The effects of source and product characteristics on persuasion.

Karin Braunsberger
braunsbe@mail.usf.edu

Follow this and additional works at: https://digital.usfsp.edu/fac_publications
Part of the Marketing Commons

Recommended Citation
THE EFFECTS OF SOURCE AND PRODUCT CHARACTERISTICS ON PERSUASION

The members of the Committee approve the doctoral dissertation of Karin Braunsberger

James M. Munch
Supervising Professor

Glen Jarboe

Julie Baker

Mark Eakin

Paul Paulus

Dean of the Graduate School
THE EFFECTS OF SOURCE AND PRODUCT CHARACTERISTICS ON PERSUASION

by

KARIN BRAUNSBERGER

Presented to the Faculty of the Graduate School of The University of Texas at Arlington in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 1996
ACKNOWLEDGEMENTS

I would like to extend my gratitude to Dr. James M. Munch who agreed to be the Chairman of my Dissertation Committee and guided me through the process of working on my dissertation. I would also like to thank Dr. Paul Paulus who was extremely helpful and encouraging, especially during the latter stages of this painful process. I further extend my gratitude to Dr. Glen Jarboe who spent many hours helping me with the data analysis. And I also thank Dr. Julie Baker and Dr. Mark Eakin for their help.

I wish to express my undying gratitude to my fellow sufferers R. Brian Buckler and Michaelle Cameron. Brian and Michaelle's constant emotional and professional support helped me through the stages known as "Dissertation Blues" (no cite!). I thank both of them for being my friends and for always being available to me.

I would also like to thank Mr. Mike McCorstin for lending his voice for the radio advertisements that had to be recorded for this dissertation.

Finally, I would like to thank Ms. RoseAnn Reddick, our administrative assistant, who encouraged me throughout my academic program. Although it can not be easy to deal with a bunch of "neurotic" Ph.D. students who are constantly on the
verge of a nervous breakdown, RoseAnn has been taking care of us for years. Thanks.

February 9, 1996
ABSTRACT

THE EFFECTS OF SOURCE AND PRODUCT CHARACTERISTICS ON PERSUASION

Publication No.________

Karin Braunsberger, Ph.D.
The University of Texas at Arlington, 1996

Supervising Professor: James M. Munch

The purpose of this research was to test the "product and endorser feature congruence hypothesis." Thus, it was tested whether matching source expertise with credence attribute claims and source experience with experience attributes claims has a positive effect on consumers' cognitive responses as well as their attitudes toward the endorser and the ad. These effects were investigated for the following reasons:

First, source expertise appears to have a significant impact on persuasion (McGuire 1969) and is distinguishable from source experience (Jacoby, Troutman, Kuss and Mazursky 1986). Thus, these constructs may have differential effects on persuasion. Second, credence and experience attributes might differentially affect consumer skepticism (Darby and Karni 1973). Third, Darby and Karni's (1973) classification in
combination with the "match-up hypothesis" (Forkan 1980) can be used to explain under what product attribute conditions an individual should be likely to prefer information supplied by either an expert or an experienced source.

The resulting hypotheses were tested in a laboratory setting. The experimental design was a 2x2x2 between-subjects, crossed factorial design. The three factors included source expertise (high/low), source experience (high/low), and product attribute claims (experience/credence). Thus, eight different treatments (i.e., radio ads endorsing a hospital) were developed.

The results indicate that while all source and product attribute claim manipulations were successful, only one of the initial hypotheses can be supported. Specifically, a source high in expertise as compared to one low in expertise appears to lead to positive attitudes toward the endorser and the ad.

The following reasons might account for the unexpected results: First, some of the respondents' cognitive responses suggest that they might have been under the impression that, due to quality controls performed by federal agencies, there is little variation in the quality of patient care provided by hospitals. Second, it appears that source experience is perceived to be more ambiguous and difficult to evaluate. Third, the majority of the sample was very young (20 to 26 years of age). For such a vital group, the choice of a hospital might not be very important.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................ iv

ABSTRACT .................................................... vi

LIST OF FIGURES ........................................... xiii

LIST OF TABLES .............................................. xiv

Chapter

1. INTRODUCTION ........................................... 1
   Statement of the Problem .................................. 1
   The Effects of Source Characteristics on Persuasion .... 2
   The Effects of Product Characteristics on Persuasion .... 4
   The Combined Effects of Source and Product Characteristics on Persuasion .... 5
   Research Purpose and Objectives ......................... 6
   An Overview of the Study .................................. 7

2. LITERATURE REVIEW ...................................... 9
   Overview .................................................. 9
   The Effects of Source Characteristics in the Persuasion Process .... 9
   Trustworthiness and Expertise as Dimensions of Source Credibility .... 11
   Source Expertise versus Source Experience ............... 13
   The Effects of Product Characteristics in the Persuasion Process .... 19
   The Combined Effects of Source and Product Characteristics in the Persuasion Process .... 22
   Product and Endorser Feature Congruence Hypothesis ......... 26
Chapter

Analytical Model ........................................ 74
Summary ............................................... 74

5. RESULTS AND ANALYSIS .............................. 75
Overview ............................................. 75
The Sample ............................................. 75
Manipulation Checks ..................................... 76
   Source Manipulations ................................ 76
      Source Expertise .................................. 76
      Source Experience ................................ 77
   Product Attribute Claims ................................ 78
Dependent Measures ..................................... 79
   Attitude Measures .................................. 79
      Attitude Toward the Endorser ................. 79
      Attitude Toward the Advertisement .......... 82
Skepticism Toward the Product Claims .................. 84
Cognitive Responses .................................... 86
   Counterarguments .................................. 87
   Source Derogations ................................ 88
   Support Arguments ................................ 90
   Source Bolsters ................................... 91
Summary ............................................... 94

