertising and magazine advertising than in TV advertising and newspaper advertising. Internet advertising was evaluated as the least trusted ad-medium by the high- and moderate-income groups; however, the medium it was the third most trusted medium by the low-income group, following TV advertising and newspaper advertising.

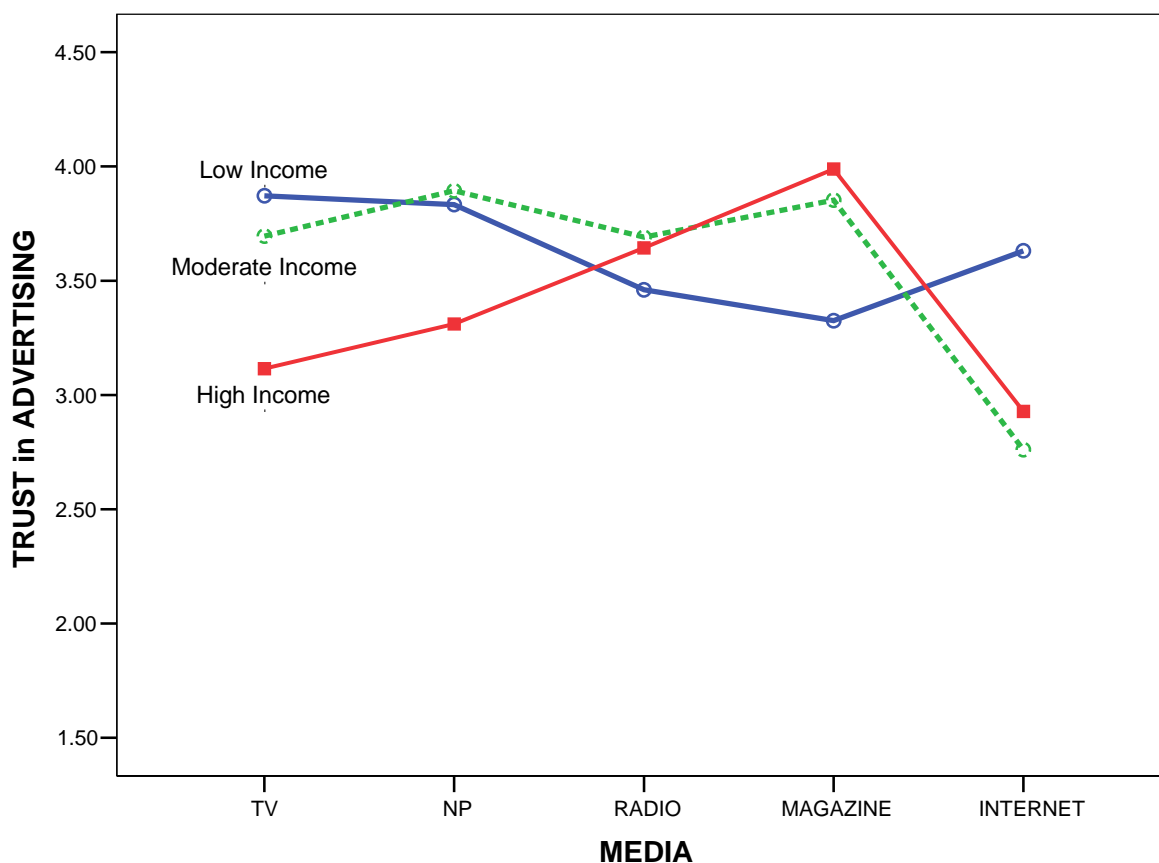


Figure 5-1. Trust in Advertising in Specific Media by the Level of Income

To test the association between medium credibility and trust in advertising for each specific medium, the analysis addressed the question:

RQ 6. Are consumer perceptions of a medium's credibility associated with trust in advertising for that medium?

Five hierarchical regression analyses were conducted for each of the five media: television, radio, newspapers, magazines and the Internet.

The dependent variable in each analysis was trust in advertising for a specific medium. The independent variables were entered in the following hierarchical blocks: (a) co-variates including age, gender, education, and income; (b) perceptions of advertising including trust in advertising, attitude toward advertising in general, and advertising credibility; and (c) medium credibility. Within each block the stepwise inclusion method was used.

Table 5-25 shows the significant predictors of trust in advertising for each specific medium. For TV advertising, the level of income, trust in advertising in general, and perceived TV credibility were significant predictors, explaining 72.3 percent of total variance (beta=-.30,  $p \leq .01$ ; beta=.79,  $p \leq .001$ ; beta=.16,  $p \leq .05$ , respectively). Trust in advertising in general and radio credibility were significant predictors of trust in radio advertising with adj.  $R^2=44.8$  percent (beta=-.50,  $p \leq .001$ ; beta=.53,  $p \leq .001$ , respectively). Age, the level of education, trust in advertising in general, and newspaper credibility explained 69.9 percent of total variance of trust in newspaper advertising (beta=-.39,  $p \leq .01$ ; beta=-.31,  $p \leq .05$ ; beta=.71,  $p \leq .001$ ; beta=.34,  $p \leq .001$ , respectively). For magazine advertising, trust in advertising in general and magazine credibility were significant predictors, explaining 73.9 percent of total variance (beta=.83,  $p \leq .001$ ; beta=.25,  $p \leq .001$ , respectively). Trust in advertising in general and Internet credibility were significant predictors of trust in Internet advertising, with adj.  $R^2=47.9$  percent (beta=.46,  $p \leq .01$ ; beta=.55,  $p \leq .001$ ).

Across all five media, media credibility consistently exhibited an independent contribution to variance explained for trust in advertising in the specific medium, when other possible covariates were taken into account in the model. The total explained variance for each of the five regression models increased when medium credibility was included in the models: the  $R^2$  changed after including TV credibility by 2 percent, radio credibility by 21 percent,

newspaper credibility by 10 percent, magazine credibility by 5 percent, and Internet credibility by 28 percent.

These results suggest that media credibility is directly associated with trust for advertising in specific media. Media credibility provided separate explanatory power when other significant variables were taken into account.

Table 5-25. Predictors of Trust in Advertising for Each Medium:  
Hierarchical Regressions of Direct Effects<sup>1</sup>

Significant Predictors	TV (n=83)		Radio (n=51)		Newspaper (n=61)		Magazine (n=67)		Internet (n=49)	
	Beta	Step	Beta	Step	Beta	Step	Beta	Step	Beta	Step
<b>Block 1: Covariates</b>										
Income	-.30 <sup>b</sup>	(1)	-	-			-	-	-	-
Age					-.39 <sup>b</sup>	(1)				
Education					-.31 <sup>a</sup>	(2)				
R <sup>2</sup> Change	+ 9%		-		+ 13%		-		-	
F Change	8.20 <sup>b</sup>		-		10.88 <sup>b</sup>		-		-	
<b>Block 2: Perceptions on Advertising</b>										
Trust in Advertising	.79 <sup>c</sup>	(1)	.50 <sup>c</sup>	(1)	.71 <sup>c</sup>	(1)	.83 <sup>c</sup>	(1)		
Advertising Credibility									.46 <sup>b</sup>	(1)
R <sup>2</sup> Change	+ 62%		+ 25%		+ 45%		+ 69%		+ 21%	
F Change	172.86 <sup>c</sup>		17.06 <sup>c</sup>		68.29 <sup>c</sup>		147.01 <sup>c</sup>		12.68 <sup>b</sup>	
<b>Block 3: Medium Credibility</b>										
Media Credibility	.16 <sup>a</sup>	(1)	.53 <sup>c</sup>	(1)	.34 <sup>c</sup>	(1)	.25 <sup>c</sup>	(1)	.55 <sup>c</sup>	(1)
R <sup>2</sup> Change	+ 2%		+ 21%		+ 10%		+ 5%		+ 28%	
F Change	5.91 <sup>a</sup>		19.21 <sup>c</sup>		19.91 <sup>c</sup>		13.52 <sup>c</sup>		26.58 <sup>c</sup>	
Total Explained Variance (Adj. R <sup>2</sup> )	72.3%		44.8%		69.9%		73.9%		47.9%	

<sup>a</sup>  $p \leq .05$ , <sup>b</sup>  $p \leq .01$ , <sup>c</sup>  $p \leq .001$

<sup>1</sup> Potential predictors were entered in the following order, with stepwise inclusion within each block: (1) covariates: gender, age, education, and income; (2) perceptions on advertising: trust in advertising, advertising credibility, and attitude toward advertising in general; and (3) medium credibility.

## CHAPTER 6

### DISCUSSION, IMPLICATIONS, AND FUTURE RESEARCH

#### **Summary of Research**

The purpose of this study was to develop a reliable and valid scale to measure the construct of trust in advertising. Trust in advertising was preliminarily defined as a consumer's confidence that advertising is a reliable source of product/service information, and one's willingness to act on the basis of information conveyed by advertising. A multi-stage research project was conducted and the following steps were performed: (1) identifying initial items, (2) assessing reliability of the scale, (3) testing validity of the scale, and (4) the development of a 20-item Likert format scale (the ADTRUST scale) to capture and measure the concept of trust in advertising. Data were collected to answer 6 research questions and 5 hypotheses.

The first research question was addressed to explore what trust in advertising is, as well as the dimensionality of the construct. A series of factor analyses produced the ADTRUST scale, revealing that trust in advertising is a multi-dimensional construct with four distinct components: *Reliability*, *Usefulness*, *Affect*, and *Willingness to Rely On*. The ADTRUST items showed high reliability, with 20 items sufficiently representing the four components of the ad-trust construct. Table 6-1 presents the developed ADTRUST scale.



Table 6-1. The ADTRUST scale developed in the research

<i>Components</i>	<i>Information conveyed in national advertising is ...</i>	Strongly Disagree	Strongly Agree
Reliability	1. Honest	1 2 3 4 5 6 7	
	2. Truthful	1 2 3 4 5 6 7	
	3. Credible	1 2 3 4 5 6 7	
	4. Reliable	1 2 3 4 5 6 7	
	5. Dependable	1 2 3 4 5 6 7	
	6. Accurate	1 2 3 4 5 6 7	
	7. Factual	1 2 3 4 5 6 7	
	8. Complete	1 2 3 4 5 6 7	
	9. Clear	1 2 3 4 5 6 7	
Usefulness	10. Valuable	1 2 3 4 5 6 7	
	11. Good	1 2 3 4 5 6 7	
	12. Useful	1 2 3 4 5 6 7	
	13. Helps people make the best decisions	1 2 3 4 5 6 7	
Affect	14. Likeable	1 2 3 4 5 6 7	
	15. Enjoyable	1 2 3 4 5 6 7	
	16. Positive	1 2 3 4 5 6 7	
Willingness to Rely On	17. I am willing to rely on ad-conveyed information when making purchase related decisions.	1 2 3 4 5 6 7	
	18. I am willing to make important purchase related decisions based on ad-conveyed information.	1 2 3 4 5 6 7	
	19. I am willing to consider the ad-conveyed information when making purchase related decisions.	1 2 3 4 5 6 7	
	20. I am willing to recommend the product or service that I have seen in ads to my friends or family.	1 2 3 4 5 6 7	

To address the issue of the concurrent validity of the ADTRUST scale, the second research question asked whether the ADTRUST scale was able to discriminate among groups

who exhibited different levels of trust in advertising on the non-diagnostic single measure of trust in advertising. The scores of the ADTRUST scale between the two groups were compared: (a) one group who exhibited high trust in advertising on the single item measure of trust (higher-trust group) and (b) one group who exhibited low trust in advertising on the single item measure (lower-trust group). The mean ADTRUST score of the higher-trust group was significantly higher than that of the lower-trust group. Thus, the ADTRUST scale exhibited concurrent validity.

Research questions 3 and 4 examined the convergent and discriminant validity of the ADTRUST scale. The relationship between trust in advertising and attitude toward advertising in general, and the relationship between trust in advertising and advertising credibility were examined by three different methods: Multitrait-Multimethod matrix (MTMM), confirmatory factor analysis, and exploratory factor analysis.

The MTMM, which was composed of the three ad-responses measured by two different scale-formats (Likert format scales and Semantic Differential format scales), found strong convergent validity of the ADTRUST scale and partial support for the discriminant validity of the scale. Confirmatory and exploratory factor analyses of the three constructs indicated that the ADTRUST scale was distinct from the measures for both attitude toward advertising in general and advertising credibility. The analyses indicate that the ADTRUST scale is related to those ad-responses, but also assesses qualities independent from each of the two related constructs. The ADTRUST scale overlapped with the measure of attitude toward advertising in general relative to advertising credibility, and overlapped with the measure of advertising credibility relative to *Reliability* and *Usefulness*. However, the ADTRUST scale took into account other facets of attitudes toward advertising with which the measures of attitude toward advertising in general

and advertising credibility did not: *Willingness to Rely On* and *Affect*. Thus, the results provide evidence that the ADTRUST scale has discriminant validity.

To test nomological validity of the ADTRUST scale, five hypothesized relationships were tested among trust in advertising and other ad-related response variables. The five hypotheses tested the assumption that consumer trust in advertising will be significantly and positively correlated with (a) trust in ads, (b) attitude toward ads, (c) use of ad-conveyed information, and (d) advertising involvement, and significantly and negatively correlated with ad avoidance. The results showed they are all significantly correlated as hypothesized. The ADTRUST scale was demonstrated to have nomological validity.

Research question 5-a asked whether the ADTRUST scale could be generalized to validly measure trust in advertising in the context of different media. Two different types of advertising media were considered: broadcast media (television and radio) and print media (newspapers, magazines). The results of confirmatory factor analyses found support for the ADTRUST scale with a four-factor structure in the contexts of both broadcast and print ad-media. The ADTRUST items produced high reliability scores for both of the advertising media categories, indicating that the scale structure adequately represents trust in broadcasting advertising and trust in print advertising

Research questions 5-b and -c asked whether consumer trust in advertising varies across specific advertising media types. Five ad-media were examined: television, newspapers, radio, magazines, and the Internet. The results of ANOVA indicate that trust in advertising is significantly lower for Internet advertising than for the other media. Other than Internet advertising, there were no significant differences between television, newspaper, radio, and magazine advertising. Although the difference was not statistically significant, print advertising

was found to be more trusted than broadcasting advertising. Magazine advertising was the most trusted medium, followed by newspaper, television, and radio advertising. Internet advertising was the least trusted ad medium.

Among demographic characteristics, education and income were found to be associated with trust in specific ad-media. Trust in advertising was significantly higher in the lower-educated group than in the higher-educated group; respondents in the higher-income group put more trust in radio advertising and magazine advertising than in TV advertising and newspaper advertising. Also, respondents in the lower-income group tended to trust TV advertising and newspaper advertising more than radio advertising and magazine advertising.

Research question 6 asked if perceived credibility of a medium is associated with ad-trust in that medium. Across all five media investigated, media credibility was consistently associated with media-specific ad-trust, indicating that trust in a medium and trust in advertising in that medium are directly related.

## **Conclusions and Discussion**

### **Three-part dimensionality of trust in advertising**

This study empirically validates that trust in advertising is a multidimensional construct and should be measured at the multidimensional level. The results suggest that the construct of trust in advertising should be operationalized as the combination of (a) consumer perception of reliability and usefulness of advertising, (b) consumer affect toward advertising, and (c) consumer willingness to rely on advertising. *Reliability* and *Usefulness* reflect the cognitive evaluation of advertising; *Affect* reflects the emotional response of advertising; and *Willingness to Rely On* reflects the behavioral intent to use the information conveyed in advertising. The

four trust components support the proposed conceptualization (in Chapter 3) that trust in advertising is a multi-dimensional construct having cognitive, affect, and conative dimensions.

The conceptualization of trust in advertising as having cognitive, emotional, and behavioral dimensions is consistent with the existing trust conceptualizations posited by several scholars (e.g. Barber, 1983; Lewis and Weigert, 1985a; Mishra, 1996, Swan et al., 1988). Numerous researchers have conceptualized trust as a composition of a trusting belief and a trusting behavioral intention (e.g., Lewis and Weigert, 1985; Luhman, 1979; McAllister, 1995; McKnight et al., 1998; Moorman et al., 1993), and have suggested trust is a mix of cognition and emotion (Lewis and Weigert, 1985; Ohanian, 1990; Swan et al., 1988).

**Four components of trust in advertising: *Reliability, Usefulness, Affect, and Willingness to Rely On***

The four components of ad-trust, *Reliability, Usefulness, Affect, and Willingness to Rely On*, emerged from empirical investigation, and reflected seven of the initially hypothesized elements of the construct: integrity, reliability, competence, benevolence, confidence, affect, and willingness to rely on.

The items forming the *Reliability* component suggest that *Reliability* includes integrity (defined as not lying) and reliability (defined as keeping its promise), the first two hypothesized trust components. The initial items hypothesized to represent integrity and reliability were merged into the *Reliability* component: honest, truthful, credible, dependable, and reliable. Combining integrity and reliability is not uncommon in trust research. Many scholars have treated integrity and reliability as similar constructs and have often assumed that the two constructs are the same (e.g., Doney and Cannon 1997; Larzelers et al., 1980; McKnight et al.,

2002). For example, McKnight et al. (2002) reviewed the past trust studies and categorized integrity, morality, credibility, reliability, and dependability as the same construct. In addition, the researchers combined keeping promises (i.e., reliability) and not lying (i.e., honesty) into the same category, which is parallel to the *Reliability* component of the present research.

The *Reliability* component also includes items reflecting the quality of information conveyed in advertising: factual, accurate, clear, and complete. Inclusion of these items suggests that the *Reliability* component reflects consumer evaluation of the informational value of advertising. Thus, considering all items forming the *Reliability* component, it is arguable that *Reliability* refers to the consumer's inclusive evaluation of advertising's ethical principals, including honesty and reliability, and information quality of advertising.

The second component, *Usefulness*, refers to consumer feeling of how useful advertising is for purchase-related decision making. If the *Reliability* component is the evaluation of ethical standard and quality of information conveyed in advertising per se, then the *Usefulness* component is the consumer's judgment of the practical value of the credible and reliable information that optimizes consumer decision making.

Arguably, *Usefulness* is parallel to competence, a frequently investigated trust component in past trust research. Competence is often defined as the ability of the trustee to do one's job successfully and how well the trustee did his or her job (e.g., Barber 1983; Butler and Cantrell, 1984; McKnight et al., 2002). From a consumer point of view, the primary function of advertising is to provide consumers with product- or service-related information. Hence, in terms of advertising, competence can be defined as advertising's usefulness as a good source of product information.

The *Affect* component reflects the likeability of advertising. Likeability can include attractiveness, feeling of liking, enjoyability, and positive affection (e.g., Ganesan, 1994; Haley, 1996; Ohanian, 1990; Young and Albaum, 2003). Here, the *Affect* component includes items such as positive, likeable, and enjoyable, which are consistent with the prior conceptualization of likeability. Having *Affect* as one component of trust in advertising is consistent with prior findings that indicate that feelings of trust are related to liking (Swan et al., 1988; Swan, Trawick, and Silva, 1985) and the conceptual argument that both cognition and emotion form the basis of trust (Lewis and Weigert, 1985).

*Willingness to Rely On* reflects behavioral intent to act on the basis of the information conveyed in advertising. *Willingness to Rely On* has been frequently considered in past trust literature. Many trust theorists have conceptualized that trust is inseparable from taking a risk (i.e., relying on the trustee) (Coleman, 1990; Deutsch, 1958; Hall, Dugan, Zheng, and Mishra, 2001; Hosemer, 1995; Rousseau, Sitkin, Burt, and Camerer, 1998). *Willingness to Rely On* has been empirically investigated by many researchers as an element of trust (Albrecht and Travaglione, 2003; Mayer and Davis, 1999; McAllister, 1995; McKnight et al., 2002; Moorman et al., 1992, 1993;), and the ADTRUST scale component, *Willingness to Rely On*, is consistent with that part trust research.