6. DISCUSSION AND IMPLICATIONS ...................... 95
Overview ............................................... 95

xi
Chapter

Summary and Discussion of Results ......................... 95

Summary ....................................................... 95

Discussion of Results ................................. 96

Source Expertise versus Source Experience ............ 96

Product Attribute Claims ..................... 105

Theoretical and Managerial Implications ............... 109

Contributions and Limitations ..................... 111

Suggestions for Future Research .................... 113

Summary and Conclusion ......................... 114

Appendix

A. Questionnaire for Pilot Study I: Source Manipulations ................................. 116

B. Questionnaire for Pilot Study II: Source Manipulations .................................. 127

C. Questionnaire for Pilot Study III: Product Claim Manipulations ................... 137

D. Experimental Message: Introductory Remarks and Experimental Treatments ........... 153

E. Experimental Measures ...................................... 171

F. Figures and Residual Plots .............................. 198

BIBLIOGRAPHY ................................................... 246
LIST OF FIGURES

Figure

2.1. Possible Combinations of Source Characteristics .............. 18

4.1. Chronology of the Experimental Procedure ............. 73
LIST OF TABLES

Table

3.1. List of Hypotheses ........................................... 44
4.1. Product Attribute Claims .................................. 63
5.1. Means and ANOVA Table for the Measure of Attitude Toward the Endorser .................................. 81
5.2. Means and ANOVA Table for the Measure of Attitude Toward the Advertisement .................................. 83
5.3. Means and ANOVA Table for the Measure of Skepticism Toward the Product Attribute Claims .................................. 85
5.4. Definitions of the Different Types of Cognitive Responses .................................. 86
5.5. ANOVA Table - Dependent Measure: Frequency of Counterarguments .................................. 89
5.6. ANOVA Table - Dependent Measure: Frequency of Source Derogations .................................. 90
5.7. ANOVA Table - Dependent Measure: Frequency of Support Arguments .................................. 92
5.8. ANOVA Table - Dependent Measure: Frequency of Source Bolsters .................................. 93
5.9. Summary of the Research Results .................................. 94
6.1. ANOVA Table - Dependent Measure: Attitude Toward the Hospital .................................. 100
6.2. ANOVA Table - Dependent Measure: Purchase Intentions .................................. 101
6.3. Means and ANOVA Table for the Measure of Believability of Product Attribute Claims .................................. 107
6.4. Interaction Between Source Experience and Product Attribute Claims - Dependent Measure: Believability of Product Attribute Claims
CHAPTER I

INTRODUCTION

Statement of the Problem

Much research in social psychology, economic psychology, and marketing has focused on assessing the impact of persuasive communications on attitude formation and change (Darby and Karni 1973; Kahle and Homer 1985; McGuire 1969; Nelson 1970, 1974; Price, Feick and Higie 1989; Sternthal, Phillips and Dholakia 1978; Wright 1973; Wright and Lynch 1995). This area has also been of interest to industry and policy makers. Whereas policy makers are mainly concerned about protecting consumers from misleading marketing communications, industry is generally interested in the impact of persuasive communications on profits. Considering that U.S. businesses spend a vast amount of money per year on marketing communications directed at consumers, the interest in the effects of this type of communication is understandable. For example, it has been estimated that U.S. advertising expenditures exceed $126 billion per year (Advertising Age 1992), whereas yearly spending on sales promotion is believed to run about $160 billion (Mandese and Donaton 1992). Some companies in the U.S. spend a staggering amount of money on advertising alone.
Proctor & Gamble, for example, spends over $2.1 billion per year on national advertising, which is closely followed by Phillip Morris and General Motors with yearly national advertising expenditures of approximately $2 billion and $1.4 billion, respectively (Crain Communications Inc. 1993).

The Effects of Source Characteristics on Persuasion

Communication factors that are generally examined in persuasion studies include the effects of source, message, channel, receiver, and destination characteristics (McGuire 1969). Much of this research has focused on the effects of source characteristics on attitude formation and change. Specifically, source characteristics such as similarity, attractiveness, expertise, trustworthiness, accessibility, likability, and power have received attention (Bither and Wright 1979; Feick and Higie 1992; Festinger 1954; Hovland and Weiss 1951; Kamins 1990; Klebba and Unger 1983; McGinnies and Ward 1980; Price et al., 1989; Sternthal et al., 1978; Woodside and Davenport 1974). The findings indicate that sources with relatively high positive characteristics are in general more persuasive than sources with less positive or negative characteristics. It further appears that source credibility seems to be the most important source characteristic in the determination of persuasion, with highly credible sources being consistently more persuasive than less credible ones (Bochner and Insko 1966; McGinnies 1973).
There appears to be little agreement, however, as to how source credibility should be defined. Although some find evidence for two dimensions of source credibility, namely expertise and trustworthiness (Giffin 1967; Hovland, Janis and Kelley 1953; Schweitzer and Ginsburg 1966; Sternthal et al., 1978), others find the impact of trustworthiness to be trivial (Anderson and Clevenger 1963; McGuire 1969). One reason that may be offered for why there is so much disagreement about the dimensionality of source credibility is that there appear to be multiple definitions and operationalizations of source expertise. Thus, measurements of source expertise often are confounded with source attractiveness, source similarity, or trustworthiness (Brock 1965; Hovland and Weiss 1951; McGinnies and Ward 1980; Walster, Aronson and Abraham 1966).

Further, whereas some define and operationalize source expertise in terms of source experience (Brock 1965; Woodside and Davenport 1974; Alba and Hutchinson 1987; Bettman and Sujan 1987), others maintain that expertise and experience are two distinguishable constructs, with expertise involving a qualitatively higher level of knowledge and/or skill than experience (Jacoby et al., 1986; Maddux and Rogers 1980). Research adhering to this latter view has shown that a source high in expertise tends to be consistently more persuasive than a source low in expertise (Crano 1970; Hass 1981; Homer and Kahle 1990; Ross 1973).

Thus, it appears that a precise definition of both source
expertise and source experience might resolve at least some of the problems encountered by previous research and may even shed light on some of the more ambiguous findings (Burnkrant and Cousineau 1975; McGinnies and Ward 1980). A more precise definition could also further the development and testing of an integrated framework explaining under which conditions source expertise is likely to have a pronounced effect on persuasion and the resulting impact on the choice of advertising form and content.

The Effects of Product Characteristics on Persuasion

Research in economic psychology and marketing on consumer information processing suggests that consumer attitudes may not only be affected by certain source characteristics, but also by certain product characteristics. In this context, Nelson's (1970, 1974) framework seems to be relevant. Nelson has distinguished between the "search" and "experience" qualities of a product. Accordingly, search attributes are those that can be determined before the purchase of a product, whereas experience attributes are those that can only be evaluated after the product has been used. Darby and Karni (1973) have added a third category, which they term "credence" attributes. Since evaluation of these attributes is not possible through normal usage of the product, consumers would have to be willing to invest in additional information to properly assess their value (e.g., most consumers probably do not possess the
expertise to judge whether a medical diagnosis about a heart condition is correct and would have to acquire additional information to be able to do so).

It has been suggested that consumers are differentially skeptical of advertising claims depending on whether these claims are search, experience, or credence attribute claims. Wright and Lynch (1995), for example, found empirical support for Nelson's (1970) hypothesis that consumers should be more skeptical of experience than search attribute claims. Further, Darby and Karni's (1973) theory implies that consumers should be most skeptical of credence attribute claims, because the lack of complete information creates favorable conditions for fraud. These findings and suggestions indicate that an advertiser's choice of product attribute claims should guide the composition of the promotional mix (Wright and Lynch 1995).

The Combined Effects of Source and Product Characteristics on Persuasion

It has been suggested in the marketing literature that a match between endorser and product characteristics should increase the effectiveness of persuasive communications. For example, the "match-up hypothesis" (Forkan 1980; Hawkins, Best and Coney 1983) proposes that congruence between relevant product and endorser characteristics should have a positive effect on product and advertisement evaluations, whereas incongruence should lead to declining evaluations (Kamins
This hypothesis is based on the premise that each endorser carries a specific psychological or cultural meaning that needs to match the meaning of the product. If this match occurs and the transfer of meaning from endorser to product is successful, the advertisement can be expected to be effective and persuasive (McCracken 1989). Empirical research in marketing tends to support this notion of necessary congruence between certain product and endorser features (Kahle and Homer 1985; Kamins 1990; Langmeyer and Walker 1991).

These findings suggest a general need for matching of product and endorser characteristics and further indicate a need to investigate the combined effects of these communication variables on persuasion.

Research Purpose and Objectives

The purpose of this research is to examine the combined effects of certain source and product characteristics on persuasion processes in advertising. The study is designed to investigate the following research issues:

(1) What are the effects of different source characteristics on individuals being exposed to a persuasive advertisement message?

(2) What are the effects of different product characteristics on individuals being exposed to a persuasive advertisement message?
(3) What are the combined effects of the above mentioned source and product characteristics on individuals being exposed to a persuasive advertisement message?

Specifically, this study focuses on the impact of source expertise and source experience on persuasion, while also examining the effects of credence and experience attribute claims. There are several reasons why this research investigates the above effects.

First, source expertise appears to have a significant impact on persuasion and is distinguishable from source experience. Thus, these two constructs are likely to have differential effects on attitude formation and change. Second, product attribute claims, such as credence and experience attribute claims, have been suggested to differentially affect consumer skepticism. Third, as the next chapter will show, Nelson's (1970, 1974) and Darby and Karni's (1973) classification in combination with the "match-up hypothesis" (Forkan 1980; Hawkins et al., 1983) can be used to explain under what product attribute conditions an individual should be likely to prefer prepurchase information supplied by either an expert or an experienced source.

An Overview of the Study

Chapter 1 presents the statement of the problem as well as the purpose and objectives of the study. Chapter 2 contains
a review of the relevant literature on the effects of source and product characteristics on persuasion. It further includes a discussion of the relevant literature on the "match-up hypothesis." These discussions provide the basis for the particular research issues of interest. The specific hypotheses to be tested are introduced in chapter 3. Chapter 4 includes the research design and methodology used to test these hypotheses. The hypotheses tests are contained in chapter 5. The results of these tests and implications for future research and marketing management are discussed in chapter 6.
CHAPTER II

LITERATURE REVIEW

Overview

This chapter presents a review of the literature on which the hypotheses in chapter 3 are based. First, the chapter addresses the conceptual and empirical evidence for the effects of specific source characteristics on the individual in the persuasion process. Then the discussion turns to evidence for the impact of certain product characteristics on consumer evaluations of that product. Finally, evidence for the combined effects of specific source and product characteristics on individuals being exposed to persuasive communications will be reviewed.

The Effects of Source Characteristics in the Persuasion Process

As mentioned before, much research has been done in both marketing and social psychology on the effects of source characteristics on persuasion. Source characteristics that have received much attention include similarity, attractiveness, expertise, trustworthiness, accessibility, likability, and
power (Bither and Wright 1979; Feick and Higie 1992; Festinger 1954; Hovland and Weiss 1951; Kamins 1990; Klebba and Unger 1983; McGinnies and Ward 1980; Price et al., 1989; Sternthal et al., 1978; Woodside and Davenport 1974). In general, it has been found that sources with relatively high positive characteristics are more persuasive than those with less positive, or even negative, characteristics. Specifically, source credibility has been suggested to be the most important source characteristic in the determination of persuasion, with highly credible sources being more persuasive than those who are less credible (Bochner and Insko 1966; McGinnies 1973).