Confidence, an initially hypothesized trust component, did not emerge as a component of trust in advertising in the present study. One possible explanation is that the construct is too intertwined with other trust components to be empirically separated. Although confidence has been often conceptualized as an important aspect of trust, it is rarely empirically estimated how confidence relates to trust. Prior conceptualization of confidence as the outcome of the firm belief of the party's reliability, integrity, care, and concern suggests that confidence is deeply

rooted in those trusting beliefs that are indistinguishable from one another (Altman and Taylor, 1973; Johnson and Grayson, 2005; Larzelere and Huston, 1980; Morgan and Hunt 1994; Rotter, 1971).

Benevolence also did not emerge as a component of trust in advertising. One plausible explanation why the study's respondents did not consider benevolence as a component of trust in advertising is that consumers apparently perceive that advertising is not altruistic. The currently used definitions of advertising generally agree that the purpose of advertising is to influence or persuade consumers to purchase advertised goods, services, or ideas (Richards and Curran, 2002). The conventional perception of advertising is that advertising is fundamentally a commercial communication tool to sell products and services (Beltramini, 2006; Coney, 2002). Consumers interviewed in the early stages of this research mentioned that advertising is a commercial message to persuade them to buy advertised products or services; thus recognized that the primary aim of advertising is not to provide them with purely benevolent, objective market information.

Another alternative explanation why benevolent did not emerge is the possibility that it is intertwined with honesty. Larzelere and Huston (1980) argue that, while benevolence and honesty are conceptually distinct, they are operationally inseparable because the two constructs are so intertwined (e.g., if a partner's honesty is questioned then his or her benevolence is also doubtful). Doney and Cannon (1997) also suggest that even though trust can be conceptualized as two distinct concepts (e.g. credibility and benevolence), in practice they may be so intertwined that they are operationally inseparable.



### **Trust in advertising is cognition-based trust.**

When the relative strength of the cognitive, emotional, and behavioral dimensions of ad-trust are compared, it would appear that the cognitive component is the backbone of consumer trust in advertising. Thirteen items out of the twenty ADTRUST items were associated with cognitive components (*Reliability* and *Usefulness*). The *Reliability* and *Usefulness* components explained most of total explained variance.

Several trust researchers have pointed out that comparative strength and importance of trust components in the formation of trust relationships vary depending on the type of social relationship (e.g., Lewis and Weigert, 1985a). The emotional content of trust is typically high in long-established primary-group relationships (Johnson-George and Swap, 1982, Rempel, Homes, and Zanna 1985), and the cognitive base of trust is more extensive and continuing in the formation of trust relationships in secondary groups (e.g., business relationships or social systems). Considering that consumer trust in advertising is trust in a social institution, which is similar to the trust relationship in a secondary group, the finding that trust in advertising is based more on cognitive elements is consistent with prior research findings.

### **Implications**

This research contributes to advertising research by providing a reliable and valid instrument to measure trust in advertising. As discussed in Chapter 1, though many trust-related constructs have been measured in advertising research, there is no consistency in the research as to the number and types of dimensions that trust in advertising comprises. In addition, there are few validated multi-item measurements of trust in advertising which have been tested for internal reliability and validity. Developing a valid instrument contributes to advertising research in various ways. According to Straub (1989), a valid instrument: (a) brings more rigor to research

and allows research to be conducted in a more systematic manner; (b) promotes “cooperative research efforts” (p.148); (c) makes research results more interpretable and clear; and (d) helps assure that research results are valid or can be trusted. These results offer the following theoretical and practical applications.

The introduction of the ADTRUST scale as a valid measure of the construct of trust in advertising should help advertising researchers develop a more in-depth understanding of how consumers respond to advertising. Advertising effect models have documented that the personal characteristics of consumers can affect their responses to advertising (e.g., MacKenzie and Lutz, 1989). The results of this research also support the argument that trust in advertising (i.e., personal characteristics) affects consumer trust in ads and attitude toward ads. Thus, considering the effects of trust in advertising on the evaluation of ads should improve the validity of research results of consumer responses to advertising.

Another theoretical implication of the development of the ADTRUST scale is that it brings inter-disciplinary research on the trust construct into advertising research. Trust has been the focus of research in the other social sciences, including psychology, sociology, management, and marketing; however, trust has rarely been the focus of systematic study in advertising research. Understanding the construct utilized in other disciplines and applying these understandings to advertising research should help advertising researchers understand advertising phenomena from a wider, interdisciplinary perspective. The ADTRUST scale is literature-grounded, and provides an inter-disciplinary typology of trust constructs that in turn can provide advertising researchers with the opportunities to understand and explore trust from the perspective of other disciplines. .

Additionally, the ADTRUST scale should be of practical value to public policy makers and advertising practitioners. First, the use of the ADTRUST scale should help public policy makers in examinations of whether current regulations are effective for consumers to receive beneficial information from advertising. The basic principal of advertising regulation is that advertising should offer truthful, not deceptive, information so as to provide consumers with useful market information (Beltramini, 2006; Obermiller and Spangenberg, 1998). If consumers do not have trust in advertising, advertising information is of little benefit. Policy research using the ADTRUST scale has the potential of improving consumer-based regulatory studies to advance consumer welfare.

Advertising practitioners might have an interest in using the ADTRUST scale. The results of this research suggest that consumer trust in advertising affects evaluation of the message of the advertisement. Conventional thinking in advertising presumes that an ad campaign will have more influence on those who exhibit more trust in advertising than those who exhibit less ad-trust. Using the ADTRUST Scale to measure levels of trust in developed advertising messages within a specific target audience should help advertising practitioners decide whether to run an advertising campaign to reach that target or whether other marketing tools, such as sales promotions or publicity, should be considered as more trustworthy communication forms.

The ADTRUST scale might also be beneficial to advertising media planners. The ADTRUST scale demonstrated the ability to measure trust in advertising in specific media. Specifically, the results found that each media type exhibits different levels of consumer trust in advertising and that ad-trust in different media is differentially related to demographic characteristics of consumers. By utilizing the ADTRUST scale, advertising planners can identify

which ad-medium is most trusted by target audiences as they attempt to select the most effective ad-media.

### **Limitations and Suggestions for Future Research**

As with other forms of social science research, there are limitations to this study. One limitation is the use of convenience samples to develop and validate the ADTRUST scale. A student survey was conducted among students enrolled in the same journalism class; a non-student adult survey was conducted among University of Georgia staff members. Convenience samples have been criticized for not accurately representing a population of interest, and thus having limited external validity. To overcome this problem, the ADTRUST scale should be validated through additional research using consumer samples collected from larger populations by random sampling methods.

With respect to the examination of the reliability of the ADTRUST scale, the research tested internal consistency among the items, but did not examine stability of the scale. Considering that consistency of a result across different points in time (i.e., stability) is necessary for the development of a reliable scale, future researchers should utilize the test-retest method to examine whether the ADTRUST generates stable results across time.

Another limitation is that the research tested only part of the nomological network involving trust in advertising. This research tested the hypothesized relationships between trust in advertising and other related ad-response constructs, including attitudinal responses to advertising and advertising credibility. The antecedents of trust in advertising were not examined, and should be the focus of future research.

Past trust research suggests that prior experience with the trustee and the trustor's propensity to trust affect trust (Blau, 1964; Gefen, 2000; Luhmann, 1979; McKnight et al., 2002). Experience with the object of trust promotes trust in the object (Blau, 1964; Luhmann 1979), and those who have higher propensity to trust are more likely to trust the party than those who have lower propensity to trust (Gefen, 2000; McKnight et al., 2002). Examining a larger nomological network including antecedents of trust in advertising would provide more understanding of the role of the trust in advertising construct relative to advertising effect models.

Future researchers may wish to investigate the relationship among components of trust and their differential effects on consumer behavior. Prior studies have suggested that the relationships among trust components might be causal; trusting beliefs predict trusting intentions (Davis et al., 1981). *Reliability* and *Usefulness* (i.e. cognitive trusting beliefs) might affect *Willingness to Rely On*. *Affect* might be posited to have independent effect, separate from cognitive beliefs, on the *Willingness to Rely On*. Future research should explore these relationships among the cognitive, affect, and behavioral dimensions of ad-trust.

Past trust research has also indicated that each of the components of trust is correlated to trust-related behaviors in different strengths (McKington et al., 2002). In the context of advertising, trust-related behaviors might include the consumer's attentiveness to advertising or the use of information conveyed in advertising. It might be hypothesized that consumer's cognitive beliefs about advertising's reliability and usefulness have direct effects on the consumer's attention to advertising or use of advertising information, or that cognitive beliefs have indirect effect on the behaviors through the trusting intent (i.e., willingness to rely on the information conveyed in advertising). The profound understanding of the relationships among

trust components and their differential effects on consumer behavior may help practitioners decide how they need to act to affect, build, and sustain consumer trust in advertising.

Additional research should extend the application of the ADTRUST scale beyond national advertising. To determine if the scale is generalizable to other types of advertising, future investigators should replicate the validation stage of this research across local/retail advertising, business-to-business advertising, public service advertising, and public relations/corporate advertising. These investigations should use ads for differently defined products/services (e.g., new products versus mature products), different media (e.g., outdoor, direct mail, directions), and include other ad-response measures (e.g., emotions, values, and sales/contributions).

In the scale development process, this study employed qualitative methods including consumer and expert interviews. These exploratory discussions with interviewees provided additional ADTRUST items which have not previously appeared in the published trust literature and enabled the researcher to interpret why some hypothesized components did not emerge as expected (i.e., benevolence). Given the success of this multi-method approach, it is recommended that future scale development research include qualitative studies such as in-depth interview or focus groups in the preliminary stages of scale development.

The product of this research – the ADTRUST Scale – offers great promise to advertising theorists and practitioners. Hopefully, its refinement and application will be the foci of a steady stream of research on trust in advertising.

## REFERENCES

- Abernethy, A. M. (1991). Differences Between Advertising and Program Exposure for Car Radio Listening, *Journal of Advertising Research*, 31 (April/May), 33-42.
- Albrecht, S., and Travaglione, A. (2003). Trust in public sector senior management during times of turbulent change, *International Journal of Human Resource Management*, 14 (2), 1-17.
- Altman, I., and Taylor, D.A. (1973). *Social Penetration: The Development of Interpersonal Relationships*. New York: Holt, Rinehart and Winston.
- Alwitt, L. F., and Prabhaker, P. R. (1994). Identifying Who Dislikes Television Advertising: Not by Demographic Alone, *Journal of Advertising Research*, 34 (November/December), 17-29.
- Andaleeb, S.S. (1992). The Trust Concept: Research Issues for Channels of Distribution. In Sheth, J.N. (Ed.), *Research In Marketing*, 11, (pp. 1-42), CT: JAI Press.
- Andaleeb, S.S., and Anwar, S.F. (1996). Factors Influencing Customer Trust in Salespersons in a Developing Country. *Journal of International Marketing*, 4(4), 35-52.
- Anderson, E., and Weitz, B. A. (1989). Determinants of Continuity in Conventional Industrial Channel Dyads, *Marketing Science*, 8 (Fall), 310-323.
- Anderson, J.C., and Gerbing, D.W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411-423.
- Anderson, J. C., and Narus, J. A. (1990). A Model of Distributor Firm and Manufacturer Firm Working Partnerships, *Journal of Marketing*, 54 (January), 42-58.
- Ball, D., Coelho, P. S., and Machas, A. (2004). The role of communication and trust in explaining customer loyalty: an extension to the ECSI model, *European Journal of Marketing*, 38 (9), 1272-1293.
- Bagozzi, R.P., and Yi, Y. (1993). Multitrait-Multimethod Matrices in Consumer Research: Critique and New Developments. *Journal of Consumer Psychology*, 2(2), 143-170.
- Banwant, M.C., and Bystrom, D.G. (2005). Young Voters' Responses to the 2004 Presidential Advertisements. *American Behavioral Scientist*, 49(2), 314-325.
- Barber, B. (1983). *The Logic and Limits of Trust*, New Brunswick, NJ: Rutgers University Press.

- Bauer, R., and Greyser, S. (1968). *Advertising in America: The Consumer View*, Boston: Harvard University Press.
- Belk, R. W. and Pollay, R. W. (1985). Images of Ourselves: The Good Life in Twentieth Century Advertising. *Journal of Consumer Research*, 11, 887-897.
- Beltramini, R.F. (2006). Consumer Believability of Information in Direct-to-Consumer (DTC) Advertising of Prescription Drugs. *Journal of Business Ethics*, 63(4), 333-343,
- Beltramini, R. F., and Evans, K. R. (1985). Perceived Believability of Research Results Information in Advertising, *Journal of Advertising*, 14 (3), 18-31.
- Berlo, D.K., Lemert, J.B. and Mertz, R.J. (1970). Dimensions for Evaluating the Acceptability of Message Sources. *Public Opinion Quarterly*, 33, 563-576.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York:Wiley.
- Bobinski, G. Jr., Cox, D., and Cox, A. (1996). Retail sale advertising, perceived retailer credibility, and price rationale, *Journal of Retailing*, 72 (3), 291-306. Bok, S. (1978). *Lying: Moral choice in Public and Private Life*. New York: Pantheon Books.
- Boush, D. M., Kim, C-H., Kahle, L. R., and Batra, R. (1993). Cynicism and Conformity as Correlates of Trust in Product Information Sources, *Journal of Current Issues and Research in Advertising*, 15 (2), 71-79.
- Bromily, P., and Cummings, L. L. (1992), Transaction costs in organizations with trust, Working paper, No.28, *Strategic Management Research Center*, University of Minnesota, Minneapolis.
- Brown, B. W. (1981). *Images of Family Life in Magazine Advertising: 1920-1978*, New York: Praeger.
- Bucy, E.P. (2003). Media Credibility Reconsidered: Synergy Effects Between On-Air and Online News. *Journalism and Mass Communication Quarterly*, 80(2), 247-264.
- Burton, S., and Lichtenstein, D.R. (1988). The Effect of Ad Claims and Ad Context on Attitude toward the Advertisement. *Journal of Advertising*, 17(1), 3-11.
- Butler, J. K. (1986). Reciprocity of Dyadic Trust in Close Male-Female Relationships, *The Journal of Social Psychology*, 126 (5), 579-591.
- Bulter, J.K. (1991). Toward Understanding and Measuring Conditions of Trust: Evolution of a Conditions of Trust Inventory. *Journal of Management*, 17(3), 643-663.
- Butler, J. K., and Cantrell, R. S. (1984). A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates, *Psychological Reports*, 55, 19-28.



- Calfee, J. E., and Ringold, D. J. (1994). The 70% Majority: Enduring Consumer Beliefs about Advertising, *Journal of Public Policy & Marketing*, 13 (2), 228-238.
- Campbell, D. T. (1960). Recommendations for APA Test Standards Regarding Construct, Trait, or Discriminant Validity, *American Psychologist*, 15 (August), 546-553.
- Campbell, D. T., and Fiske, D. W. (1959). Convergent and Discriminant Validity by the Multitrait-Multimethod Matrix, *Psychological Bulletin*, 56 (March), 81-105.
- Carey, J. W. (1960). Advertising: An Institutional Approach, in C. H. Sandage and V. Fryburger (Eds.), *The Roles of Advertising*, (p18-34), Homewood, IL: Richard D. Irwin, Inc.
- Chaudhuri, A., and Holbrook, M.B.(2002). Product Class Effects on Brand Commitment and Brand Outcomes: The Role of Brand Trust and Brand Affect? *Journal of Brand Management*, 10 (1) 33-58.
- Cho, C., and Cheon, H.J. (2004). Why Do People Avoid Advertising On The Internet? *Journal of Advertising*, 33(4), 89-97.
- Choices III. (2005). University of Georgia Library.
- Chowdhury, S. (2005). The Role of Affect- and Cognition-based Trust in Complex Knowledge Sharing. *Journal of Managerial Issues*, 17(3), 310-326.
- Churchill, G. A. Jr. (1979). A Paradigm for Developing Better Measures of Marketing Construct, *Journal of Marketing Research*, 16 (February), 64-73.
- Comrey, A. (1970). *Manual for the Comrey Personality Scales*. San Diego, CA:EdiTs.
- Coney, S. (2002). Direct-to-Consumer Advertising of Perception Pharmaceuticals: A Consumer Perspective from New Zealand. *Journal of Public Policy and Marketing*, 21, 213-223.
- Cronin, J. J., and Menelly, N. E. (1992). Discrimination vs. Avoidance: 'Zipping' of Television Commercials, *Journal of Advertising*, 21(Summer), 1-7.
- Crosby, L. A., Evans, K., and Cowles, D. (1990). Relationship quality in service selling: an interpersonal influence perspective, *Journal of Marketing*, 54 (July), 68-81.
- Cummings, L.L., and Bromiley, P. (1996). The Organizational Trust Inventory (OTI): Development and Validation. In Kramer, R.M., and Tyler, T.R. (Eds.), *Trust in Organizations: Frontiers of Theory and Research*, (pp. 302-330), California: Sage Publications
- Davis, F.D., Bagozzi, R.P., and Warshaw, P.R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982-1003.

- Delgado-Ballester, E., Munuera-Alemán, J.L., and Yagüe-Guillén, M.J. (2003). Development and Validation of a Brand Trust Scale. *International Journal of Market Research*, 45(1), 35-53.
- Derbaix, C. and Pecheux, C. (2003). A New Scale to Assess Children's Attitude toward TV Advertising. *Journal of Advertising Research*, 43, 390-399.
- Deutsch, M. (1958). Trust and Suspicion, *Journal of Conflict Resolution*, 2 (4), 265-279.
- DeVillie, R. F. (1991). *Scale Development: Theory and Application*. Newbury Park, CA: Sage Publications.
- Doney, P.M. and Cannon, J.P. (1997). An Examination of the Nature of Trust in Buyer-Seller Relationships. *Journal of Marketing*, 61 (April), 35-51.
- Ducoffe, R. H. (1996). Advertising Value and Advertising on the Web, *Journal of Advertising Research*, 36 (September/October), 21-35.
- Erdogan, B. Z. (1999). Celebrity Endorsement: A Literature Review, *Journal of Marketing Management*, 15 (4), 291-314.
- Ferres, N., Julia, C., and Travaglione, A. (2004). Co-Worker Trust as a social catalyst for constructive employee attitudes, *Journal of Managerial Psychology*, 19 (6), 608-622.
- Flanagin, A. J., and Metzger, M. J. (2000). Perceptions of Internet Information Credibility, *Journalism and Mass Communication Quarterly*, 77 (3), 515-540.
- Flynn, L.R. (1993). Do Standard Scales Work in Older Samples? *Marketing Letter*, 4(April), 127-138.
- Fornell, C., and Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(February), 39-50.
- Gambetta, D. (1988). Can We Trust Trust? In D. Gambetta (Ed.), *Trust: Making and Breaking Cooperative Relations*, (pp. 213-238), New York: Basil Blackwell.
- Ganesan, S. (1994). Determinants of Long-Term Orientation in Buyer-Seller Relationships. *Journal of Marketing*, 58 (April), 1-19.
- Ganesan, S., and Hess, R.L. (1997). Dimensions and Levels of Trust: Implications for Commitment to a Relationship," *Marketing Letters*, 8 (4), 439-448.
- Gaziano, C., and McGrath, K. (1986). Measuring the Concept of Credibility, *Journalism Quarterly*, 63 (Autumn), 451-462.
- Gefen, D. (2000). E-Commerce: The Role of Familiarity and Trust. *Omega: Internet Journal of Management Science*, 28(6), 725-737.

- Gefen, D., Karahanna, E., and Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model, *MIS Quarterly*, 27 (1), 51-90.
- Gerbing, D. W., and Anderson, J. C. (1988). An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment, *Journal of Marketing Research*, 25 (May), 186-192.
- Golembiewski, R. T., and McConkie, M. (1975). The Centrality of Interpersonal Trust in Group Processes, in C. L. Cooper (Ed.), *Theories of Group Processes*, (pp. 131-185). New York: Wiley.
- Granovetter, M. S. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91, 481-510.
- Grayson, K., and Ambler, T. (1999). The Dark Side of Long-Term Relationships in Marketing Services, *Journal of Marketing Research*, 36 (February), 132-141.
- Guenzi, P. (2002). Sales Force Activities and Customer Trust, *Journal of Marketing Management*, 18, 749-778.
- Gutiérrez, S.S., Cillán, J.G., and Izquierdo, C.C. (2003). The Consumer's Relational Commitment: Main Dimensions and Antecedents. *Journal of Retailing and Consumer Services*, 11, 351-367.
- Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W.C. (1998). *Multivariate Data Analysis*, 5<sup>th</sup> ed. New Jersey: Prentice Hall.
- Haley, E. (1996). Exploring the Construct of Organization as Source: Consumers' Understanding of Organizational Sponsorship of Advocacy Advertising, *Journal of Advertising*, 25 (2), 19-35.
- Hall, M. A., Dugan, E., Zheng, B., and Mishra, A. K. (2001). Trust in physicians and medical institutions: What is it, Can it be measured, and Does it matter? *The Milbank Quarterly*, 79 (4), 613-639.
- Haller, T. F. (1974). What Students Think of Advertising, *Journal of Advertising Research*, 14 (February), 33-38.
- Hammond, S. L. (1987). Health Advertising: The Credibility of Organizational Sources, *Communication Yearbook*, 10, 613-628.
- Hann, P., and Berkey, C. (2002). A Study of the Believability of the Forms of Puffery. *Journal of Marketing Communications*, 8, 243-256.
- Hawes, J. M., Mast, K. E., and Swan, J. E. (1989). Trust Earning Perceptions of Sellers and Buyers, *Journal of Personal Selling and Sales Management*, 9 (Spring), 1-8.

- Heretick, D.M.L. (1981). Gender-Specific Relationships Between Trust-Suspicion, Locus of Control, and Psychological Distress. *Journal of Psychology*, 108, 267-274.
- Hess, J.S. (1995). Construction and Assessment of a Scale to Measure Consumer Trust. In B.B. Stern & G.M. Zinkhan (Eds.) *AMA Educators Conference: Enhancing Knowledge Development in Marketing*, 6, AMA, Chicago, IL, 20-26.
- Holbrook, M.B. (1987). Mirror, Mirror, on the Wall, What's Unfair in the Reflections on Advertising? *Journal of Marketing*, 51(July), 95-103.
- Hosmer, L. T. (1995). Trust: the Connecting Link Between Organizational Theory and Philosophical Ethics, *Academy of Management Review*, 20 (2), 379-403.
- Hovland, C. and Janis, I. L. (1959). *Personality and Persuasibility*. New Haven: Yale University Press.
- Hovland, C. I., Janis, I. L., and Kelly, H. H. (1953). *Communication and Persuasion*. New Haven: Yale University Press.
- Hu, L., and Bentler, P.M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Structural Equation Modeling*, 6, 1-55.
- Insko, C.A., Kirchner, J.L., Pinter, B., Efav, J., and Wildschut, T. (2005). Interindividual-Intergroup Discontinuity as a Function of Trust and Categorization: The Paradox of Expected Cooperation. *Journal of Personality and Social Psychology*, 88(2), 365-385.
- James, W. I., and Kover, A. (1992). Do Overall Attitudes toward Advertising Affect Involvement with Specific Advertisements? *Journal of Advertising Research*, 32 (5), 78-83.
- Jarvenpaa, S.L., and Tractinsky, N. (1999). Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer Mediated Communication*, 5(2), 1-35.
- Jarvenpaa, S. L., Tractinsky, N., and Vitale, M. (2000). Consumer Trust in an Internet store, *Information Technology and Management*, 1, 45-71.
- Johnson, D., and Grayson, K. (2005). Cognitive and affective trust in service relationships, *Journal of Business Research*, 58 (2005), 500-507.
- Johnson, T. J., and Kaye, B. K. (1998). Cruising Is Believing?: Comparing Internet and Traditional Sources on Media Credibility Measures, *Journalism and Mass Communication Quarterly*, 75 (2), 325-340.
- Johnson-George, C., and Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other, *Journal of Personality and Social Psychology*, 43, 1306-1317.

- Joreskog, K.G. (1971). Statistical Analysis of Sets of Congeneric Tests. *Psychometrika*, 36, 109-133.
- Kenney, M. S., Ferrell, L. K., and LeClair, D. T. (2001). Consumer's trust of salesperson and manufacturer: an empirical study, *Journal of Business Research*, 51, 73-86.
- Kiousis, S. (2001). Public Trust or Mistrust? Perceptions of Media Credibility in the Information Age. *Mass Communication and Society*, 4(4), 381-403.
- Lafferty, B. A., and Goldsmith, R. E. (1999). Corporate Credibility's Role in Consumers' Attitudes and Purchase Intentions When a High versus a Low Credibility Endorser is used in the Ad, *Journal of Business Research*, 44, 109-116.
- Lane, W. R., King, K., and Russell, J. T. (2004). *Kleppner's Advertising Procedure*, (16<sup>th</sup> ed.) Person Education, Inc. Upper Saddle River, New Jersey.
- Larzelere, R. E., and Huston, T. L. (1980). The Dyadic Trust Scale: Toward Understanding Interpersonal Trust in Close Relationship, *Journal of Marriage and the Family*, August, 595-604.
- Leathers, D.G. (1992). *Successful Nonverbal Communications: Principals and Applications*. New York: Macmillan.
- Lee, S., and Lumking, J. R. (1992). Differences in Attitude toward TV Advertising: VCR Usage as a Moderator, *International Journal of Advertising*, 11 (4), 333-342.
- Lee, M. K. O., and Turban, E. (2001). A Trust Model for Consumer Internet Shopping, *International Journal of Electronic Commerce*, 6 (1), 75-91.
- Lewicki, R. J., and Bunker, B. B. (1995a). Trust in Relationships: A Model of Development and Decline. In B. B. Bunker, J. Z. Rubin and Associates (Eds.), *Conflict, Cooperation and Justice* (pp. 133-176), San Francisco: Jossey-Bass Publishers.
- Lewicki, R. J., and Bunker, B. B. (1995b). Developing and Maintaining Trust in Work Relationships. In R. M. Kramer and T. R. Tyler (Eds.), *Trust in Organizations: Frontiers of theory and research* (pp. 114-139), California: Sage Publications.
- Lewis, J. D., and Weigert, A. (1985a). Trust as a Social Reality, *Social Forces*, 63 (4), 967-985.
- Lewis, J. D., and Weigert, A. (1985b). Social Atomism, Holism and Trust, *The Sociological Quarterly*, 26 (4), 455-471.
- Luhmann, N. (1979). *Trust and Power*. New York: John Wiley.
- Luhmann, N. (1980). *Trust and Power*. New York: Wiley.

- Luhman, N. (1988). Familiarity, Confidence, Trust: Problems and Alternatives. In *Trust: Making and Breaking Cooperative Relations*, D. Gambetta (Ed.), New York: Basil Blackwell, 1988, pp. 94-107.
- MacKenzie, S. B., and Lutz, R. J. (1989). An Empirical Examination of the Structural Antecedents of Attitude Toward the Ad in an Advertising Pretesting Context, *Journal of Marketing*, 53 (April). 48-65.
- MacKenzie, S.B., Lutz, R.J., and Belch, G.E. (1986). The Role of Attitude toward the Ad as A Mediator of Advertising Effectiveness: A Test of Competing Explanations. *Journal of Marketing Research*, 23(May), 130-143.
- Mayer, R. C., Davis, J. H., and Schoorman, F. D. (1995). An integration model of organizational trust, *Academy of management review*, 20 (3), 709-734.
- Mayer, R. C., and Davis, J. H. (1999). The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment, *Journal of Applied Psychology*, 84 (1), 123-136.
- McAllister, D. J. (1995). Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations, *Academy of Management Journal*, 38 (1), 24-59.
- McCroskey, J.C., and Jenson, T.A. (1975). Image of Mass Media News Sources. *Journal of Broadcasting*, 19(2), 169-180.
- McKnight, D. H., Choudhury, V., and Kacmar, C. (2002). Developing and Validating Trust Measures for E-Commerce: An Integrative Typology. *Information System Research*, 13 (3), 334-359.
- McKnight, D. H., Cummings, L. L., and Chervany, N. L. (1998). Initial Trust Formation in New Organizational Relationships. *Academy of Management Review*, 23 (3), 472-490.
- Menon, A. M., Deshpande, A., Perri, M. III, and Zinkhan, G. (2002). Trust in Online Prescription Drug Information Among Internet Users: The Impact on Information Search Behavior After Exposure to Direct-to-Consumer Advertising. *Health Marketing Quarterly*, 20 (1), 17-35.
- Meyers, L.S., Gamst, G., and Guarino, A.J. (2006). *Applied Multivariate Research: Design and Interpretation*. Thousand Oak, California: Sage Publications.
- Michalos, A. C. (1990). The Impact of Trust on Business, International Security, and the Quality of Life. *Journal of Business Ethics*, 9, 619-638.
- Michell, A.A., and Olson, J.C. (1981). Are Product Attribute Beliefs the Only Mediator of Advertising Effects on Brand Attitude? *Journal of Marketing Research*, 28(August), 318-332.

- Mishra, A. K. (1996). Organizational responses to crisis: The centrality of trust. In R.M. Kramer & T. Tyler (Eds.), *Trust in organizations*. Newbury Park, CA:Sage
- Moorman, C., Zaltman, G., and Deshpande, R. (1992). Relationship between providers and uses of market research: the dynamic of trust within and between organizations. *Journal of marketing research*, 26 (August), 314-328.
- Moorman, C., Deshpande, R., and Zaltman, G. (1993). Factors Affecting Trust in Market Research Relationships, *Journal of Marketing*, 57 (January), 81-101.
- Mord, M. S., and Gilson, E. (1985). Shorter Units: Risk-Responsibility-Reward, *Journal of Advertising Research*, 25 (August/September), 9-19.
- Morgan, R.M., and Hunt, S.D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58 (July), 20-38.
- Morrison, D.E., and Firmstone, J. (2000). The Social Function of Trust and Implications for E-Commerce. *International Journal of Advertising*, 19, 599-623.
- Muehling, D. D. (1987). An Investigation of Factors Underlying Attitudes-Toward-Advertising-In-General, *Journal of Advertising*, 16 (1), 32-40.
- Nelson, P. (1974). The Economic Value of Advertising, in Y. Brozen (ed.), *Advertising and Society*, (pp. 43-65), New York: New York University Press.
- Newell, S. J., and Goldsmith, R. E. (2001). The Development of a Scale to Measure Perceived Corporate Credibility, *Journal of Business Research*, 52, 235-247.
- Nigro, F.A. (1969). *Management—Employee Relations in the Public Service*. Chicago, Ill.: Public Personnel Association
- Obermiller, C., and Spangenberg, E. R. (1998). Development of a Scale to Measure Consumer Skepticism Toward Advertising, *Journal of Consumer Psychology*, 7 (2), 159-186.
- O’Cass, A. (2002). Political Advertising Believability and Information Source Value During Election, *Journal of Advertising*, 26 (1), 63-74.
- Ohanian, R. (1990). Construction and Validation of a Scale to Measure Celebrity Endorsers’ Perceived Expertise, Trustworthiness, and Attractiveness, *Journal of Advertising*, 19 (3), 39-52.
- Olney, T.J., Holbrook, M.B., and Batra, R. (1991). Consumer Responses to Advertising: The Effects of Ad Content, Emotions, and Attitude toward the Ad on Viewing Time. *Journal of Consumer Research*, 17(March), 440-453.
- Omodei, M.M. and McLennan, J. (2000). Conceptualizing and Measuring Global Interpersonal Mistrust-Trust. *Journal of Social Psychology*, 140(3), 279-294.

- Pavlou, P. A. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model, *International Journal of Electronic Commerce*, 7 (3), 101-134.
- Pearce, W.B. (1974). Trust in Interpersonal Relationships, *Speech Monographs*, 41(3), 236-244.
- Peter, J. P. (1981). Construct Validity: A Review of Basic Issues and Marketing Practices, *Journal of Marketing Research*, 18 (May), 133-145.
- Peterson, T. (1975). *Magazine in the Twentieth Century*, 2<sup>nd</sup> edition, Urbana, IL: University of Illinois Press
- Pittatore, O. (1983). The Image of Italy in Ads in Five U.S. Magazines. *Journalism Quarterly*, 60(4), 728-731
- Plank, R. E., Reid, D. A., and Pullins, E. B. (1999). Perceived Trust in Business-to-Business Sales: A New Measure, *Journal of Personal Selling and Sales Management*, 16 (3), 61-71.
- Pollay, R. W., and Mittal, B. (1993). Here's the Beef: Factors, Determinants, and Segments in Consumer Criticism of Advertising, *Journal of Marketing*, 57 (July), 99-114.
- Random House Webster's Unabridged Dictionary 2<sup>nd</sup> Edition (1998). NY: Random House Inc.
- Reast, F.D. (2005). Brand Trust and Brand Extension Acceptance: The Relationship. *Journal of Product & Brand Management*, 14(1), 4-13.
- Reid, L. N., and Soley, L. C. (1982). Generalized and Personalized Attitudes toward Advertising's Social and Economic Effects, *Journal of Advertising*, 11 (3), 3-7.
- Rempel, J. K., Holmes, J. G., and Zanna, M. P. (1985). Trust in Close Relationships, *Journal of Personality and Social Psychology*, 49 (1), 95-112.
- Richards, J.I., and Curran, C.M. (2002). Oracles on Advertising: Searching for a Definition. *Journal of Advertising*, 31(2), 63-77.
- Ring, P. S., and Van de Ven, A. H. (1992). Structuring cooperative relationships between organizations, *Strategic Management Journal*. 13, 483-498.
- Rotter, J. B. (1966). Generalized expectancies for internal vs. external control, *Psychological Monography*, 80, 1-28 (Whole No. 609)
- Rotter, J. B. (1967). A New Scale for the Measurement of Interpersonal Trust, *Journal of Personality*, 35, 651-665.
- Rotter, J. B. (1971). Generalized Expectancies for Interpersonal Trust, *American Psychologist*, 26 (May), 443-450.



- Rotter, J. B. (1980). Interpersonal Trust, Trustworthiness, and Gullibility, *American Psychologist*, 35 (1), 1-7.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., and Camerer, C. (1998). Not so different after all: a cross discipline view of trust, *Academy of Management Review*, 23 (3), 393-404.
- Sandage, C. H. (1973). Some Institutional Aspects of Advertising, *Journal of Advertising*, 1, 6-9.
- Sandage, C. H., and Leckenby, J. D. (1980). Student Attitudes Toward Advertising: Institution vs. Instrument, *Journal of Advertising*, 9 (2), 29-32.
- Scanzoni, J. (1979). Social Exchange and Behavioral Interdependence. In R.L. Burgess & T.L. Huston (Eds.), *Social Exchange in Developing Relationships*, New York: Academic Press.
- Schlosser, A. E., Shavitt, S., and Kanfer, A. (1999). Survey of Internet Users' Attitudes Toward Internet Advertising, *Journal of Interactive Marketing*, 13 (3), 34-54.
- Shapiro, S. P. (1987). The Social Control of Impersonal Trust, *American Journal of Sociology*, 93, 623-658.
- Shavitt, S., Lowrey, P., and Haefner, J. (1998). Public Attitude Toward Advertising: More Favorable Than You Might Think, *Journal of Advertising Research*, 38 (July/August), 7-22.
- Sheppard, B. H., Hartwick, J., and Warshaw, P. R. (1988). The Theory of Reasoned Action: A Meta Analysis of Past Research with Recommendations for Modifications in Future Research, *Journal of Consumer Research*. 15 (3), 325-343.
- Sheth, J.N. (1974). Measurement of Advertising Effectiveness: Some Theoretical Considerations. *Journal of Advertising*, 3(1), 6-11.
- Shorstrom, E. L. (1975), *Personal Orientation Dimension*. San Diego, CA: EdITS
- Speck, P.S., and Elliott, M.T. (1997). Predictors of Advertising Avoidance in Print and Broadcast Media, *Journal of Advertising*, 26 (Fall), 61-76.
- Stamm, K., and Dube, R. (1994). The Relationship of Attitudinal Components to Trust in Media, *Communication Research*, 21(1), 105-123.
- Straub, D.W. (1989). Validating Instruments in MIS Research. *MIS Quarterly*, 13(2), 147-165.
- Sumasundaran, T. N., and Light, C. D. (1991). A Cross-Cultural and Media Specific Analysis of Student Attitudes toward Advertising, in Mary Gilly et al. (Eds.), *Proceedings of the American Marketing Associations 1991 Educator's Conference*, 2 (pp. 666-669), Chicago: American Marketing Association.

- Swan, J. E., Bowers, M. R., and Richardson, L. D. (1999). Customer Trust in the Salesperson: An Integrative Review and Meta-Analysis of the Empirical Literature, *Journal of Business Research*, 44, 93-107.
- Swan, J. E., Trawick, I. F. Jr., Rink, D. R., and Roberts, J. J. (1988). Measuring Dimensions of Purchaser Trust of Industrial Salespeople, *Journal of Personal Selling and Sales Management*, 8 (May), 1-9.
- Tedesco, J.C. (2002). Televised Political Advertising Effects: Evaluating Responses during the 2000 Robb-Allen Senatorial Election. *Journal of Advertising*, 31(1), 37-48.
- University of Georgia (2006). *Quick Facts about UGA*. Retrieved May 5, 2006 from the University of Georgia website: <http://www.uga.edu/profile/facts.html>
- Vanden Berge, B., Soley, L., and Reid, L. (1981). Factor Study of Dimensions of Advertiser Credibility, *Journalism Quarterly*, 58 (4), 629-631.
- Vauhgn, R. (1986). How Advertising Works: A Planning Model Revisited. *Journal of Advertising Research*, 26, 59-66.
- Weber, L. R., and Carter, A. (1998). On Constructing Trust: Temporality, Self-Disclosure, and Perspective-Taking, *International Journal of Sociology and Social Policy*, 18 (1), 7-26.
- Wheless, L. R., and Grotz, J. (1977). The measurement of trust and its relationship to self-disclosure, *Human Communication Research*, 2, 338-346.
- Whitehead, J.L. (1968). Factors of Source Credibility. *Quarterly Journal of Speech*, 54, 59-63.
- Williamson, O. E. (1993). Calculativeness, Trust, and Economic Organization. *Journal of Law and Economics*, 36 (April): 453-486
- Wimmer, R. D., and Dominick, J. (2000). *Mass Media Research: An Introduction* (6<sup>th</sup> Ed.), Bermond, CA: Wadsworth Publishing Company.
- Wolin, L. D., Korgaonkar, P., and Lund, D. (2002). Beliefs, Attitudes, and Behavior Towards Web Advertising, *International Journal of Advertising*, 21 (1), 87-113.
- Worchel, P. (1979). Trust and Distrust. In Austin, W.G. and Worchel, S. (Eds.), *The Social Psychology of Intergroup Relations*, (pp. 174-187), Belmont: Wadsworth.
- Wrightsmann, L. S. (1974), *Assumptions about Human Nature: A Social-Psychological Approach*. Monterey, CA: Brooks/Cole.
- Yang, K.C.C., (2003). Internet Users' Attitudes toward and Beliefs about Internet Advertising: An Exploratory Research from Taiwan, *Journal of International Consumer Marketing*, 15 (4), 43-65.