However, this is where the agreement ends. Some define a credible source as being both trustworthy and high in expertise (Giffin 1967; Hovland, Janis and Kelley 1953; Schweitzer and Ginsburg 1966; Sternthal et al., 1978), whereas others find the impact of trustworthiness to be trivial (Anderson and Clevenger 1963; McGuire 1969). One of the reasons for this disagreement might be traced to the multiple definitions and operationalizations of source expertise that have been used in previous research. Due to the lack of a commonly acknowledged and precise definition, measurements of source expertise are often confounded with source attractiveness, source similarity, or trustworthiness (Brock 1965; Hovland and Weiss 1951; McGinnies and Ward 1980; Walster et al., 1966). Consequently, attempts to develop an integrating framework explaining under what conditions source expertise is likely to have a pronounced
effect on persuasion and the resulting impact on advertising form and content have in general been problematic (Feick and Higie 1992; Petty, Cacioppo and Goldman 1981; Price et al., 1989).

Trustworthiness and Expertise as Dimensions of Source Credibility

Dholakia and Sternthal (1977), and Sternthal et al., (1978), have reviewed numerous empirical studies on the relationship between source credibility and persuasion and concluded that trustworthiness and expertise are two dimensions of source credibility. However, a closer look at the empirical evidence cited by the above authors makes it clear that most of these studies have manipulated source credibility by creating a highly positive (attractive, likeable, trustworthy, and knowledgeable) and a highly negative source, thus making it impossible to determine the unique contribution of each of these factors on attitude change (Hovland and Weiss 1951; Johnson, Torcivia and Poprick 1968; Kelman and Hovland 1953; Miller and Baseheart 1969; Schulman and Worrell 1970; Walster et al., 1966; Warren 1969).

Kelman and Hovland's findings (1953), for example, suggest that positive communicators have a significantly greater effect on immediate attitude change than negative communicators. A positive communicator is described as being trustworthy and well-informed, whereas a negative communicator
is pictured as untrustworthy and poorly informed. However, the negative source also gives "the impression of being an obnoxious, self-centered individual with a shady past and present", whereas the positive communicator, who is an acknowledged expert, gives the impression of being a warm, sincere, and caring individual (1953, p. 329). Thus, it is difficult to determine whether it was the perceived expertise, trustworthiness, or likability of the source that had a more pronounced effect on attitude change.

Some of the more recent studies fall victim to the same fallacy. For example, McGinnies and Ward (1980) have investigated the effects of trustworthiness and expertise on attitude change, and find only trustworthiness to have a significant effect. The source manipulations, however, appear to be problematic. Both expert and nonexpert are described as West German professionals. Considering recent history, using the opinions of West Germans in a matter related to territorial boundaries might not have been the most appropriate choice under any circumstances. This choice could have enhanced the importance of trustworthiness to the respondents, which could be one reason why expertise was found to have an insignificant impact on attitude change. Further, describing the untrustworthy source as being sympathetic to the Nazi party, might not have been a very good idea either. This confounding of trustworthiness with likability might have further increased the strength of the trustworthiness manipulation.
McGuire (1969) has also performed an extensive review of studies investigating the relationship between source credibility and attitude change. He maintains while there is conclusive empirical evidence for a significant effect of expertise on attitude change, the evidence for an effect of trustworthiness is "small almost to the vanishing point" (1969, p.185).

Further, several more recent studies have found communicator expertise to be linked positively to successful influence attempts toward a given audience (DeCarufel and Insko 1979; Fazio 1979; Woodside and Davenport 1974). Thus, the present study will concentrate on the effect of expertise on attitude change.

Source Expertise versus Source Experience

Much work has been done in marketing and social psychology on the impact of expertise on persuasion. A review of this work, however, shows that there is no agreement about the definition of expertise. Hovland et al., (1953), define expertise as the extent to which a communicator is perceived to be capable of making correct assertions. McGuire (1969, p. 182) defines expertise as an individual's "perceived ability to know the correct stand on the issue." These two definitions are very similar but not very precise. Accordingly, the construct expertise has been operationalized in a variety of ways. Brock's (1965) manipulation of perceived communicator
expertise, for example, consists of having the experienced salesperson report a one-time consumption that is twenty times as high as that of the subject's prospective purchase of paint, whereas the inexperienced salesperson reports a one-time consumption that is equal to that of the subject's. Woodside and Davenport (1974) manipulate two levels of expertise as being able to give oral instructions on how to operate certain accessory equipment versus not being able to do so. Burnkrant and Cousineau (1975) use female home economic students majoring in foods and nutrition as experts regarding the taste of coffee and have to report that the source manipulation is ineffective.

Further, Alba and Hutchinson (1987, p. 411) define expertise "as the ability to perform product-related tasks successfully." McCracken (1989) suggests that individuals who are perceived to be able to make valid assertions about a product are generally perceived as having greater expertise. Accordingly, Feick and Higie (1992) maintain that expertise may be obtained in a variety of ways, including formal training or product-related experiences. Similarly, Slama and Williams (1990) suggest that the expertise of early purchasers arises from early purchase of a certain product. Bettman and Sujan (1987) describe consumers who have prior experience with a specific product class as being experts, whereas Hoch and Ha (1986) call such consumers experienced. Price and Feick (1984) describe experts as being knowledgeable friends, relatives, or acquaintances and find that the anticipated use of such experts
as a source of product information is significantly greater than the use of any other source, including professionals to whom a fee is paid. Thus, not only is there a lack of a valid definition of expertise, but much of the literature uses expertise and experience interchangeably.

Therefore, it may be helpful to more precisely define experience and expertise. Jacoby et al., (1986, p. 469), maintain that expertise and experience are "conceptually orthogonal". In other words, an individual can possess considerable experience in a specific field but nevertheless not be an expert on the subject matter. Also, individuals with the same level of expertise may possess differing amounts of experience. The authors further suggest that a major problem shared by many of the previous studies is that "the concept expertise was operationalized in terms of experience" (1986, p. 469). According to the authors, one reason for the confounding of experience and expertise is that both involve the acquiring of skills and/or knowledge. However, although a personal encounter with a subject area or object might lead to experience it does not equate to expertise. The authors further maintain that the major distinction between experience and expertise is that the latter involves a qualitatively higher level of knowledge and/or skill that can be compared to some external standard. This is in line with Maddux and Rogers' (1980, p. 236) statement that "an expert source must possess expertise on some topic." Thus, whereas Price and Higie (1992)
state that expertise can be attained through product-related experience and formal training, the reasoning of Jacoby et al., (1986), leads us to suggest that the former describes attainment of experience whereas the latter describes attainment of expertise. In other words, experience and expertise appear to be two distinguishable constructs and based on the above literature we suggest the following definitions:

**Experience** is defined as displaying a relatively high degree of familiarity with a certain subject area, which is obtained through some type of exposure (e.g., a consumer who went through the process of information search, decision making, and/or product usage would be considered to be experienced).

**Expertise** is defined as having a high degree of skill in/knowledge of a certain subject area, which is obtained through some type of formal training (e.g., an auto mechanic who went through vocational training would be considered to be an expert).

As research in both social psychology and marketing has shown, in general a source high in expertise tends to be more persuasive than a source low in expertise (Crano 1970; Crisci and Kassinove 1973; Homer and Kahle 1990; Maddux and Rogers 1980; Ross 1973; Whittaker and Meade 1968; Wood and Kallgren 1988). For example, Crano's findings (1970) indicate that individuals exposed to an expert source tend to exhibit more agreement with the expert's advocated position than those individuals exposed to a source low in expertise. Likewise, Crisci and Kassinove (1973) find the perceived level of communicator expertise to have a significant effect on agreement. Wood and Kallgren (1988) investigated the relationship between communicator attributes and persuasion and
find expert sources to be more persuasive than nonexpert ones. The findings further indicate that experts, relative to nonexperts, might be perceived to present fairer and more carefully thought out ideas. Similarly, Maddux and Rogers (1980) studied the effects of source expertise on attitude toward sleep and find that agreement with the source is greater if the source is an expert (professor of psychology) rather than a nonexpert (professor of music) on the topic area. Thus, Hass' observation (1981) that research in social psychology has produced very consistent evidence that sources high in expertise are generally more persuasive than those low in expertise seems to be supported.

While it is thus apparent that much work has focused on the effects of source expertise on attitude formation and change, there seems to be no research examining the impact of source experience on persuasion. That is probably, at least in part, due to the common practice of measuring source expertise in terms of source experience (Jacoby et al., 1986). However, it seems reasonable to propose that a highly experienced source is more persuasive than a less experienced one.

Furthermore, to the best of our knowledge, it has not been suggested so far that source expertise and source experience might have differential effects on individuals exposed to persuasive communications. According to Jacoby et al., (1986), however, it might be worthwhile to consider the degree of both expertise and experience possessed by a specific
source. Consequently, a source might have (1) a high level of both expertise and experience; (2) a high level of expertise and a low level of experience; (3) a low level of expertise combined with a high level of experience; or (4) a low level of expertise and a low level of experience (see Figure 2.1). In line with the above discussion, it appears to be reasonable to expect a source that is high in both expertise and experience to be, under general conditions, more persuasive than a source possessing any of the other three possible combinations. It further seems to be plausible to suggest that, in general, a source low in both expertise and experience should be the least persuasive. As to which of the two remaining combinations should lead to more effective persuasion attempts might depend on the situation, as will be discussed during the following sections.

<table>
<thead>
<tr>
<th>Source Expertise</th>
<th>Source Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>high, high</td>
</tr>
<tr>
<td></td>
<td>high, low</td>
</tr>
<tr>
<td>low</td>
<td>high, high</td>
</tr>
<tr>
<td></td>
<td>low, low</td>
</tr>
</tbody>
</table>

Figure 2.1. Possible Combinations of Source Characteristics.
The Effects of Product Characteristics in the Persuasion Process

A review of the literature in economic psychology and marketing on consumer information processing suggests that consumer evaluations are not only influenced by certain source characteristics, but also by certain product characteristics. Nelson (1970, 1974), for example, has distinguished between the "search" and "experience" qualities of a product. Search qualities or attributes are those that can be verified through the search process before the consumer purchases the product (e.g., the color or fit of a dress). Experience attributes, on the other hand, can be evaluated only after the product has been used or consumed (e.g., the taste of a can of tuna). Darby and Karni (1973) express the need to include a third class of properties, which they term "credence" attributes. "Credence qualities are those which, although worthwhile, cannot be evaluated in normal use. Instead the assessment of their value requires additional costly information" (1973, p. 69). For example, for services such as medical care and auto repair consumers generally do not possess the expertise to determine whether a diagnosis is correct or whether the service is performed well. Evaluation of both diagnosis and service performance would require extensive learning or consultation of an acknowledged expert, which according to Darby and Karni, would be perceived by most consumers as being too costly.

Zeithaml (1981) has used the above classification to
distinguish between goods and services. She has placed goods and services on a continuum that ranges from "easy to evaluate" to "difficult to evaluate". Accordingly, goods are high in either search or experience attributes, whereas (due to intangibility, heterogeneity, and inseparability of consumption) services are high in either experience or credence attributes and thus are more difficult to evaluate. Although we do not disagree with the notion that services are generally high in either experience and credence qualities, we propose that goods can be high in either search, experience, and/or credence qualities. For example, many high-tech consumer goods (e.g., personal computers, audio systems) appear to be high in credence qualities. A consumer using his/her PC should be able to determine whether it works, but how does s/he know, without consulting an expert, that it works according to specifications?