- Young, L., and Albaum, G. (2003). Measurement of Trust in Salesperson-Customer Relationship in Direct Selling. *Journal of Personal Selling and Sales Management*, 23(3), 253-269.
- Yousafzai, S. Y., Pallister, J. G., and Foxall, G. L. (2003). A Proposed model of e-trust for electronic banking, *Technovation*, 23, 847-860.
- Zaichkowsky, J. L. (1985). Measuring the Involvement Construct, *Journal of Consumer Research*, 12 (December), 341-352.
- Zaichkowsky, J. L. (1986). Conceptualizing Involvement, *Journal of Advertising*, 15 (2), 4-14.
- Zaichkowsky, J. L. (1994). The Personal Involvement Inventory: Reduction, Revision, and Application to Advertising, *Journal of Advertising*, 23 (4), 59-70.
- Zaltman, G., and Moorman, C. (1988). The Importance of Personal Trust in the Use of Research." *Journal of Advertising Research*, 28, (October/November), 16-24.
- Zaheer, A., McEvily, B., and Perrone, V. (1998). Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance, *Organization Science*, 9 (2), 141-159.
- Zand, D. E. (1972). Trust and managerial problem solving, *Administrative Science Quarterly*, 17, 229-239.
- Zucker, L. G. (1986). Production of Trust: Institutional Sources of Economic Structure, 1840-1920. In B. M. Staw and L.L. Cummings (Eds.), *Research in Organizational Behavior*, 8, (pp. 53-111). Greenwich, CT: JAI Press.

**APPENDIX A:**

**Past Measures Related to Trust in Advertising**

### Appendix A. Past Measures Related to Trust in Advertising

Study	Construct	Measures
Bauer and Greyser (1968)	Subscale of Attitude toward Advertising (AG)	Providing true picture, Resulting in better products, Raising our standard of living, promoting unnecessary consumption
Whitehead (1968)	Source Credibility	Trustworthiness, Professionalism, Dynamism, Objectivity
Berlo, Lemert, and Mertz (1970)	Source Credibility	Safety, Qualification, Dynamism
McCroskey and Jenson (1975)	Media Credibility	Competency, Character, Sociability, Composure, and Extroversion
Sandage and Leckenby (1980)	Subscale of AG	Honest-Dishonest, Sincere-Insincere
Beltramini and Evans (1985)	Perceived Believability of Advertisement	Believable, Trustworthy, Convincing, Credible, Reasonable, Honest, Likely, Unquestionable, Conclusive, Authentic
Gaziano and McGrath (1986)	Media Credibility	Fairness, Completeness, Accuracy, Privacy, Reader's interest, Community affiliated, Factual, Overall trust, Well-training, Motivation for money
Hammond (1987)	Organization Credibility	Expertise; Trustworthiness
Muehling (1987)	Subscale of AG	Presenting a true picture, Truthful; Reliable source of information, Not giving people enough information
MacKenzie and Lutz (1989)	Ad Credibility Advertiser Credibility Advertising Credibility	Convincing-unconvincing Believable-unbelievable Biased-unbiased
Ohanian (1990)	Endorser Credibility	Perceived expertise, Trustworthiness; Attractiveness
Leathers (1992)	Source Credibility	Competence, Trustworthiness, and Dynamism
Boush et al. (1993)	Trust in advertising	Trust absolutely-don't trust at all
Pollay and Mittal (1993)	Subscale of AG	Falsity/No Sense

### Appendix A. Past Measures Related to Trust in Advertising (Cont'd)

Study	Construct	Measures
Alwitt and Prabhaker (1994)	Subscale of Attitude toward TV advertising	Informational benefit, Non-informative
Stamm and Dube (1994)	Trust in Media	Overall trust
Bobinski et al. (1996)	Retail Advertiser Credibility	Trustworthiness
Haley (1996)	Organization Credibility	Trustworthiness, Competence, Attractiveness (likeability)
Johnson and Kaye (1998,2000, 2002)	Media Credibility	Believability, Accuracy, Lack of bias and depth
Shavitt et al. (1998)	Subscale of AG	Trustworthiness
Schlosser et al. (1999)	Subscale of AG	Trustworthiness
Lafferty and Goldsmith (1999)	Endorser Credibility Corporate Credibility	Attractiveness, Trustworthiness, Expertise, Trustworthiness
Flanagin and Metzger (2000)	Media Credibility	Believability, Accuracy, Trustworthiness, Bias and completeness
Kiouisis (2001)	Media Credibility	Factuality, Motivation for money, Privacy, Community concern, and Overall trust
Newell and Goldsmith (2001)	Corporate Credibility	Expertise and Trustworthiness
Haan and Berkey (2002)	Believability of puffery	Believable-Unbelievable
Menon et al. (2002)	Trust in online information	Accuracy
Bucy (2003)	Media Credibility	Believability, Fairness, Accuracy, Informativeness, and Depth

**APPENDIX B:**  
**Prior Conceptualizations of Trust**

## Appendix B: Prior Conceptualizations of Trust

### Research Approach: Trust as Individual Personality (Generalized Predisposition to Trust)

Study	Definition of Trust	Measures
Rotter (1967)	An expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon	Credibility of social institution, Belief in other's sincerity, and Caution
Heretick (1981)	Positive expectancy concerning the motives of other individuals	Honesty, Fairness, Openness, Selfishness.
Michalos (1990)	A relatively informed attitude or propensity to allow oneself and perhaps others to be vulnerable to harm in the interest of some perceived greater good	Conceptual
Omodei and McLennan (2000)	[Mistrust] is a tendency to view other individuals as mean, selfish, malevolent, unreliable, and not to be depended on to treat one well	Honesty, benevolence, Selfishness, Openness
Insko et al. (2005)	Expectation of goodwill and benign intent	Trustworthiness

### Research Approach: Trust as Social Good (From Societal View)

Study	Definition of Trust	Measures
Deutsch (1958)	Expectation of the occurrence of an event even if he expects its occurrence and his expectation leads to behavior which he perceives to have greater negative motivational consequences if the expectation are not confirmed than positive motivational consequences if it is confirmed.	A choice to co-operate (Utilizing a two-person non-zero-sum game)
Barber (1983)	Expectation of (1) the persistence and fulfillment of the natural social order; (2) technically competent role performances; (3) fiduciary responsibility	Conceptual
Lewis and Weigert (1985b)	Members of that system act according to and are secure in the expected futures constituted by the presence of each other or their symbolic representations	Conceptual
Zucker (1986)	A set of social expectations shared by everyone involved in an economic exchange. Trust has three sources: process based, person based and institution based.	Conceptual
Shapiro (1987)	A social relationship in which principals invest resources, authority or responsibility in another on their behalf for some uncertain future return	Conceptual
Weber and Carter (1998)	One's belief that the other will take one's perspective into account when decision-making and will not act in ways to violate the moral standards of the relationship	Conceptual



## Appendix B: Prior Conceptualizations of Trust (Cont'd)

### Research Approach: Trust toward a specific other (in Close Relationships)

Study	Definition of Trust	Measures
Wheless and Gotz (1977)	A process of engaging in certain types of dependent behaviors which are related to favorable perceptions of the trustworthiness of another person (or people in general) in somewhat risky situations where the expected outcomes that are dependent upon other person(s) are not known with certainty	
Scanzoni (1979)	Actor's willingness to arrange and repose his or her activities on Other because of confidence that Other will provide expected gratifications	Conceptual.
Larzelere and Huston (1980)	Belief on another person's benevolence and honesty	Honesty, Benevolence, Confidence, Sincerity, Fairness, Dependence
Jonson-George and Swap (1982)	Reliability and emotional trust.	Reliability, Emotional trust
Rempel, Holmes and Zanna (1985)	A generalized expectation related to the subjective probability an individual assigns to the occurrence of some set of future events	Predictability, Dependability, Faith
Butler (1986)	No explicit definition	Use Larzelere and Huston(1980)'s Dyadic Trust Scale

### Research Approach: Trust toward a specific other (in Organizational Relationships)

Study	Definition of Trust	Measures
Golembiewski and McConkie (1975)	Reliance on, or confidence in, some event, process or person. Trust is strongly linked to confidence in, and overall optimism about, desirable events taking place.	Conceptual
Butler and Cantrell (1984)	No explicit definition	Integrity, Competence, Consistency, Loyalty, Openness
Gambetta (1988)	The probability that he will perform an action that is beneficial or at least not detrimental is high enough for us to consider engaging in some form of cooperation with him.	Conceptual

## Appendix B: Prior Conceptualizations of Trust (Cont'd)

### Research Approach: Trust toward a specific other (in Organizational Relationships) (cont'd)

Study	Definition of Trust	Measures
Zaltman and Moorman (1988)	An interpersonal or interorganizational state that reflects the extent to which the parties can predict one another's behavior; can depend on one another when it counts; and have faith that the other will continue to act in a responsive manner despite an uncertain future	Qualitative Interview No Measure
Butler (1991)	No explicit definition	Availability, Competence, Consistency, Discreetness, Fairness, Integrity, Loyalty, Openness, Promise fulfillment, and Receptivity.
Hosmer (1995)	the reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group or firm to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange	Conceptual
McAllister (1995)	The extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another	<ul style="list-style-type: none"> <li>▪ <u>Cognition-based trust</u>: responsibility, ability, reliability, and trustworthiness</li> <li>▪ <u>Affect-based trust</u>: openness, emotional investment, and genuine care</li> </ul>
Mayer et al. (1995)	The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party	Ability, Benevolence and Integrity
Rousseau et al. (1998)	A psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another.	Conceptual
Mayer and Davis (1999)	A willingness to be vulnerable to the actions of another party	Ability, Benevolence, Integrity

## Appendix B: Prior Conceptualizations of Trust (Cont'd)

### Research Approach: Trust in Economic Transaction (Business to Business Setting)

Study	Definition of Trust	Measures
Swan et al. (1988)	The emotion of a buyer feeling secure or insecure about relying on the salesperson and belief about the trustworthiness of a salesperson in a situation where the buyer faces some risk if the salesperson is not trustworthy	Honesty, Dependable, Competent, Responsible, Likeable
Anderson and Naurus (1990)	The firm's belief that another company will perform actions that will result in positive outcomes for the firm, as well as not take unexpected actions that would result in negative outcomes for the firm.	Overall Trust
Moorman et al. (1992)	Willingness to rely on an exchange partner in whom one has confidence	Willingness to take a risk, Confidence in relying on. Overall trust
Bromily and Cummings (1992)	Expectation that another individual or group will (1) make a good faith effort to behave in accordance with any commitments, both explicit or implicit; (2) be honest in whatever negotiations preceded those commitments; (3) not take excessive advantage of others even when the opportunity is available.	
Ring and Van de Ven (1992)	Confidence in the other's goodwill	Conceptual
Moorman et al. (1993)	Willingness to rely on an exchange partner in whom one has confidence	Willingness to take a risk, Confidence in relying on. Overall trust. <ul style="list-style-type: none"> <li>▪ <u>Antecedent of trust</u>: expertise, uncertainty reduction, sincerity, integrity, dependability, collective orientation, tact, timeliness, confidentiality, congeniality</li> </ul>
Ganesan (1994)	Willingness to rely on a partner in whom one has confidence based on belief in that party's credibility and benevolence	<ul style="list-style-type: none"> <li>▪ <u>Credibility</u>: Frank, reliable, knowledgeable, open</li> <li>▪ <u>Benevolence</u>: sacrifice, care for customers, friendly</li> </ul>
Morgan and Hunt (1994)	Confidence in an exchange partner's reliability and integrity	Reliability and Integrity

## Appendix B: Prior Conceptualizations of Trust (Cont'd)

### Research Approach: Trust in Economic Transaction (Business to Business Setting) (Cont'd)

Study	Definition of Trust	Measures
Andaleeb and Anwar (1996)	Willingness to risk being influenced by a salesperson	Willingness to purchase, Feeling of risky, Overall trust
Doney and Cannon (1997)	Perceived credibility and benevolence	Credibility, Honesty, Benevolence, Overall trust
Ganesan and Hess (1997)	Credibility and Benevolence	<ul style="list-style-type: none"> <li>▪ <u>Credibility</u>: integrity, honesty, knowledge, openness of communication</li> <li>▪ <u>Benevolence</u>: sacrifice, genuine care and concern for the buyer's outcome</li> </ul>
Plank, Reid and Pullins (1999)	A global belief on the part of the buyer that the salesperson, product and company will fulfill their obligations as understood by the buyer	<ul style="list-style-type: none"> <li>▪ <u>Salesperson trust</u>: care for customers, expertise, emotional attachment, integrity</li> <li>▪ <u>Product Trust</u>: satisfactory performance, technical attribute</li> <li>▪ <u>Company Trust</u>: Care for customers, quality employee, reputation</li> </ul>
Swan, Bowers and Richardson (1999)	Affect and cognition on salesperson	Specific salesperson behavior, Salesperson's attributes, General trust
Guenzi (2002)	A confident belief that the salesperson can be relied upon to behave in such a manner that the long-term interest of the customer will be served (Crosby, Evans and Cowles, 1990)	<ul style="list-style-type: none"> <li>▪ <u>Salesperson Dimension</u>: competence, honesty, selling techniques, interpersonal skills, length of the relationship, and personal characteristics (age, gender)</li> <li>▪ <u>Company Dimension</u>: overall image, satisfaction in past interaction, collaborative attitude, length of the relationship</li> <li>▪ <u>Communication Dimension</u>: company advertising</li> </ul>

## Appendix B: Prior Conceptualizations of Trust (Cont'd)

### Research Approach: Trust in Economic Transaction (Business to Consumer Setting)

Study	Definition of Trust	Measures
Hess (1995)	[Brand Trust] No explicit definition	Altruism, Honesty, Reliable, Expect
Jarvenpaa and Tractinsky (1999)	[Trust in e-vendor] Willingness to rely when there is vulnerability	Integrity and Caring
Jarvenpaa et al. (2000)	[Trust in e-vendor] A trustor's expectations about the motives and behaviors of a trustee	Trustworthiness, Fulfillment of promise, customer-oriented, calculative trust, satisfaction
Morrison and Firmstone (2000)	[Trust in e-vendor] A belief that something will perform in line with expectations. It is not blind faith but is a calculative action involving an element of risk	Reputation, Familiarity, Performance and Accountability.
Kennedy, Ferrell, and LeClair (2001)	[Trust in Salesperson] The reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group or firm to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange (consistent with Hosmer 1995)	<ul style="list-style-type: none"> <li>▪ <u>Trust of salesperson</u>: confidence on believability, care for consumers, honesty, sincerity, and morality.</li> <li>▪ <u>Trust of manufacturer</u>: care for consumers' interests, sincerity, keeping a standards regarding honesty and morality</li> </ul>
Lee and Turban (2001)	[Trust in e-vendor] Willingness of a consumer to be vulnerable to the actions of an Internet merchant in an Internet shopping transaction, based on the expectation that Internet merchant will behave in certain agreeable ways, irrespective of the ability of the consumer to monitor or control the Internet merchant	Integrity and Ability
Chaudhuri and Holbrook (2002)	[Brand Trust] The willingness of the average consumer to rely on the ability of the brand to perform its stated function	Overall trust, reliability, Feeling of safety
McKnight, Choudhury, and Kacmar (2002)	Consists of trusting beliefs and trusting intentions. Trusting beliefs are beliefs on competence, benevolence, and integrity. Intention is willingness to depend.	Benevolence, Integrity, Competence, and Willingness to depend
Delgado-Ballester et al. (2003)	[Brand Trust] Brand reliability and brand intentions	Brand reliability, Brand Intentions
Ball, Coelho and Machas (2003)	[Brand Trust] No Explicit Definition	Benevolence, Overall trust
Gefen, Karahanna and Straub (2003)	[Trust in e-vendor] A set of consumer's belief in the e-vendor's integrity, benevolence, ability, and predictability	Integrity, Benevolence, Ability, Predictability

## Appendix B: Prior Conceptualizations of Trust (Cont'd)

### Research Approach: Trust in Economic Transaction (Business to Consumer Setting) (Cont'd)

Study	Definition of Trust	Measures
Pavlou (2003)	[Trust in e-vendor] The belief that allows consumers to willingly become vulnerable to Web retailers after having taken the retailers' characteristics into consideration	Benevolence, Credibility
Young and Albaum (2003)	[Trust in Salesperson] An evolving affective state including both emotional and cognitive elements and emerges from the perceptions of competence and a positive, caring motivation in the relationship partner to be trusted, and functions to increase the propensity to manage risk in the relationship of parties' shared environment	<ul style="list-style-type: none"> <li>▪ <u>Cognitive beliefs on salesperson</u>: accuracy of information, timely information, fairness, honesty, mutuality, personal relationship, commitment, trustworthy, selfishness, ability and intention</li> <li>▪ <u>Feelings about salesperson</u>: liking, acceptance, admiration, esteem, respect, appreciation, gratitude, faith</li> <li>▪ <u>General Trust in salesperson</u>: dependable, predictable, keeping a promise, honesty, confidence, familiarity, benevolence, consistency.</li> </ul>
Yousafzai et al. (2003)	[Trust in e-banking] Customer's trust on electronic banking is a psychological state which leads to the willingness of customer to perform banking transactions on the Internet, expecting that the bank will fulfill its obligations, irrespective of customer's ability to monitor or control bank's actions	Conceptual
Gutiérrez et al. (2004)	[Trust in Manufacturer] A willingness to rely on an exchange partner in whom one has confidence	Capacity and competence, Intentions and values
Johnson and Grayson (2005)	<p>[Trust in Financial Service Provider] Cognitive Trust: Confidence or willingness to rely on service provider's competence and reliability</p> <p>Affective Trust: Confidence in a partner on the basis of feelings generated by the level of care and concern the partner demonstrates.</p> <p>Behavioral trust: Actions that flows from a state of cognitive and affective trust.</p>	<ul style="list-style-type: none"> <li>▪ <u>Cognitive Trust</u>: reliability and competence (5 items)</li> <li>▪ <u>Affective Trust</u>: feelings of security and perceived strength of the relationship (5 items)</li> </ul>
Reast (2005)	[Brand Trust] Credibility and performance satisfaction	Credibility Performance satisfaction

**APPENDIX C:**  
**Questionnaire for Product Selection**

## Appendix C: Pre-test for Product Selection

Instructions: The purpose of this study is to measure a person's involvement in various product categories. Please judge the following product categories against a series of descriptive scales according to how YOU perceive the product. On the rating scales, place a check mark in the space that best describes your opinion about the product.

Product Category	Are you a <u>current or frequent user</u> of this product category?		Have you <u>purchased</u> this product?	
	Yes	No	Yes	No
Auto Insurance				
Athletic Shoes				
Credit Card				
Toothbrush				
Vegetable Juice				
Breakfast Cereal				
Bottled Water				
Mobile Phone Service				
Mobile Phone				
Mouthwash				

To me, Auto Insurance is...

Important	_____ : _____ : _____ : _____ : _____ : _____	Unimportant
Relevant	_____ : _____ : _____ : _____ : _____ : _____	Irrelevant
Boring	_____ : _____ : _____ : _____ : _____ : _____	Interesting
Means nothing	_____ : _____ : _____ : _____ : _____ : _____	Means a lot to me
Little to lose if I choose the wrong brand	_____ : _____ : _____ : _____ : _____ : _____	A lot to lose if I choose the wrong brand

To me, Athletic Shoes are...

Important	_____ : _____ : _____ : _____ : _____ : _____	Unimportant
Relevant	_____ : _____ : _____ : _____ : _____ : _____	Irrelevant
Boring	_____ : _____ : _____ : _____ : _____ : _____	Interesting
Means nothing	_____ : _____ : _____ : _____ : _____ : _____	Means a lot to me
Little to lose if I choose the wrong brand	_____ : _____ : _____ : _____ : _____ : _____	A lot to lose if I choose the wrong brand

To me, Credit Card is...

Important	_____ : _____ : _____ : _____ : _____ : _____	Unimportant
Relevant	_____ : _____ : _____ : _____ : _____ : _____	Irrelevant
Boring	_____ : _____ : _____ : _____ : _____ : _____	Interesting
Means nothing	_____ : _____ : _____ : _____ : _____ : _____	Means a lot to me
Little to lose if I choose the wrong brand	_____ : _____ : _____ : _____ : _____ : _____	A lot to lose if I choose the wrong brand



## To me, Toothbrush is...

Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

## To me, Vegetable Juice is...

Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

## To me, Breakfast Cereal is...

Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

## To me, Bottled Water is...

Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

## To me, Mobile Phone Service is...

Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

## To me, Mobile Phone is...

Important	_____ : _____ : _____ : _____ : _____ : _____ : _____	Unimportant
Relevant	_____ : _____ : _____ : _____ : _____ : _____ : _____	Irrelevant
Boring	_____ : _____ : _____ : _____ : _____ : _____ : _____	Interesting
Means nothing	_____ : _____ : _____ : _____ : _____ : _____ : _____	Means a lot to me
Little to lose if I choose the wrong brand	_____ : _____ : _____ : _____ : _____ : _____ : _____	A lot to lose if I choose the wrong brand

## To me, Mouth Wash is...

Important	_____ : _____ : _____ : _____ : _____ : _____ : _____	Unimportant
Relevant	_____ : _____ : _____ : _____ : _____ : _____ : _____	Irrelevant
Boring	_____ : _____ : _____ : _____ : _____ : _____ : _____	Interesting
Means nothing	_____ : _____ : _____ : _____ : _____ : _____ : _____	Means a lot to me
Little to lose if I choose the wrong brand	_____ : _____ : _____ : _____ : _____ : _____ : _____	A lot to lose if I choose the wrong brand

Gender: Male \_\_\_\_\_ Female \_\_\_\_\_

Age: \_\_\_\_\_

**APPENDIX D:**  
**Student Survey Questionnaire**  
**(Reliability Stage)**

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# A Survey of Consumers' Perceptions of Advertising

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Study supervised by: Dr. Karen W. King  
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**Respondent:**

**Please turn the page and read instructions.**

## Instructions

In this survey, you will be asked a variety of questions about your opinions on **national consumer advertising**.

National consumer advertising refers to advertising for brands or services that are distributed in most or all of the U.S. Coverage of national advertising need not to be national, it may be regional. Advertising for the Nike shoe brand or the Kraft Macaroni and Cheese brand is an example of national advertising. In contrast, local retail advertising refers to advertising by a dealer or store that sells products directly to the consumer. Examples of retail advertising include advertising for local stores such as Macy's or the local grocery store. National consumer advertising is normally associated with general brand information whereas local retail advertising often includes price, return policies, store locations, and hours of operation.

Please keep in mind that you are answering about **national advertising in general as an institution**, not individual advertisements or a specific type of advertising such as TV commercials, print ads or Internet advertising.

Please turn the page and begin answering the questions by putting a check mark in the space or box that most closely represents your opinion.

Your cooperation is greatly appreciated.

## I. Perceptions of Advertising in General

1. Please consider your attitude toward national advertising in general. Using a scale where **1 = strongly disagree** and **7 = strongly agree**, please indicate your level of agreement with each statement.

	Strongly Disagree	Strongly Agree
Advertising is essential.	: : : : : 1 2 3 4 5 6 7	
Most advertising insults the intelligence of the average person.	: : : : : 1 2 3 4 5 6 7	
In general, advertising results in lower prices.	: : : : : 1 2 3 4 5 6 7	
Advertising often persuades people to buy things they shouldn't buy	: : : : : 1 2 3 4 5 6 7	
In general, advertisements present a true picture of the product being advertised	: : : : : 1 2 3 4 5 6 7	
Advertising helps raise our standard of living	: : : : : 1 2 3 4 5 6 7	
Advertising results in better products for the public	: : : : : 1 2 3 4 5 6 7	
We can depend on getting the truth in most advertising	: : : : : 1 2 3 4 5 6 7	
Advertising's aim is to inform the consumer	: : : : : 1 2 3 4 5 6 7	
Advertising is informative	: : : : : 1 2 3 4 5 6 7	
Advertising is generally truthful	: : : : : 1 2 3 4 5 6 7	
Advertising is a reliable source of information about the quality and performance of products	: : : : : 1 2 3 4 5 6 7	
Advertising is truth well told	: : : : : 1 2 3 4 5 6 7	
I've been accurately informed after viewing most advertisements	: : : : : 1 2 3 4 5 6 7	
Most advertising provides consumers with essential information	: : : : : 1 2 3 4 5 6 7	

2. The following statements pertain to the information conveyed in advertising. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

<i>Information conveyed in national advertising is ...</i>	Strongly Disagree	Strongly Agree
Informative	1 2 3 4 5 6 7	
Likeable	1 2 3 4 5 6 7	
Accurate	1 2 3 4 5 6 7	
Complete	1 2 3 4 5 6 7	
Clear	1 2 3 4 5 6 7	
Timely	1 2 3 4 5 6 7	
Consumer-oriented	1 2 3 4 5 6 7	
Factual	1 2 3 4 5 6 7	
Benefits consumers	1 2 3 4 5 6 7	
Ethical	1 2 3 4 5 6 7	
Dependable	1 2 3 4 5 6 7	
Honest	1 2 3 4 5 6 7	
Credible	1 2 3 4 5 6 7	
Helps people make the best decisions	1 2 3 4 5 6 7	
Good	1 2 3 4 5 6 7	
Misleading	1 2 3 4 5 6 7	
Unbiased	1 2 3 4 5 6 7	
Believable	1 2 3 4 5 6 7	
Reliable	1 2 3 4 5 6 7	
Truthful	1 2 3 4 5 6 7	
Responsible	1 2 3 4 5 6 7	
Benevolent	1 2 3 4 5 6 7	
Valuable	1 2 3 4 5 6 7	

<i>Information conveyed in national advertising is ...</i>	Strongly Disagree	Strongly Agree
Enjoyable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Useful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Positive	— : — : — : — : — : — : —	1 2 3 4 5 6 7

2-1. Now I would like to ask you about your attitudes related to information conveyed in advertising. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

	Strongly Disagree	Strongly Agree
I trust ad-conveyed information	— : — : — : — : — : — : —	1 2 3 4 5 6 7
I have confidence in ad-conveyed information	— : — : — : — : — : — : —	1 2 3 4 5 6 7
It is safe to trust ad-conveyed information	— : — : — : — : — : — : —	1 2 3 4 5 6 7
<i>I am willing to...</i>	Strongly Disagree	Strongly Agree
Rely on ad-conveyed information when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Make important purchase related decisions based on ad-conveyed information.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Consider the ad-conveyed information when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Search for more information on the product or service that I have seen in ads, if I am interested in.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Recommend the product or service that I have seen in ads to my friends or family.	— : — : — : — : — : — : —	1 2 3 4 5 6 7



3. Now I would like to ask you about your behavior when using various media.  
On a scale where **1 = never** and **7 = always**, how often do you do each of following?

	Never	Always
Rely on information from ads to make purchase related decisions	_ : _ : _ : _ : _ : _ : _ 1 2 3 4 5 6 7	
Use information from ads for important purchase decisions	_ : _ : _ : _ : _ : _ : _ 1 2 3 4 5 6 7	
Switch TV channels during commercials when watching TV	_ : _ : _ : _ : _ : _ : _ 1 2 3 4 5 6 7	
Switch radio channels during commercials when listening to radio	_ : _ : _ : _ : _ : _ : _ 1 2 3 4 5 6 7	
Flip past ad page in a magazine when reading magazines	_ : _ : _ : _ : _ : _ : _ 1 2 3 4 5 6 7	
Skip ads in the newspaper when reading newspapers	_ : _ : _ : _ : _ : _ : _ 1 2 3 4 5 6 7	
Avoid ads on the web when using the Internet (e.g. blocking pop-ads, scrolling down, closing pop-up windows)	_ : _ : _ : _ : _ : _ : _ 1 2 3 4 5 6 7	

4. On the next page is a list of words describing advertising. On the rating scales, place a check mark (✓) in the space that best describes your opinion about advertising. Please keep in mind that advertising refers to national advertising in general, not individual advertisements or specific types of advertising such as TV commercials or print ads.

**For example.** If you think that advertising is very closely related to one end of the scale, you should place your check mark as follows:

Believable \_ : \_ : \_ : \_ : \_ : \_ : ✓ Unbelievable

or

Believable ✓ : \_ : \_ : \_ : \_ : \_ : \_ Unbelievable

If you think that advertising is neutral in terms of its believability, you should place your check mark as follows:

Believable \_ : \_ : \_ : ✓ : \_ : \_ : \_ Unbelievable



5. Below is a list of words describing information conveyed in national advertising. On the rating scales, place a check mark (✓) in the space that best describes your opinion about ad-conveyed information.

**Ad-conveyed information is:**

Extremely informative	____:____:____:____:____:____:____	Not at all informative
Extremely accurate	____:____:____:____:____:____:____	Not at all accurate
Extremely complete	____:____:____:____:____:____:____	Not at all complete
Extremely clear	____:____:____:____:____:____:____	Not at all clear
Extremely timely	____:____:____:____:____:____:____	Not at all timely
Extremely consumer-oriented	____:____:____:____:____:____:____	Not at all consumer-oriented
Extremely benevolent	____:____:____:____:____:____:____	Not at all benevolent
Extremely beneficial to consumers	____:____:____:____:____:____:____	Not at all beneficial to consumers
Extremely helpful for make the best decisions	____:____:____:____:____:____:____	Not at all helpful for make the best decisions
Extremely honest	____:____:____:____:____:____:____	Not at all honest
Extremely truthful	____:____:____:____:____:____:____	Not at all truthful
Extremely ethical	____:____:____:____:____:____:____	Not at all ethical
Extremely factual	____:____:____:____:____:____:____	Not at all factual
Extremely misleading	____:____:____:____:____:____:____	Not at all misleading
Extremely biased	____:____:____:____:____:____:____	Not at all biased
Extremely believable	____:____:____:____:____:____:____	Not at all believable
Extremely credible	____:____:____:____:____:____:____	Not at all credible
Extremely reliable	____:____:____:____:____:____:____	Not at all reliable
Extremely dependable	____:____:____:____:____:____:____	Not at all dependable
Extremely responsible	____:____:____:____:____:____:____	Not at all responsible
Extremely likeable	____:____:____:____:____:____:____	Not at all likeable
Extremely valuable	____:____:____:____:____:____:____	Not at all valuable
Extremely enjoyable	____:____:____:____:____:____:____	Not at all enjoyable
Extremely useful	____:____:____:____:____:____:____	Not at all useful
Extremely good	____:____:____:____:____:____:____	Not at all good
Extremely positive	____:____:____:____:____:____:____	Not at all positive

**Ad-conveyed information is:**

Extremely trustworthy \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ Not at all trustworthy

Extremely confident \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ Not at all confident

Extremely safe to trust \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ Not at all safe to trust

5-1. Now I would like to ask you about your behavior when using national advertising. On the rating scales, place a check mark (✓) in the space that best describes your willingness to do the behavior.

- **Rely on ad-conveyed information when making purchase related decisions**

I am always willing to \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ I am never willing to

- **Make important purchase related decisions based on ad-conveyed information**

I am always willing to \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ I am never willing to

- **Consider the ad-conveyed information when making purchase related decisions**

I am always willing to \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ I am never willing to

- **Search more information on the interesting product or service I have seen in ads**

I am always willing to \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ I am never willing to

- **Recommend the product or service that I have seen in ads to my friends or family**

I am always willing to \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ I am never willing to

6. On a scale where **1 = don't trust at all** and **7 = absolutely trust**, how much do you trust the information conveyed in advertising?

Not trust at all    1    2    3    4    5    6    7    Absolutely trust

7. On a scale where **1 = not at all favorable** and **7 = extremely favorable**, how favorable do you feel toward advertising in general?

Not at all favorable    1    2    3    4    5    6    7    Extremely favorable

8. On a scale where **1 = not at all credible** and **7 = extremely credible**, how credible do you think advertising in general?

Not at all credible    1    2    3    4    5    6    7    Extremely Credible

## II. Perceptions of Advertising in Various Media

### Television Advertising

Have you watched TV advertising in the past 6 months?

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #10

9. The following statements pertain to the information **National Television advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

<i>Information conveyed in national TV advertising is ...</i>	Strongly Disagree	Strongly Agree
Informative	1 2 3 4 5 6 7	
Likeable	1 2 3 4 5 6 7	
Accurate	1 2 3 4 5 6 7	
Complete	1 2 3 4 5 6 7	
Clear	1 2 3 4 5 6 7	
Timely	1 2 3 4 5 6 7	
Consumer-oriented	1 2 3 4 5 6 7	
Factual	1 2 3 4 5 6 7	
Benefits consumers	1 2 3 4 5 6 7	
Ethical	1 2 3 4 5 6 7	
Dependable	1 2 3 4 5 6 7	
Honest	1 2 3 4 5 6 7	
Credible	1 2 3 4 5 6 7	
Helps people make the best decisions	1 2 3 4 5 6 7	
Good	1 2 3 4 5 6 7	
Misleading	1 2 3 4 5 6 7	
Unbiased	1 2 3 4 5 6 7	
Believable	1 2 3 4 5 6 7	

<i>Information conveyed in national TV advertising is ...</i>	Strongly Disagree	Strongly Agree
Reliable	1 2 3 4 5 6 7	
Truthful	1 2 3 4 5 6 7	
Responsible	1 2 3 4 5 6 7	
Benevolent	1 2 3 4 5 6 7	
Valuable	1 2 3 4 5 6 7	
Enjoyable	1 2 3 4 5 6 7	
Useful	1 2 3 4 5 6 7	
Positive	1 2 3 4 5 6 7	

9-1. Now I would like to ask you about your attitude related to information conveyed in **national TV advertising**. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

	Strongly Disagree	Strongly Agree
I trust the information conveyed in TV advertising	1 2 3 4 5 6 7	
I have confidence on the information conveyed in TV advertising	1 2 3 4 5 6 7	
It is safe to trust the information conveyed in TV advertising	1 2 3 4 5 6 7	
<i>I am willing to...</i>	Strongly Disagree	Strongly Agree
Rely on the information conveyed in TV advertising when making purchase related decisions.	1 2 3 4 5 6 7	
Make important purchase related decisions based on the information conveyed in TV advertising.	1 2 3 4 5 6 7	
Consider the information conveyed in TV advertising when making purchase related decisions.	1 2 3 4 5 6 7	
Search more information on the product or service that I have seen in TV advertising, if I am interested in.	1 2 3 4 5 6 7	
Recommend the product or service that I have seen in TV advertising to my friends or family.	1 2 3 4 5 6 7	

### Newspaper Advertising

Have you read newspaper advertising in the past 6 months?

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #11

10. The following statements pertain to the information **National NEWSPAPER advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

<i>Information conveyed in national newspaper advertising is ...</i>	Strongly Disagree	Strongly Agree
Informative	: : : : : : : 1 2 3 4 5 6 7	
Likeable	: : : : : : : 1 2 3 4 5 6 7	
Accurate	: : : : : : : 1 2 3 4 5 6 7	
Complete	: : : : : : : 1 2 3 4 5 6 7	
Clear	: : : : : : : 1 2 3 4 5 6 7	
Timely	: : : : : : : 1 2 3 4 5 6 7	
Consumer-oriented	: : : : : : : 1 2 3 4 5 6 7	
Factual	: : : : : : : 1 2 3 4 5 6 7	
Benefits consumers	: : : : : : : 1 2 3 4 5 6 7	
Ethical	: : : : : : : 1 2 3 4 5 6 7	
Dependable	: : : : : : : 1 2 3 4 5 6 7	
Honest	: : : : : : : 1 2 3 4 5 6 7	
Credible	: : : : : : : 1 2 3 4 5 6 7	
Helps people make the best decisions	: : : : : : : 1 2 3 4 5 6 7	
Good	: : : : : : : 1 2 3 4 5 6 7	
Misleading	: : : : : : : 1 2 3 4 5 6 7	
Unbiased	: : : : : : : 1 2 3 4 5 6 7	
Believable	: : : : : : : 1 2 3 4 5 6 7	

<i>Information conveyed in national newspaper advertising is ...</i>	Strongly Disagree	Strongly Agree
Reliable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Truthful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Responsible	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Benevolent	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Valuable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Enjoyable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Useful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Positive	— : — : — : — : — : — : —	1 2 3 4 5 6 7

10-1. Now I would like to ask you about your attitude related to information conveyed in **National Newspaper advertising**. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

	Strongly Disagree	Strongly Agree
I trust the information conveyed in newspaper advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
I have confidence on the information conveyed in newspaper advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
It is safe to trust the information conveyed in newspaper advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
<i>I am willing to...</i>	Strongly Disagree	Strongly Agree
Rely on the information conveyed in newspaper advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Make important purchase related decisions based on the information conveyed in newspaper advertising.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Consider the information conveyed in newspaper advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Search more information on the product or service that I have seen in newspaper advertising, if I am interested in.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Recommend the product or service that I have seen in newspaper advertising to my friends or family.	— : — : — : — : — : — : —	1 2 3 4 5 6 7



### Radio Advertising

Have you listen to radio advertising in the past 6 months?

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #12

10. I would like to ask you about your opinions on the information **National RADIO advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 means strongly disagree** and **7 means strongly agree**.