In other words, a product in general consists of search, experience, and credence attributes (Ford, Smith and Swasy 1990). Some products, such as the above-mentioned dress, are high in search qualities because the consumer is able to verify many of its important attributes prior to purchase. This same dress, however, also has some experience attributes. For example, to determine its effects on a significant other in a specific social context the dress first has to be purchased and worn. This dress might also have some credence attributes that the consumer is unable to evaluate in normal use, such as
perhaps the long-term effects of the dye on respiratory health. Similarly, services not only have experience and credence attributes but also some search attributes. Consumers often use price, location, and reputation of different service providers to form the consideration set from which to make a final decision (Zeithaml 1981).

Advertisers, regardless of whether they are dealing with a service or with a physical good, have to decide whether to focus on the search, experience, or credence attributes of their product. It has been suggested that consumers are differentially skeptical of advertising claims depending on whether these claims are search, experience, or credence attribute claims (Ford et al., 1990; Wright and Lynch 1995). Specifically, Wright and Lynch (1995) investigated under what conditions direct experience is more effective than advertising in presenting product attribute information and found individuals to be significantly more skeptical of experience than search attribute claims. Likewise, Ford et al., (1990), had subjects rate their degree of skepticism toward search, experience, and credence attribute claims and found evidence for Nelson's (1970) hypothesis that consumers tend to be consistently more skeptical of experience than search attribute claims. The results further indicate that while consumers tend to perceive experience attribute claims as being more believable than credence attribute claims, they do not seem to display a higher level of skepticism toward credence attribute
claims as relative to experience attribute claims. The latter finding directly contradicts Darby and Karni's theory (1973) which implies that consumers should be more skeptical of credence than experience attribute claims, because they are generally aware that the lack of complete information in the former case creates more favorable conditions for fraud. Ford et al., (1990), suggest that these discrepant findings might be due to the product attribute manipulations. That is, whereas all of the twenty experience attribute claims are performance-related claims, fifteen of the twenty credence attribute claims are nonperformance-related (e.g., claims about product ingredients, etc.). This might have confounded the attribute manipulations, because consumers might be more skeptical of performance-related than nonperformance-related claims.

The Combined Effects of Source and Product Characteristics in the Persuasion Process

The above discussion implies that it might be a worthwhile venture for the advertiser to carefully select both endorser characteristics and product attribute claims and to cautiously design and execute the advertisement. It has been proposed that consumers should in general prefer an endorser who is high in expertise and/or highly experienced over endorsers who are low in expertise and/or inexperienced and should, under general conditions, be less skeptical toward experience than credence attribute claims. However, it might be
interesting to ask what likely consumer reactions would be if certain product attribute claims were presented by a certain type of endorser.

Based on the above discussion, we propose that Nelson's (1970, 1974) and Darby and Karni's (1973) classification in combination with the "match-up hypothesis" (Forkan 1980; Hawkins et al., 1983) can be used to explain under what conditions a consumer should be likely to look for prepurchase information supplied by either an expert or an experienced source.

According to the "match-up hypothesis", in effective advertisements the messages conveyed by the image of the product and the image of the endorser converge. In other words, it is suggested that congruence between product and endorser characteristics should have a positive effect on product and advertisement evaluations, whereas incongruence should lead to declining evaluations (Kamins 1990). A study by McCollum, Spielman & Co. (Forkan 1980) further shows that advertisements that represent a match between product and celebrity endorsers generally lead to higher brand awareness and attitude change. Therefore, it has been recommended that advertisers should first decide what they want to say about the product and then search for the personality to fit that message (Forkan 1980).

For example, Kahle and Homer (1985) investigated the effect of celebrity-source physical attractiveness on product and advertisement evaluations and found the use of a physically
attractive celebrity for the endorsement of a product that is designed to increase physical attractiveness to have a positive impact on brand recall, attitude toward the product, and purchase intentions. According to the authors, these findings suggest that a match between product and endorser characteristics increases the source's informational value. Likewise, Kamins (1990) investigated the attractiveness aspect of the "match-up hypothesis" and found that an attractive celebrity, relative to a less attractive one, leads to higher endorser credibility and believability and a more positive attitude toward the ad for the attractiveness-related product but not for the attractiveness-unrelated product.

Similarly, McCracken (1989) maintains that the effectiveness of celebrity endorsers depends, among other things, on the meanings that the endorser brings to the process. He argues that each celebrity endorser carries a specific meaning and that an endorsement succeeds if there is a match between "the cultural meanings of the celebrity world, on the one hand, and the endorsed product, on the other" (1989, p. 313). Thus, if there is congruence between the meaning of both the endorser and the endorsed product and the transfer of meaning is successful, the advertisement is expected to be effective and powerful. Langmeyer and Walker's (1991) research is directly based on McCracken's (1989) theories and demonstrates that celebrity endorsers possess symbolic meanings and are able to transfer these meanings to the products they
endorse. Specifically, the authors asked the respondents to describe the meanings that celebrity endorser Cher holds when she advertises "Scandinavian Health Spas" and found her to represent attractiveness, fitness, hard work, sex, independence, confidence, and agelessness on one hand, and low credibility (due to plastic surgery) on the other hand. Further, both positive and negative meanings are transferred from Cher to the endorsed product. For example, the fitness of celebrity endorser Cher is associated with "Scandinavian Health Spa" being a good place to get fit whereas Cher's low credibility leads to the belief that "Scandinavian's" advertising lacks credibility.