<i>Information conveyed in national radio advertising is ...</i>	Strongly Disagree	Strongly Agree
Informative	: : : : : : : 1 2 3 4 5 6 7	
Likeable	: : : : : : : 1 2 3 4 5 6 7	
Accurate	: : : : : : : 1 2 3 4 5 6 7	
Complete	: : : : : : : 1 2 3 4 5 6 7	
Clear	: : : : : : : 1 2 3 4 5 6 7	
Timely	: : : : : : : 1 2 3 4 5 6 7	
Consumer-oriented	: : : : : : : 1 2 3 4 5 6 7	
Factual	: : : : : : : 1 2 3 4 5 6 7	
Benefits consumers	: : : : : : : 1 2 3 4 5 6 7	
Ethical	: : : : : : : 1 2 3 4 5 6 7	
Dependable	: : : : : : : 1 2 3 4 5 6 7	
Honest	: : : : : : : 1 2 3 4 5 6 7	
Credible	: : : : : : : 1 2 3 4 5 6 7	
Helps people make the best decisions	: : : : : : : 1 2 3 4 5 6 7	
Good	: : : : : : : 1 2 3 4 5 6 7	
Misleading	: : : : : : : 1 2 3 4 5 6 7	
Unbiased	: : : : : : : 1 2 3 4 5 6 7	
Believable	: : : : : : : 1 2 3 4 5 6 7	

<i>Information conveyed in national radio advertising is ...</i>	Strongly Disagree	Strongly Agree
Reliable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Truthful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Responsible	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Benevolent	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Valuable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Enjoyable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Useful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Positive	— : — : — : — : — : — : —	1 2 3 4 5 6 7

10-1. Now I would like to ask you about your attitude related to information conveyed in **National Radio advertising**. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

	Strongly Disagree	Strongly Agree
I trust the information conveyed in radio advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
I have confidence on the information conveyed in radio advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
It is safe to trust the information conveyed in radio advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
<i>I am willing to...</i>	Strongly Disagree	Strongly Agree
Rely on the information conveyed in radio advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Make important purchase related decisions based on the information conveyed in radio advertising.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Consider the information conveyed in radio advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Search more information on the product or service that I have seen in radio advertising, if I am interested in.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Recommend the product or service that I have seen in radio advertising to my friends or family.	— : — : — : — : — : — : —	1 2 3 4 5 6 7

### Magazine Advertising

Have you read magazine advertising in the past 6 months?

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #13

10. Following statements pertain to the information **National MAGAZINE advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 means strongly disagree** and **7 means strongly agree**.

<i>Information conveyed in national magazine advertising is ...</i>	Strongly Disagree	Strongly Agree
Informative	: : : : : : : 1 2 3 4 5 6 7	
Likeable	: : : : : : : 1 2 3 4 5 6 7	
Accurate	: : : : : : : 1 2 3 4 5 6 7	
Complete	: : : : : : : 1 2 3 4 5 6 7	
Clear	: : : : : : : 1 2 3 4 5 6 7	
Timely	: : : : : : : 1 2 3 4 5 6 7	
Consumer-oriented	: : : : : : : 1 2 3 4 5 6 7	
Factual	: : : : : : : 1 2 3 4 5 6 7	
Benefits consumers	: : : : : : : 1 2 3 4 5 6 7	
Ethical	: : : : : : : 1 2 3 4 5 6 7	
Dependable	: : : : : : : 1 2 3 4 5 6 7	
Honest	: : : : : : : 1 2 3 4 5 6 7	
Credible	: : : : : : : 1 2 3 4 5 6 7	
Helps people make the best decisions	: : : : : : : 1 2 3 4 5 6 7	
Good	: : : : : : : 1 2 3 4 5 6 7	
Misleading	: : : : : : : 1 2 3 4 5 6 7	
Unbiased	: : : : : : : 1 2 3 4 5 6 7	
Believable	: : : : : : : 1 2 3 4 5 6 7	

<i>Information conveyed in national magazine advertising is ...</i>	Strongly Disagree	Strongly Agree
Reliable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Truthful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Responsible	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Benevolent	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Valuable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Enjoyable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Useful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Positive	— : — : — : — : — : — : —	1 2 3 4 5 6 7

10-1. Now I would like to ask you about your attitude related to information conveyed in **National Magazine advertising**. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

	Strongly Disagree	Strongly Agree
I trust the information conveyed in magazine advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
I have confidence on the information conveyed in magazine advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
It is safe to trust the information conveyed in magazine advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
<i>I am willing to...</i>	Strongly Disagree	Strongly Agree
Rely on the information conveyed in magazine advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Make important purchase related decisions based on the information conveyed in magazine advertising.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Consider the information conveyed in magazine advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Search more information on the product or service that I have seen in magazine advertising, if I am interested in.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Recommend the product or service that I have seen in magazine advertising to my friends or family.	— : — : — : — : — : — : —	1 2 3 4 5 6 7

### Internet Advertising

Have you used internet advertising in the past 6 months?

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #14

10. I would like to ask you about your opinions on the information **National INTERNET advertising (e.g. banner ads, commercial sites)** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 means strongly disagree** and **7 means strongly agree**.

<i>Information conveyed in national Internet advertising is ...</i>	Strongly Disagree	Strongly Agree
Informative	: : : : : : : 1 2 3 4 5 6 7	
Likeable	: : : : : : : 1 2 3 4 5 6 7	
Accurate	: : : : : : : 1 2 3 4 5 6 7	
Complete	: : : : : : : 1 2 3 4 5 6 7	
Clear	: : : : : : : 1 2 3 4 5 6 7	
Timely	: : : : : : : 1 2 3 4 5 6 7	
Consumer-oriented	: : : : : : : 1 2 3 4 5 6 7	
Factual	: : : : : : : 1 2 3 4 5 6 7	
Benefits consumers	: : : : : : : 1 2 3 4 5 6 7	
Ethical	: : : : : : : 1 2 3 4 5 6 7	
Dependable	: : : : : : : 1 2 3 4 5 6 7	
Honest	: : : : : : : 1 2 3 4 5 6 7	
Credible	: : : : : : : 1 2 3 4 5 6 7	
Helps people make the best decisions	: : : : : : : 1 2 3 4 5 6 7	
Good	: : : : : : : 1 2 3 4 5 6 7	
Misleading	: : : : : : : 1 2 3 4 5 6 7	
Unbiased	: : : : : : : 1 2 3 4 5 6 7	
Believable	: : : : : : : 1 2 3 4 5 6 7	

<i>Information conveyed in national Internet advertising is ...</i>	Strongly Disagree	Strongly Agree
Reliable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Truthful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Responsible	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Benevolent	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Valuable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Enjoyable	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Useful	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Positive	— : — : — : — : — : — : —	1 2 3 4 5 6 7

10-1. Now I would like to ask you about your attitude related to information conveyed in **National Internet advertising**. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

	Strongly Disagree	Strongly Agree
I trust the information conveyed in internet advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
I have confidence on the information conveyed in internet advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
It is safe to trust the information conveyed in internet advertising	— : — : — : — : — : — : —	1 2 3 4 5 6 7
<i>I am willing to...</i>	Strongly Disagree	Strongly Agree
Rely on the information conveyed in internet advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Make important purchase related decisions based on the information conveyed in internet advertising.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Consider the information conveyed in internet advertising when making purchase related decisions.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Search more information on the product or service that I have seen in internet advertising, if I am interested in.	— : — : — : — : — : — : —	1 2 3 4 5 6 7
Recommend the product or service that I have seen in internet advertising to my friends or family.	— : — : — : — : — : — : —	1 2 3 4 5 6 7

### III. Perceptions of the Information in Mass Media

Which of the following media have you seen, read or listened to in the past 6 months? Please indicate by checking yes or no below for each medium listed.

(1) Television	Yes _____	No _____
(2) Newspapers	Yes _____	No _____
(3) Radio	Yes _____	No _____
(4) Magazine	Yes _____	No _____
(5) Internet	Yes _____	No _____

11. Below is a list of words evaluating the quality of information delivered by different mass media. Please rate each on the corresponding items by placing a check mark (✓) in one of 7 spaces. **Please keep in mind that information includes non-advertising contents and advertising contents.**

**For example.** If you think that the information newspapers deliver is very closely related to one end of the scale, you should place your check mark as follows:

Extremely believable \_\_\_\_\_:\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ ✓ Not at all believable  
or

Extremely believable ✓ \_\_\_\_\_:\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ Not at all believable

If you think that the information newspapers deliver is neutral in terms of its believability, you should place your check mark as follows:

Extremely believable \_\_\_\_\_:\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ ✓ \_\_\_\_\_:\_\_\_\_\_ :\_\_\_\_\_ :\_\_\_\_\_ Not at all believable

#### Information television delivers:

Extremely believable	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all believable
Extremely accurate	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all accurate
Extremely fair	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all fair
Extremely in-depth	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all in-depth

#### Information newspapers deliver:

Extremely believable	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all believable
Extremely accurate	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all accurate
Extremely fair	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all fair
Extremely in-depth	_____ :_____ :_____ :_____ :_____ :_____ :_____	Not at all in-depth

**Information radio delivers:**

Extremely believable \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all believable  
 Extremely accurate \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all accurate  
 Extremely fair \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all fair  
 Extremely in-depth \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all in-depth

**Information magazines deliver:**

Extremely believable \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all believable  
 Extremely accurate \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all accurate  
 Extremely fair \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all fair  
 Extremely in-depth \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all in-depth

**Information the Internet delivers:**

Extremely believable \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all believable  
 Extremely accurate \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all accurate  
 Extremely fair \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all fair  
 Extremely in-depth \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all in-depth

**IV. Evaluation of Advertisements**

12. On the next several pages, I would like to ask you to evaluate a series of advertisements. You will see 6 different advertisements and be asked to answer the questions for each advertisement. On the rating scales, place a check mark (✓) in the space that best describes your opinion about each advertisement.

**For example.** If you think that the advertisement is very closely related to one end of the scale, you should place your check mark as follows:

Extremely useful \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ ✓ Not at all useful

or

Extremely useful ✓ \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all useful

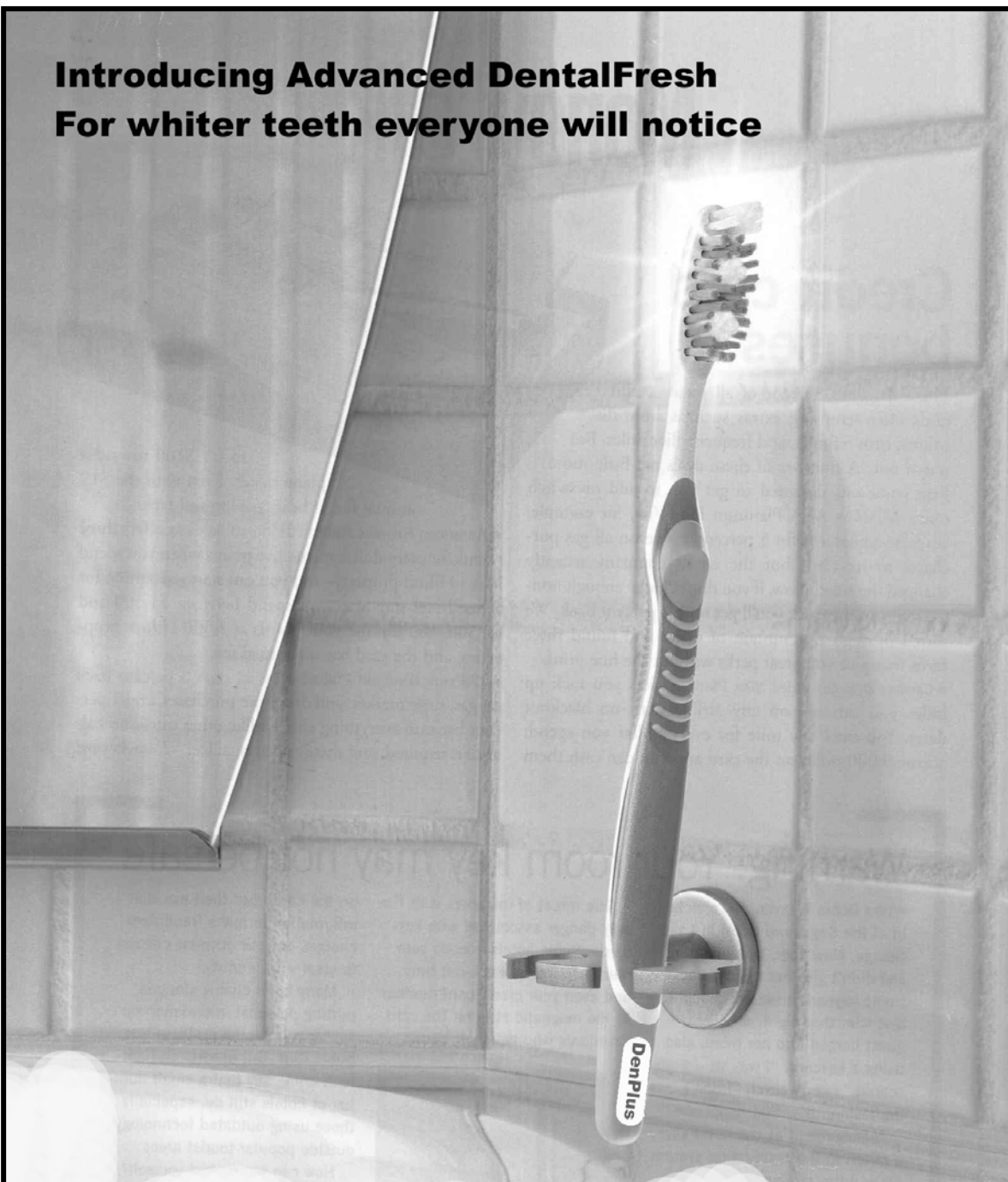
If you think that the advertisement is neutral in terms of its usefulness, you should place your check mark as follows:

Extremely useful \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ ✓ \_\_\_\_\_:\_\_\_\_\_ : \_\_\_\_\_:\_\_\_\_\_ Not at all useful



Please look at the ad for 30 seconds to answer the questions on the next page.  
You should not go back to this page once you turn the page.

**Introducing Advanced DentalFresh  
For whiter teeth everyone will notice**



The amazing new DenPlus Advanced DentalFresh whitening toothbrush has a unique polish cup bristle designed to help maximize the effectiveness of your toothpaste. Tightly packed center bristles encircled by taller angled bristles help hold toothpastes to effectively clean away stains. It cleans and whitens your teeth, leaving you with a brighter, whiter and healthy-looking smile.



**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw.

Have you seen this ad before? Yes \_\_\_\_\_ No \_\_\_\_\_

	Strongly Disagree		Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____
	1	2	3
	4	5	6
	7		

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
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**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

- Please indicate how you perceive "toothbrush"

**To me, toothbrush is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please look at the ad for 30 seconds to answer the questions on the next page.  
You should not go back to this page once you turn the page.



Carry the ultimate audio-visual experience in your pocket with the TG4500 from TelPon. Stream, download and play multimedia content on-demand, and enhance your listening experience with powerful stereo speakers that can fill a room with music. It's the true integration of sound and vision.



TG 4500

Stereo Speakers  
3D Gaming  
Streaming Video  
1.3 Megapixel Camera  
Dual Color Display

 **TELPON**

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw.

Have you seen this ad before? Yes _____ No _____
--

	Strongly Disagree							Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7	

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

- Please indicate how you perceive "Mobile Phone"

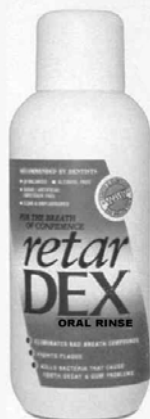
**To me, Mobile Phone is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please look at the ad for 30 seconds to answer the questions on the next page.  
You should not go back to this page once you turn the page.

## Bad Breath: Why you're always the last to know.



A simple question: when someone you know or work with has bad breath, do you tell them?

If you're like most people, the answer is probably "No."

Which means that nobody is going to tell you when YOU have bad breath.

So to be sure you don't, use RetarDEX products.

They're guaranteed to ban bad breath, because they actually get rid of something dentists call Volatile Sulphur Compounds, or VSCs.



These are the end products of bacteria feeding off dead cell tissue and debris in the mouth that, hardly surprising, smell terrible. Ordinary mouthwashes, toothpastes and sprays only mask the odor with a nicer smell which soon wears off. But the clinically proven RetarDEX range of 24-hour oral care products has a patented active ingredient called CloSYS II which eliminates these VSCs and rapidly restores fresh breath.

Of course, you don't have to have a bad breath problem to use RetarDEX. Most people use it as part of their daily oral health routine. Try it yourself.



### CloSYS II

#### The unique ingredient in RetarDEX.

**CloSYS II not only neutralizes bad smells on contact but also kills the bacteria that create them. It works by releasing oxygen and is also a powerful anti-bacterial agent that helps restore your mouth's chemical balance for fresher breath.**

[www.periproducts.com](http://www.periproducts.com)

**periproducts**  
INNOVATION IN ORAL CARE

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw

Have you seen this ad before? Yes \_\_\_\_\_ No \_\_\_\_\_

	Strongly Disagree		Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____
	1	2	3
	4	5	6
	7		

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

- Please indicate how you perceive "Mouthwash"

**To me, Mouthwash is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please look at the ad for 30 seconds to answer the questions on the next page.  
You should not go back to this page once you turn the page.



**Save on your car insurance and  
Get hundreds of dollars back in your pocket**

In a recent survey, DiaMond AUTO customers report saving an average of \$200 on a six-month policy.\* Some policyholders have reduced their premiums by as much as \$600 in the first year alone! That's just one of the many reasons millions of drivers choose DiaMond AUTO. Our 24/7 customer service makes sure you get courteous and efficient service any time of the day, any day of the year.

---

CALL NOW FOR A FREE QUOTE  
**1-800-232-7272**

HAVE YOUR CURRENT POLICY AND DRIVER'S LICENSE HANDY  
FOR AN ONLINE QUOTE GO TO [WWW.DIAMONDAUTO.COM](http://WWW.DIAMONDAUTO.COM)

**DiaMond  
AUTO**

\* Based on information reported by 4,103 new customers who purchased directly from an DiaMond AUTO customer Information center. Actual savings will vary.

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw

Have you seen this ad before? Yes _____ No _____
--

	Strongly Disagree							Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7	

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

- Please indicate how you perceive "Auto Insurance "

**To me, Auto Insurance is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**



Please look at the ad for 30 seconds to answer the questions on the next page.  
You should not go back to this page once you turn the page.



**Healthy benefits of wholegrain**

- Wholegrains provide a valuable source of essential nutrients, vitamins and iron
- People with healthy hearts tend to eat more wholegrain food
- It's good for digestive health
- It helps maintain blood-sugar levels
- It can help prevent some types of cancer, such as of the bowel and stomach

Look out for the Weetabix wheatsheaf sign as a guarantee of wholegrain goodness



# What are you made of?

The Weetabix family of brands contain all the goodness of wholegrain

**F**or a convenient and healthy breakfast, go for the wholegrain goodness of Weetabix. It's an excellent source of dietary fiber as it's made from wholegrains and is an important part of a balanced diet, helping our bodies to stay fit and healthy.

Weetabix contains proteins and carbohydrates to repair body cells and a two-biscuit serving provides 32 percent of the recommended daily allowance of iron and the vitamins B1, B2, niacin and folic acid. As part of your daily routine, be sure to include a wholegrain cereal from



the Weetabix family of brands. For a warming breakfast on autumn mornings, try Seriously Oaty hot oat cereal in new Spiced Apple and Sultana flavour. It'll nourish and sustain you throughout the day and can be relied upon to help you feel good and healthy.

**Expert advice**



Weetabix nutritionist Alex Parker says: 'What you eat is very important to your health and wellbeing. Good nutrition is essential for growth and development, maintaining health and reducing the risk of developing certain diseases, now and in the future. Wholegrains such as whole wheat and oats play such an important part in a healthy diet because they contain a 'package' of nutrients and plant-derived protective elements. It's this package that delivers the benefits, which is why you need the whole of the grain.'

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw

Have you seen this ad before? Yes _____ No _____
--

	Strongly Disagree							Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7	

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

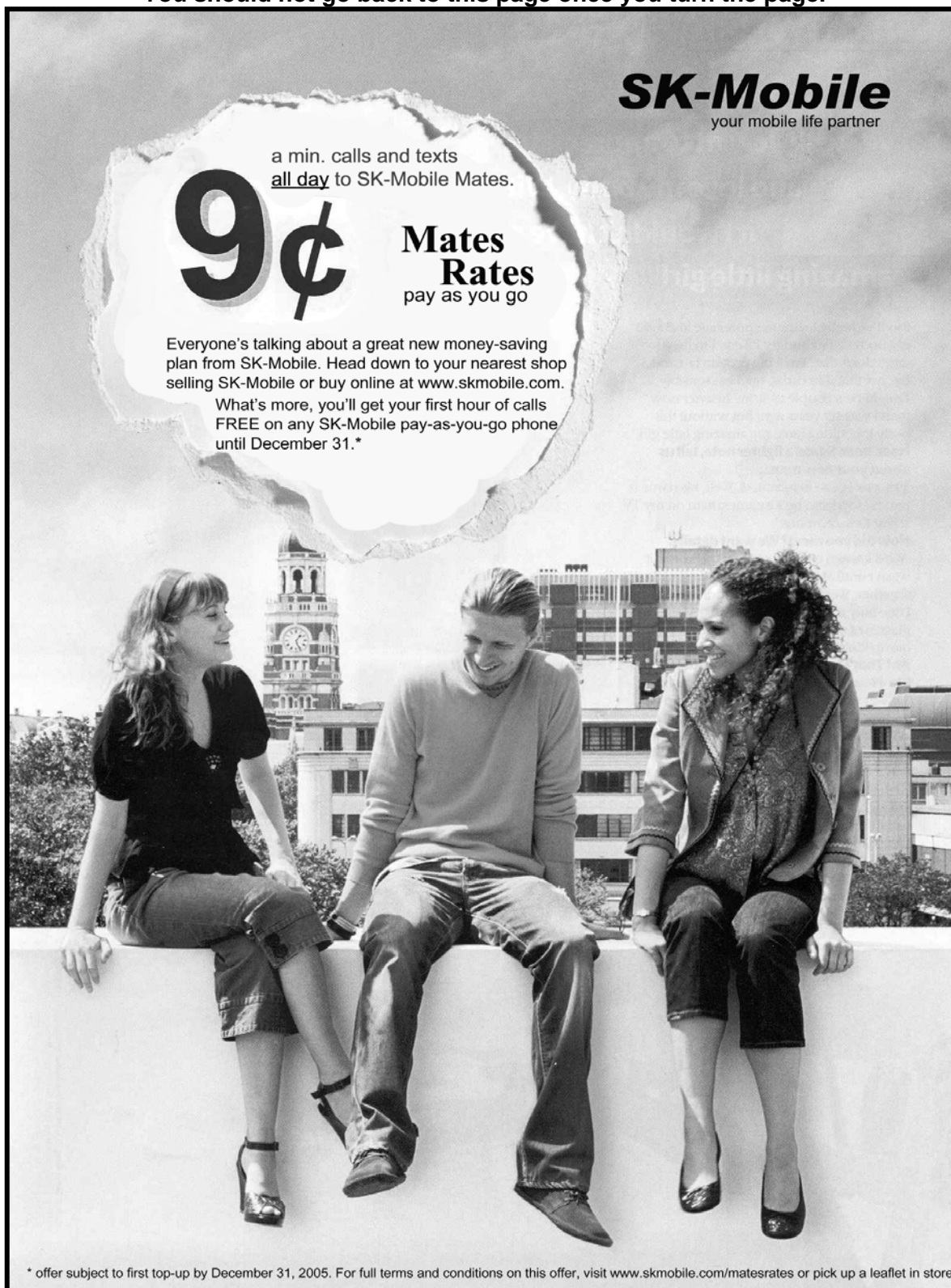
- Please indicate how you perceive "Breakfast Cereal "

**To me, Breakfast Cereal is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please look at the ad for 30 seconds to answer the questions on the next page.  
You should not go back to this page once you turn the page.



**SK-Mobile**  
your mobile life partner

a min. calls and texts  
all day to SK-Mobile Mates.

**9¢** **Mates Rates**  
pay as you go

Everyone's talking about a great new money-saving plan from SK-Mobile. Head down to your nearest shop selling SK-Mobile or buy online at [www.skmobile.com](http://www.skmobile.com).  
What's more, you'll get your first hour of calls FREE on any SK-Mobile pay-as-you-go phone until December 31.\*

\* offer subject to first top-up by December 31, 2005. For full terms and conditions on this offer, visit [www.skmobile.com/matesrates](http://www.skmobile.com/matesrates) or pick up a leaflet in store.

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw

Have you seen this ad before? Yes _____ No _____
--

	Strongly Disagree							Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7	

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

- Please indicate how you perceive "Mobile Phone Service "

**To me, Mobile Phone Service is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please provide your information. This is for classification purposes only.

Gender: Male \_\_\_\_\_ Female \_\_\_\_\_

Age: \_\_\_\_\_

Major \_\_\_\_\_

Thank you very much for taking the time to complete this survey. Please turn in the completed survey and one copy of the signed consent form to the researcher.

**APPENDIX E:**  
**Non-Student Adult Survey Questionnaire**  
**(Validation Stage)**

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# A Survey of Consumers' Perceptions of Advertising

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Hyeonjin Soh, Ph.D. Candidate

The University of Georgia

Study supervised by: Dr. Karen W. King  
Dr. Leonard N. Reid  
The Grady College of Journalism & Mass Communication  
The University of Georgia  
Athens, GA 30602-3018

**Respondent:**

**Please turn the page and read instructions.**

## Instructions

In this survey, you will be asked a variety of questions about your opinions on **national consumer advertising**.

**National consumer advertising** refers to advertising for brands or services that are distributed in most or all of the U.S. Coverage of national advertising need not to be national, it may be regional. Advertising for the Nike shoe brand or the Kraft Macaroni and Cheese brand is an example of national advertising.

In contrast, **local retail advertising** refers to advertising by a dealer or store that sells products directly to the consumer. Examples of retail advertising include advertising for local stores such as Macy's or the local grocery store. National consumer advertising is normally associated with general brand information whereas local retail advertising often includes price, return policies, store locations, and hours of operation.

Please keep in mind that you are answering about **national advertising in general as an institution**, not individual advertisements or a specific type of advertising such as TV commercials, print ads or Internet advertising.

Please turn the page and begin answering the questions by putting a check mark in the space or box that most closely represents your opinion.

Your cooperation is greatly appreciated.



## I. Perceptions of Advertising in General

1. Please consider your attitude toward national advertising in general. Using a scale where **1 = strongly disagree** and **7 = strongly agree**, please indicate your level of agreement with each statement.

	Strongly Disagree						Strongly Agree
Advertising is essential.	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Most advertising insults the intelligence of the average person.	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
In general, advertising results in lower prices.	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising often persuades people to buy things they shouldn't buy	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
In general, advertisements present a true picture of the product being advertised	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising helps raise our standard of living	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising results in better products for the public	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
We can depend on getting the truth in most advertising	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising's aim is to inform the consumer	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising is informative	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising is generally truthful	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising is a reliable source of information about the quality and performance of products	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Advertising is truth well told	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
I've been accurately informed after viewing most advertisements	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
Most advertising provides consumers with essential information	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7

2. The following statements pertain to the information conveyed in advertising. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

<i>Information conveyed in national advertising is ...</i>	Strongly Disagree						Strongly Agree
Honest	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Dependable	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Valuable	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Likeable	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Good	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Benefits consumers	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Credible	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Complete	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Factual	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Useful	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Helps people make the best decisions	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Accurate	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Truthful	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Positive	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Reliable	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Enjoyable	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Clear	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7
Believable	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7



3. Now I would like to ask you about your behavior when using various media.  
On a scale where **1 = never** and **7 = always**, how often do you do each of following?

	Never						Always				
Rely on information from ads to make purchase related decisions	_	:	_	:	_	:	_	:	_	:	_
	1	2	3	4	5	6	7				
Use information from ads for important purchase decisions	_	:	_	:	_	:	_	:	_	:	_
	1	2	3	4	5	6	7				
Switch TV channels during commercials when watching TV	_	:	_	:	_	:	_	:	_	:	_
	1	2	3	4	5	6	7				
Switch radio channels during commercials when listening to radio	_	:	_	:	_	:	_	:	_	:	_
	1	2	3	4	5	6	7				
Flip past ad pages in a magazine when reading magazines	_	:	_	:	_	:	_	:	_	:	_
	1	2	3	4	5	6	7				
Skip ads in the newspaper when reading newspapers	_	:	_	:	_	:	_	:	_	:	_
	1	2	3	4	5	6	7				
Avoid ads on the web when using the Internet (e.g. blocking pop-ads, scrolling down, closing pop-up windows)	_	:	_	:	_	:	_	:	_	:	_
	1	2	3	4	5	6	7				

4. On the next page is a list of words describing advertising. On the rating scales, place a check mark (✓) in the space that best describes your opinion about advertising. Please keep in mind that advertising refers to national advertising in general, not individual advertisements or specific types of advertising such as TV commercials or print ads.

**For example.** If you think that advertising is very closely related to one end of the scale, you should place your check mark as follows:

Believable \_ : \_ : \_ : \_ : \_ : ✓ \_ Unbelievable

or

Believable ✓ \_ : \_ : \_ : \_ : \_ : \_ Unbelievable

If you think that advertising is neutral in terms of its believability, you should place your check mark as follows:

Believable \_ : \_ : ✓ \_ : \_ : \_ : \_ Unbelievable



5. Below is a list of words describing information conveyed in national advertising. On the rating scale provided, place a check mark (✓) in the space that best describes your opinion about ad-conveyed information.

**Ad-conveyed information is:**

Extremely honest	____:____:____:____:____:____:____	Not at all honest
Extremely dependable	____:____:____:____:____:____:____	Not at all dependable
Extremely valuable	____:____:____:____:____:____:____	Not at all valuable
Extremely likeable	____:____:____:____:____:____:____	Not at all likeable
Extremely good	____:____:____:____:____:____:____	Not at all good
Extremely beneficial to consumers	____:____:____:____:____:____:____	Not at all beneficial to consumers
Extremely credible	____:____:____:____:____:____:____	Not at all credible
Extremely complete	____:____:____:____:____:____:____	Not at all complete
Extremely factual	____:____:____:____:____:____:____	Not at all factual
Extremely useful	____:____:____:____:____:____:____	Not at all useful
Extremely helpful to make the best decisions	____:____:____:____:____:____:____	Not at all helpful to make the best decisions
Extremely accurate	____:____:____:____:____:____:____	Not at all accurate
Extremely truthful	____:____:____:____:____:____:____	Not at all truthful
Extremely positive	____:____:____:____:____:____:____	Not at all positive
Extremely reliable	____:____:____:____:____:____:____	Not at all reliable
Extremely enjoyable	____:____:____:____:____:____:____	Not at all enjoyable
Extremely clear	____:____:____:____:____:____:____	Not at all clear
Extremely believable	____:____:____:____:____:____:____	Not at all believable
Extremely confident	____:____:____:____:____:____:____	Not at all confident
Extremely safe to trust	____:____:____:____:____:____:____	Not at all safe to trust
Extremely trustworthy	____:____:____:____:____:____:____	Not at all trustworthy

5-1. Now I would like to ask you about your behavior when using national advertising. On the rating scale provided, place a check mark (✓) in the space that best describes your willingness to do the behavior.

- Rely on ad-conveyed information when making purchase related decisions

I am always willing to \_\_\_\_\_ I am never willing to

- Make important purchase related decisions based on ad-conveyed information

I am always willing to \_\_\_\_\_ I am never willing to

- Consider the ad-conveyed information when making purchase related decisions

I am always willing to \_\_\_\_\_ I am never willing to

- Recommend the product or service that I have seen in ads to my friends or family

I am always willing to \_\_\_\_\_ I am never willing to

6. On a scale where **1 = don't trust at all** and **7 = absolutely trust**, how much do you trust the information conveyed in advertising?

Don't trust at all \_\_\_\_\_ Absolutely trust  
1 2 3 4 5 6 7

7. On a scale where **1 = not at all favorable** and **7 = extremely favorable**, how favorable do you feel toward advertising in general?

Not at all favorable \_\_\_\_\_ Extremely favorable  
1 2 3 4 5 6 7

8. On a scale where **1 = not at all credible** and **7 = extremely credible**, how credible do you think advertising in general?

Not at all credible \_\_\_\_\_ Extremely Credible  
1 2 3 4 5 6 7

## II. Perceptions of Advertising in Various Media

### Television Advertising

Have you watched TV advertising in the past 6 months? (check one)

Yes \_\_\_\_\_ ♦ Please complete following questions

No \_\_\_\_\_ ♦ Skip to question #10

9. The following statements pertain to the information **National Television advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

<i>Information conveyed in national TV advertising is ...</i>	Strongly Disagree	Strongly Agree
Honest	<input type="checkbox"/>	<input type="checkbox"/>
Dependable	<input type="checkbox"/>	<input type="checkbox"/>
Valuable	<input type="checkbox"/>	<input type="checkbox"/>
Likeable	<input type="checkbox"/>	<input type="checkbox"/>
Good	<input type="checkbox"/>	<input type="checkbox"/>
Benefits consumers	<input type="checkbox"/>	<input type="checkbox"/>
Credible	<input type="checkbox"/>	<input type="checkbox"/>
Complete	<input type="checkbox"/>	<input type="checkbox"/>
Factual	<input type="checkbox"/>	<input type="checkbox"/>
Useful	<input type="checkbox"/>	<input type="checkbox"/>
Helps people make the best decisions	<input type="checkbox"/>	<input type="checkbox"/>
Accurate	<input type="checkbox"/>	<input type="checkbox"/>
Truthful	<input type="checkbox"/>	<input type="checkbox"/>
Positive	<input type="checkbox"/>	<input type="checkbox"/>
Reliable	<input type="checkbox"/>	<input type="checkbox"/>
Enjoyable	<input type="checkbox"/>	<input type="checkbox"/>
Clear	<input type="checkbox"/>	<input type="checkbox"/>
Believable	<input type="checkbox"/>	<input type="checkbox"/>





**Newspaper Advertising**

Have you read newspaper advertising in the past 6 months? (check one)

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #11

10. The following statements pertain to the information **National NEWSPAPER advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

<i>Information conveyed in national newspaper advertising is ...</i>	Strongly Disagree	Strongly Agree
Honest	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Dependable	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Valuable	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Likeable	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Good	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Benefits consumers	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Credible	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Complete	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Factual	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Useful	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Helps people make the best decisions	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Accurate	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Truthful	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Positive	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Reliable	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Enjoyable	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Clear	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	
Believable	____:____:____:____:____:____:____ 1 2 3 4 5 6 7	



### Radio Advertising

Have you listen to radio advertising in the past 6 months? (check one)

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #12

11. I would like to ask you about your opinions on the information **National RADIO advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 means strongly disagree** and **7 means strongly agree**.

<i>Information conveyed in national radio advertising is ...</i>	Strongly Disagree	Strongly Agree
Honest	: : : : : : : 1 2 3 4 5 6 7	
Dependable	: : : : : : : 1 2 3 4 5 6 7	
Valuable	: : : : : : : 1 2 3 4 5 6 7	
Likeable	: : : : : : : 1 2 3 4 5 6 7	
Good	: : : : : : : 1 2 3 4 5 6 7	
Benefits consumers	: : : : : : : 1 2 3 4 5 6 7	
Credible	: : : : : : : 1 2 3 4 5 6 7	
Complete	: : : : : : : 1 2 3 4 5 6 7	
Factual	: : : : : : : 1 2 3 4 5 6 7	
Useful	: : : : : : : 1 2 3 4 5 6 7	
Helps people make the best decisions	: : : : : : : 1 2 3 4 5 6 7	
Accurate	: : : : : : : 1 2 3 4 5 6 7	
Truthful	: : : : : : : 1 2 3 4 5 6 7	
Positive	: : : : : : : 1 2 3 4 5 6 7	
Reliable	: : : : : : : 1 2 3 4 5 6 7	
Enjoyable	: : : : : : : 1 2 3 4 5 6 7	
Clear	: : : : : : : 1 2 3 4 5 6 7	
Believable	: : : : : : : 1 2 3 4 5 6 7	



### Magazine Advertising

Have you read magazine advertising in the past 6 months? (check one)

Yes \_\_\_\_ ♦ Please complete following questions

No \_\_\_\_ ♦ Skip to question #13

12. Following statements pertain to the information **National MAGAZINE advertising** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 means strongly disagree** and **7 means strongly agree**.

<i>Information conveyed in national magazine advertising is ...</i>	Strongly Disagree	Strongly Agree
Honest	: : : : : : : 1 2 3 4 5 6 7	
Dependable	: : : : : : : 1 2 3 4 5 6 7	
Valuable	: : : : : : : 1 2 3 4 5 6 7	
Likeable	: : : : : : : 1 2 3 4 5 6 7	
Good	: : : : : : : 1 2 3 4 5 6 7	
Benefits consumers	: : : : : : : 1 2 3 4 5 6 7	
Credible	: : : : : : : 1 2 3 4 5 6 7	
Complete	: : : : : : : 1 2 3 4 5 6 7	
Factual	: : : : : : : 1 2 3 4 5 6 7	
Useful	: : : : : : : 1 2 3 4 5 6 7	
Helps people make the best decisions	: : : : : : : 1 2 3 4 5 6 7	
Accurate	: : : : : : : 1 2 3 4 5 6 7	
Truthful	: : : : : : : 1 2 3 4 5 6 7	
Positive	: : : : : : : 1 2 3 4 5 6 7	
Reliable	: : : : : : : 1 2 3 4 5 6 7	
Enjoyable	: : : : : : : 1 2 3 4 5 6 7	
Clear	: : : : : : : 1 2 3 4 5 6 7	
Believable	: : : : : : : 1 2 3 4 5 6 7	

12-1. Now I would like to ask you about your attitude related to information conveyed in **National Magazine advertising**. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 = strongly disagree** and **7 = strongly agree**.

	Strongly Disagree						Strongly Agree
I trust the information conveyed in magazine advertising	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
I have confidence on the information conveyed in magazine advertising	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
It is safe to trust the information conveyed in magazine advertising	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
I am willing to rely on the information conveyed in magazine advertising when making purchase related decisions.	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
I am willing to make important purchase related decisions based on the information conveyed in magazine advertising.	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
I am willing to consider the information conveyed in magazine advertising when making purchase related decisions.	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7
I am willing to recommend the product or service that I have seen in magazine advertising to my friends or family.	_____	:	_____	:	_____	:	_____
	1	2	3	4	5	6	7

### Internet Advertising

Have you used internet advertising in the past 6 months? (check one)

Yes  ♦ Please complete following questions

No  ♦ Skip to question #14

13. I would like to ask you about your opinions on the information **National INTERNET advertising (e.g. banner ads, commercial sites)** conveys. Please rate each of the following statements by placing a check mark in one of 7 spaces, where **1 means strongly disagree** and **7 means strongly agree**.