Research by Cooper, Darley and Henderson (1974) suggests a more general need for matching of product and endorser characteristics. These authors conducted a dissonance study and found deviant-appearing sources to be more effective sources of persuasion about income tax issues than conventional-appearing sources. Maddux and Rogers (1980) studied the effects of source expertise, source attractiveness and presence of arguments on attitude toward sleep and found that agreement with the source is greater if the source is an expert (professor of psychology) rather than a nonexpert (professor of music) on the topic area. Likewise, the results of a study conducted by Peterson and Kerin (1977) can be enlisted in support of a more generalized form of the "match-up hypothesis." Peterson and Kerin (1977) investigated the effect of advertisement content (no
model/demure model/seductive model/nude model) in print ads on product, advertisement and company evaluations of a body-oil and a ratchet wrench set and found perceptual evaluations to be a function of product type. For example, the advertisement that was found to be most appealing and received the highest marks on both perceived product quality and company reputation was the seductive model/body oil treatment combination. Further, the ratchet set was evaluated more favorably if no model was employed. These findings lead the authors to suggest a need for congruence between the product and the model within an advertisement. Similarly, Baker and Churchill (1977) assessed the impact of attractiveness of both male and female models on advertising evaluations and found the male subjects to be affected by the female model's attractiveness. For the attractiveness-related product (perfume/cologne/aftershave), the attractive female model appears to be more persuasive than her unattractive counterpart, and the reverse is apparently the case for the attractiveness-unrelated product (coffee). Based on these findings, the authors suggest the need for a match of product and model characteristics.

Product and Endorser Feature Congruence Hypothesis

To summarize the above, there appears to be a need to match product features with corresponding endorser features, regardless of whether the endorser is a celebrity or not. The above cited research suggests that each product endorser has a
certain psychological appeal or gives certain psychological cues that need to fit with the product benefits or features that are to be highlighted by the advertisement. Based on this reasoning and Nelson's (1970, 1974) and Darby and Karni's (1973) classification systems, we propose a "product and endorser feature congruence hypothesis," under which the endorser who best communicates a certain type of product information1 (i.e., experience versus credence attributes) is the one most congruent with that type of information (i.e., experienced versus expert endorser).

According to Nelson's theory (1970, 1974), a consumer trying to evaluate experience attributes or benefits of a product would have to consume the good or service before being able to do so. Since attributes of this type are easily discernable during or after consumption, it is generally not very difficult to decide whether a good is performing well (e.g., the user friendliness of a computer) or whether a service is performed satisfactorily (e.g., the outcome of a haircut). Although it has been found that product trial tends to engender more reliable information than exposure to advertisement when dealing with experience attributes (Wright and Lynch 1995), it has also been acknowledged that product

---

1 In the following sections, we will concentrate on the experience and credence attributes of products, because in these cases the consumer is dealing with a relatively high degree of uncertainty (Darby and Karni 1973; Dick, Chakravarti and Biehal 1990; Ford et al., 1990; Nelson 1974) and is assumed to look for guidance more so than for products that are high in search qualities (Nelson 1974).
trial might not be practical for a large number of consumer products, especially more expensive ones (Ford et al., 1990). Thus, advertising has been suggested as being the more economical route for conveying prepurchase information (Wright and Lynch 1995). A consumer trying to evaluate credence attributes of a product is faced with the additional problem that no matter how often the product is consumed, s/he will not be able to decide whether it delivers according to specifications, unless additional costly information is acquired. Accordingly, it has been suggested that credence attribute claims might be conveyed more effectively through advertising than product experience (Wright and Lynch 1995). However, since consumers have been shown to display a relatively high level of skepticism when attending to experience (Ford et al., 1990; Wright and Lynch 1995) and credence attribute claims (Ford et al., 1990), there appears to be a need to design advertisements that focus on such attributes in a way that helps consumers overcome this skepticism and further fulfill their informational needs.

Based on the above discussion and the "product and endorser feature congruence hypothesis," we propose that if a consumer is using an advertisement to gain prepurchase information about experience attributes, an endorser who has had prior experience with those attributes and the resulting benefits would be the best match and thus best be able to communicate such information. Thus, it is proposed that an
advertisement that portrays the endorser to possess a high level of experience to be more effective than an ad that portrays the endorser to have a low level of experience, regardless of the level of expertise. On the other hand, a consumer trying to evaluate credence attributes of a product should have reason to believe that such attributes are objectively difficult to judge (Darby and Karni 1973). Therefore, it is proposed that a consumer looking to an advertisement to provide prepurchase information is not likely to rely on the judgments of an experienced endorser, who is presumed to encounter the same uncertainty, but is expected to prefer such information communicated by an endorser who is an expert in the particular field. Thus, it is suggested that an advertisement presented by an endorser high in expertise is more effective than an ad presented by an endorser who possesses a low level of expertise, regardless of the degree of experience.

Based on the above discussion of the "match-up hypothesis," we would thus expect, under product and endorser feature congruence conditions as relative to incongruence conditions, consumers to display a more positive attitude toward the endorser and the ad (Kamins 1990; Peterson and Kerin 1977).
Some of the findings in the literature further open the door to some interesting speculations about the effects of product and endorser feature congruence on cognitive response. According to Wright (1973), the consumer is an active processor of information who confronts influence attempts and critically evaluates information provided by advertising. Thus, a consumer is likely to compare incoming external information to his/her existing belief and value system. The outcome of this process are spontaneous cognitive responses (i.e., critical thoughts), which are considered to be important mediators of message acceptance. Three modes of possible cognitive responses as identified by Wright are counterarguments, source derogations, and support arguments. A counterargument is generally activated if there is a discrepancy between the incoming information and the existing structure of beliefs and values. This spontaneous thought is believed to counter and/or neutralize discrepant message content. A source derogation is considered to be an alternate form of resistive response and focuses on the message source. A source derogation is frequently used in situations where the source is viewed as either biased or incompetent and may have an effect that is similar to that of a counterargument. A support argument is activated if the incoming information is congruent with the receiver's existing beliefs. According to Wright, if advertising is to have a
chance of being accepted by the audience, the generation of support arguments is vital. Wright's typology has more recently been expanded to include source bolstering (Munch and Swasy 1988; Ratneshwar and Chaiken 1991; Swasy and Munch 1985), which has been defined as positive source-oriented thoughts (Munch and Swasy 1988).