<i>Information conveyed in national Internet advertising is ...</i>	Strongly Disagree	Strongly Agree
Honest	: : : : : : : 1 2 3 4 5 6 7	
Dependable	: : : : : : : 1 2 3 4 5 6 7	
Valuable	: : : : : : : 1 2 3 4 5 6 7	
Likeable	: : : : : : : 1 2 3 4 5 6 7	
Good	: : : : : : : 1 2 3 4 5 6 7	
Benefits consumers	: : : : : : : 1 2 3 4 5 6 7	
Credible	: : : : : : : 1 2 3 4 5 6 7	
Complete	: : : : : : : 1 2 3 4 5 6 7	
Factual	: : : : : : : 1 2 3 4 5 6 7	
Useful	: : : : : : : 1 2 3 4 5 6 7	
Helps people make the best decisions	: : : : : : : 1 2 3 4 5 6 7	
Accurate	: : : : : : : 1 2 3 4 5 6 7	
Truthful	: : : : : : : 1 2 3 4 5 6 7	
Positive	: : : : : : : 1 2 3 4 5 6 7	
Reliable	: : : : : : : 1 2 3 4 5 6 7	
Enjoyable	: : : : : : : 1 2 3 4 5 6 7	
Clear	: : : : : : : 1 2 3 4 5 6 7	
Believable	: : : : : : : 1 2 3 4 5 6 7	





### III. Perceptions of the Information in Mass Media

Which of the following media have you seen, read or listened to in the past 6 months?  
Please indicate by checking yes or no below for each medium listed.

(1) Television	Yes _____	No _____
(2) Newspapers	Yes _____	No _____
(3) Radio	Yes _____	No _____
(4) Magazine	Yes _____	No _____
(5) Internet	Yes _____	No _____

14. Below is a list of words evaluating the quality of information delivered by different mass media. Please rate each on the corresponding items by placing a check mark (✓) in one of 7 spaces. **Please keep in mind that information includes non-advertising contents and advertising contents.**

**For example.** If you think that the information newspapers deliver is very closely related to one end of the scale, you should place your check mark as follows:

Extremely believable \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_✓\_\_\_\_\_ Not at all believable  
or  
Extremely believable ✓\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ Not at all believable

If you think that the information newspapers deliver is neutral in terms of its believability, you should place your check mark as follows:

Extremely believable \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_✓\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ Not at all believable

**Information television delivers:**

Extremely believable _____:_____:_____:_____:_____:_____	Not at all believable
Extremely accurate _____:_____:_____:_____:_____:_____	Not at all accurate
Extremely fair _____:_____:_____:_____:_____:_____	Not at all fair
Extremely in-depth _____:_____:_____:_____:_____:_____	Not at all in-depth

**Information newspapers deliver:**

Extremely believable _____:_____:_____:_____:_____:_____	Not at all believable
Extremely accurate _____:_____:_____:_____:_____:_____	Not at all accurate
Extremely fair _____:_____:_____:_____:_____:_____	Not at all fair
Extremely in-depth _____:_____:_____:_____:_____:_____	Not at all in-depth

**Information radio delivers:**

Extremely believable \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all believable  
 Extremely accurate \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all accurate  
 Extremely fair \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all fair  
 Extremely in-depth \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all in-depth

**Information magazines deliver:**

Extremely believable \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all believable  
 Extremely accurate \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all accurate  
 Extremely fair \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all fair  
 Extremely in-depth \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all in-depth

**Information the Internet delivers:**

Extremely believable \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all believable  
 Extremely accurate \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all accurate  
 Extremely fair \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all fair  
 Extremely in-depth \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all in-depth

**IV. Evaluation of Advertisements**

15. On the next several pages, I would like to ask you to evaluate a series of advertisements. You will see 4 different advertisements and be asked to answer the questions for each advertisement. On the rating scales, place a check mark (✓) in the space that best describes your opinion about each advertisement.

**For example.** If you think that the advertisement is very closely related to one end of the scale, you should place your check mark as follows:

Extremely useful \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : ✓ Not at all useful

or

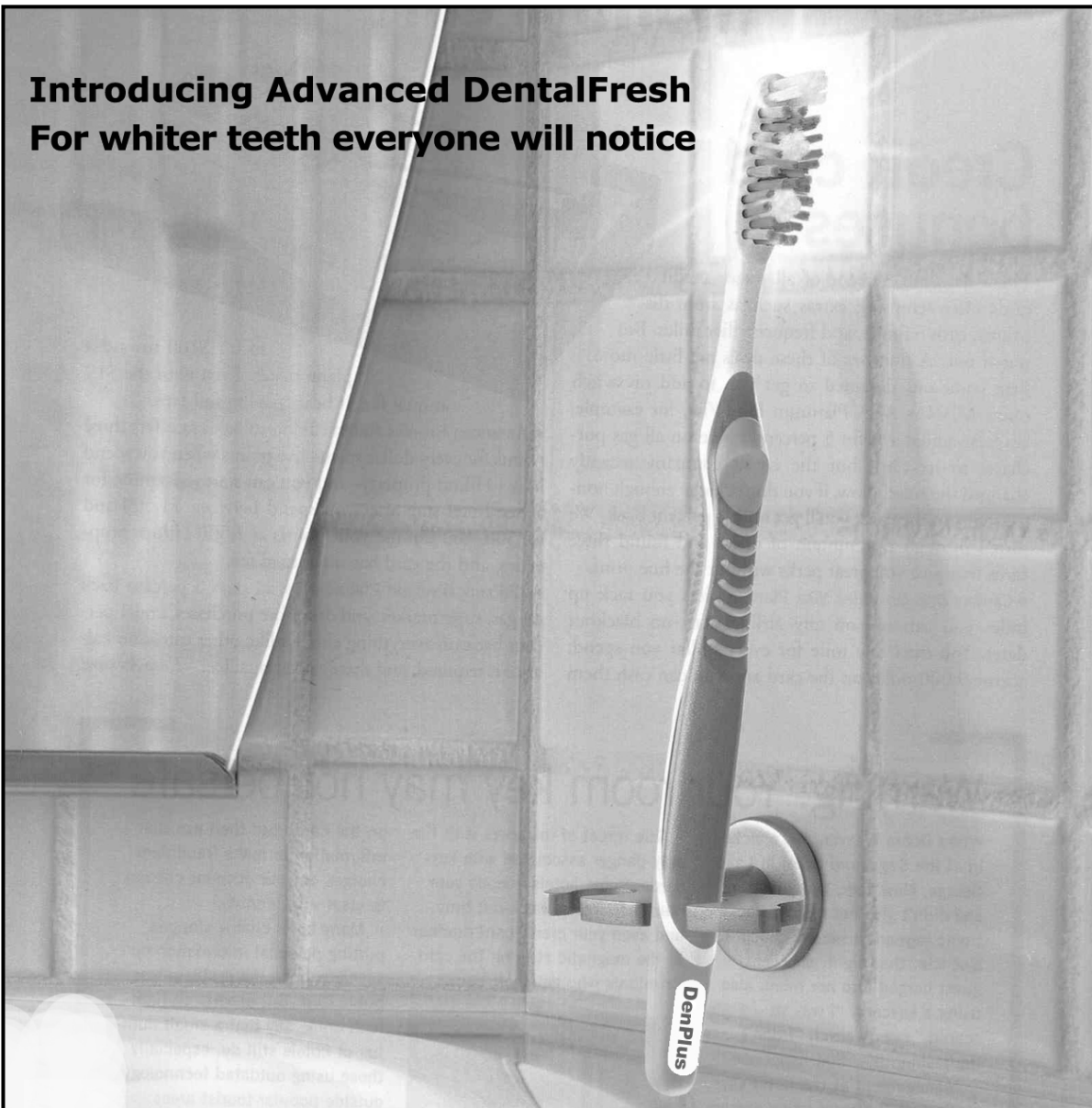
Extremely useful ✓ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all useful

If you think that the advertisement is neutral in terms of its usefulness, you should place your check mark as follows:

Extremely useful \_\_\_\_\_ : \_\_\_\_\_ : ✓ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ Not at all useful

Please look at and read this ad to answer the questions on the next page.  
You should not go back to this page once you turn the page.

**Introducing Advanced DentalFresh  
For whiter teeth everyone will notice**



The amazing new DenPlus Advanced DentalFresh whitening toothbrush has a unique polish cup bristle designed to help maximize the effectiveness of your toothpaste. Tightly packed center bristles encircled by taller angled bristles help hold toothpaste to effectively clean away stains. It cleans and whitens your teeth, leaving you with a brighter, whiter and healthy-looking smile.



To discover more great ways to keep teeth their brightest, visit [www.denplus.com](http://www.denplus.com)

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw.

Have you seen this ad before? Yes _____ No _____
--

	Strongly Disagree							Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7	

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

- Now I would like to ask you about some of your thoughts and feelings about toothbrushes in general. Please answer the below based on how you think about a “toothbrush”

**To me, Toothbrush is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please look at and read this ad to answer the questions on the next page.  
You should not go back to this page once you turn the page.



MUSIC. VIDEO.

Carry the ultimate audio-visual experience in your pocket with the TG4500 from TelPon. Stream, download and play multimedia content on-demand, and enhance your listening experience with powerful stereo speakers that can fill a room with music. It's the true integration of sound and vision.



TG 4500

Stereo Speakers  
FM Radio  
3D Gaming  
Streaming Video  
1.3 Megapixel Camera  
262K Color Screen

 **TELPON**

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw.

Have you seen this ad before? Yes \_\_\_\_\_ No \_\_\_\_\_

	Strongly Disagree		Strongly Agree
I trust the information conveyed in this ad	_____	_____	_____
	1	2	3
	4	5	6
	7		

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	-------	---------------------

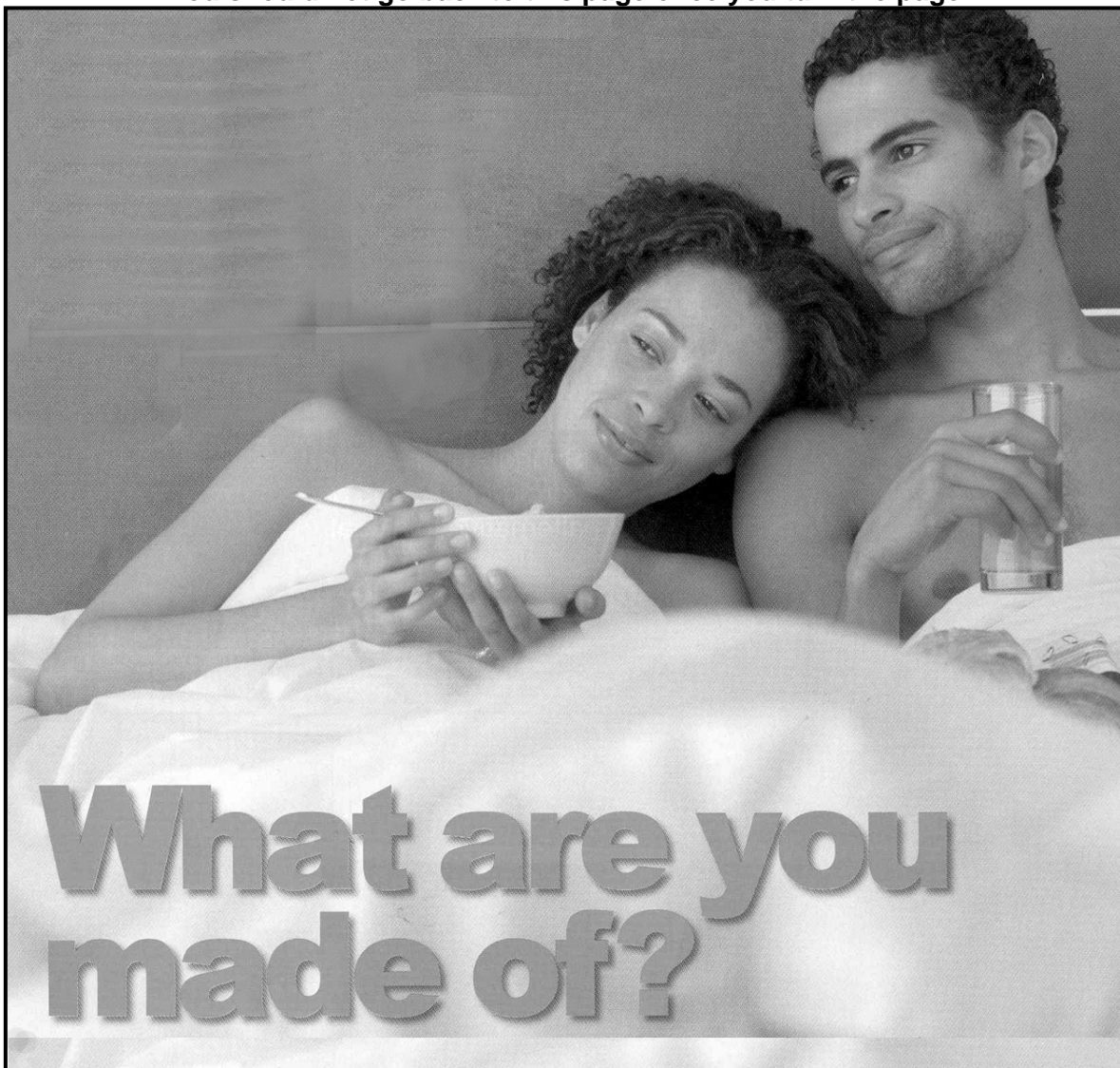
- Now I would like to ask you about some of your thoughts and feelings about mobile phones in general. Please answer the below based on how you think about a "mobile phone"

**To me, Mobile Phone is...**

Relevant	_____	_____	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please look at and read this ad to answer the questions on the next page.  
You should not go back to this page once you turn the page.

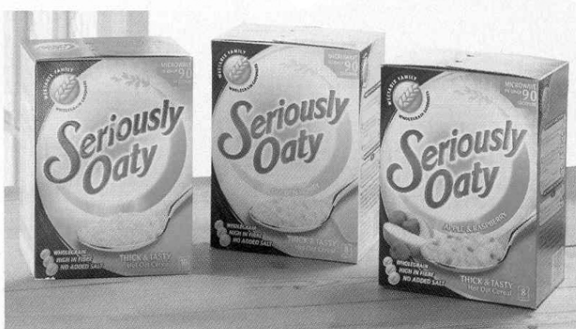


**F**or a convenient and healthy breakfast, go for the wholegrain goodness of Seriously Oaty. It's an excellent source of dietary fiber as it's made from wholegrains and is an important

part of a balanced diet, helping our bodies to stay fit and healthy.

Seriously Oaty contains proteins and carbohydrates to repair body cells. A two-biscuit serving provides 32 percent of the recommended daily allowance of iron and the vitamins B1, B2, niacin and folic acid.

For a warming breakfast on winter mornings, try Seriously Oaty hot oat cereal in new Spiced Apple and Sultana flavor. It'll nourish and sustain you throughout the day and can be relied upon to help you feel healthy.





**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw

Have you seen this ad before? Yes _____ No _____
--

	Strongly Disagree		Strongly Agree	
I trust the information conveyed in this ad	_____	_____	_____	_____
	1	2	3	4
	5	6	7	

**The advertisement I just saw is...**

	1		2		3		4		5		6		7
Extremely believable	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	Not at all believable
Extremely useful	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	Not at all useful
Extremely irritating	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	Not at all irritating
Extremely enjoyable	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	_____	_____	_____	_____	_____	_____	Not at all favorable
---------------------	-------	-------	-------	-------	-------	-------	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	_____	_____	_____	_____	_____	Not at all familiar
--------------------	-------	-------	-------	-------	-------	-------	---------------------

- Now I would like to ask you about some of your thoughts and feelings about breakfast cereal in general. Please answer the below based on how you think about "breakfast cereal"

**To me, Breakfast Cereal is...**

Relevant	_____	_____	_____	_____	_____	Irrelevant
Important	_____	_____	_____	_____	_____	Unimportant
Means nothing	_____	_____	_____	_____	_____	Means a lot to me
Boring	_____	_____	_____	_____	_____	Interesting
Little to lose if I choose the wrong brand	_____	_____	_____	_____	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Please look at and read this ad to answer the questions on the next page.  
You should not go back to this page once you turn the page.



## Introducing the NEW Mates-Rates from SK-Mobile

Everyone's talking about pay-as-you-go Mates Rates from SK-Mobile. Switch to Mates Rates and you will get **9¢**-per-minute calls all day, everyday to any other SK-Mobile customer.

What's more, you'll get your first hour of calls FREE on any SK-Mobile pay-as-you-go phone until February 28. If you are already SK-Mobile pay-as-you-go customer, call 1-800-222-7722 and switch to this new money-saving plan. With calls and texts at these prices, Mates Rates makes keeping in touch with your friends easier than ever.

**SK-Mobile**  
your mobile life partner

**PLEASE DO NOT TURN THE PAGE BACK TO THE AD**

- Please answer the following questions regarding the ad you just saw

Have you seen this ad before? Yes _____ No _____
--

	Strongly Disagree							Strongly Agree
I trust the information conveyed in this ad	_____	:	_____	:	_____	:	_____	_____
	1		2		3		4	
							5	
								6
								7

**The advertisement I just saw is...**

	1	2	3	4	5	6	7	
Extremely believable	_____	:	_____	:	_____	:	_____	Not at all believable
Extremely useful	_____	:	_____	:	_____	:	_____	Not at all useful
Extremely irritating	_____	:	_____	:	_____	:	_____	Not at all irritating
Extremely enjoyable	_____	:	_____	:	_____	:	_____	Not at all enjoyable

**I feel toward this ad...**

Extremely favorable	_____	:	_____	:	_____	:	_____	Not at all favorable
---------------------	-------	---	-------	---	-------	---	-------	----------------------

**How familiar are you to the brand?**

Extremely familiar	_____	:	_____	:	_____	:	_____	Not at all familiar
--------------------	-------	---	-------	---	-------	---	-------	---------------------

- Now I would like to ask you about some of your thoughts and feelings about mobile phone service in general. Please answer the below based on how you think about "mobile phone service"

**To me, Mobile Phone Service is...**

Relevant	_____	:	_____	:	_____	:	_____	Irrelevant
Important	_____	:	_____	:	_____	:	_____	Unimportant
Means nothing	_____	:	_____	:	_____	:	_____	Means a lot to me
Boring	_____	:	_____	:	_____	:	_____	Interesting
Little to lose if I choose the wrong brand	_____	:	_____	:	_____	:	_____	A lot to lose if I choose the wrong brand

**Go on to the next page**

Now, I would like to ask some question about you for classification purposes only.

16. In what year were you born? (write in) \_\_\_\_\_
17. What is your sex? (check one) 1. Male \_\_\_ 2. Female \_\_\_
18. What is the last grade or class that you completed in school? (check one)
1. Some High School or less
2. High School graduate (Grade 12 or GED certificate)
3. Some college, no 4-year degree
4. Bachelor's degree
5. Master's degree
6. Doctorate degree
19. What race do you consider yourself to be? (check one)
1. White
2. Black or African American
3. Asian
4. Hispanic or Latino
5. Native American or Alaska Native
6. Native Hawaiian or other Pacific Islander
7. Other or mixed race
20. Before taxes, which of the following categories did your family income fall into last year? (check one)
1. \$75,000 or more
2. \$55,000-\$74,999
3. \$35,000-\$54,999
4. \$15,000-\$34,999
5. \$14,999 or less

---

**Thank you very much  
for taking the time to complete this survey!**

PLEASE FILL OUT THE RECEIPT FORM PROVIDED TO GET YOUR GIFT MONEY.

PLACE THE COMPLETED SURVEY WITH THE RECEIPT FORM IN THE ENVELOPE PROVIDED AND PUT IN THE CAMPUS MAIL.

**RECEIPT**

I acknowledge that I have completed the survey for the research 'Measuring Trust in Advertising: Measurement Development and Validation'. Please send my \$3.00 gift to the name and campus address below.

\_\_\_\_\_  
Name of Recipient

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Campus Address