Cognitive Responses under Product and Endorser Feature Congruence Conditions

Matching Credence Attribute Claims to an Expert Source

As mentioned above, Maddux and Rogers' (1980) findings indicate that the matching of relevant communicator characteristics to a specific topic area leads to greater agreement with the source. More specifically, the authors studied the effects of source expertise on attitude toward sleep and found that agreement with the source is greater if the source is an expert (professor of psychology) rather than a nonexpert (professor of music) on the topic area. Sleep, or more precisely the number of hours a person should sleep per night, is a scientific and complex topic area that is difficult to evaluate for the "average" individual. Since the individual probably assumes that other non-experts are experiencing the same problems in evaluating the topic, they are, as has been indicated by the findings of the above study, more likely to yield to an expert's opinion (even in the absence of supporting
argumentation). Although these findings give additional support to the hypothesis that consumers who are searching for prepurchase information about credence attributes from an advertisement are more likely to prefer an expert over an experienced endorser, they also give rise to expectations about likely cognitive responses.

As research in both social psychology and marketing has shown, a source that is perceived to be high in expertise on a complex subject area is likely to be more persuasive. As Hass (1981) maintains, an individual that is open to persuasion evaluates incoming information to determine its value. Any cue that lets the individual question the accuracy of this information, will lead to more careful analysis of it. Since a source low in expertise on the subject matter is more likely to make erroneous statements, arguments provided by that source will be more closely compared to other information the individual already possesses. Since an expert, on the other hand, is less likely to be wrong the individual is more likely to accept arguments provided by such a source without close examination through counterarguing. Thus, an expert source is more likely to lead to attitude change due to decreased counterarguing. For example, Cook (1969) presented his subjects with the arguments of either a high competence (i.e., high expertise) source, who was described as a world-famous dental researcher and professor from Stanford Medical School, or a low competence (i.e., low expertise) source, who was described as
a high school student with poor grades and few intellectual interests. The proposition defended by both sources was that "It is dangerous to brush your teeth more than three times a day for many years. Teeth should be cleaned only three times a week" (1969, p. 345). As expected, the findings indicate that high source expertise leads to more agreement with the source and a higher degree of attitude change than low source expertise. Interestingly, the degree of agreement and attitude change are found to be due to the amount of counterarguing induced by the source. Comparisons of these results with a control condition in which no source information was given, show that while high expertise is found to lead to decreased counterarguing, low expertise apparently does not increase counterarguing.

However, Cook's research concentrated on counter-arguments, which he defined as "all stated disagreements with the argument" (1969, p. 346), and did not measure source derogating responses. It appears to be intuitive that an expert's opinion on a complex topic should not only lead to decreased counterarguing but also to decreased source derogation, both of which should then lead to a higher degree of agreement with the source. A study by Aronson, Turner and Carlsmith (1963) appears to confirm this speculation. These authors investigated the effects of source credibility (i.e., expertise) and communication discrepancy on opinion change. Specifically, the authors had subjects evaluate poetry. After
the completion of this task each subject was exposed to a persuasive communication about the evaluation of poetry by either a source high in expertise (T.S. Eliot) or a source low in expertise (a student at Mississippi State Teachers College who aspired to become an English teacher). Subsequent opinion and source derogation measures show that a communicator who is rated higher in terms of expertise on a complex topic area is derogated to a lesser extent and produces more opinion change than a source rated lower in expertise.

As indicated by the above findings, a highly qualified source leads to more agreement and subsequent opinion change. This outcome has been suggested to be a function of not only decreased counterarguing and source derogation, but also increased support argumentation. For example, the results of a study conducted by Gillig and Greenwald (1974) show that exposure to a highly qualified source produces approximately twice as many support arguments and correspondingly fewer counterarguments and source derogations than exposure to an unqualified source. Although these authors did not measure source bolstering responses, it appears reasonable to propose that a highly qualified source as compared to an unqualified one, does not only lead to increased support arguing but also to increased source bolstering and that the combined impact of these two responses, in turn, results in more agreement and subsequent opinion change.
Matching Experience Attribute Claims to an Experienced Source

The above discussion tried to provide a theoretical foundation for the anticipated degree of counterarguing, support arguing, source derogation and source bolstering in the case of a successful match between source expertise and credence attribute claims of a product. Kamins' (1990) results can be used to support similar expectations for successful matches between endorser characteristics other than expertise and relevant product features. The celebrity endorsers used by Kamins were chosen on the basis of their physical attractiveness and not their expertise. As may be recalled, the experiment manipulated the physical attractiveness of the endorser and the degree to which the usage of two different products is perceived to enhance attractiveness. Since the findings indicate that a matching of relevant endorser and product features leads to higher perceived endorser credibility and believability, it seems reasonable to suggest that such a successful match between an experienced endorser and experience attribute claims should produce effects in terms of counterarguing, support arguing, source derogation, source bolstering and resulting attitude that are similar to those proposed for a successful match between source expertise and credence attribute claims.
Cognitive Responses under Product and Endorser Feature Incongruence Conditions

Although the above review of the relevant literature gives us reason to believe that we can expect both less counterarguing and less source derogation if there is a match between relevant endorser and product features (i.e., credence attributes/expert endorser or experience attributes/experienced endorser), it would also be interesting to explore under which of the two mismatch conditions (i.e., credence attributes/experienced endorser or experience attributes/expert endorser) more counterarguing and/or source derogation are likely to occur. In this context, the predictions made by the "least-effort hypothesis" (Hass 1981) appear to be of relevance. According to this hypothesis, counterarguing and source derogation are alternate means of persisting persuasion, and which of the two is chosen by the message recipient depends on whichever is perceived to require the least amount of effort in a given situation (Festinger and Maccoby 1964; Kiesler and Mathog 1968). Consequently, individuals exposed to persuasion attempts by an unqualified source will derogate this source, because source derogation in this situation is perceived to be less effortful than counterarguing. Since counterarguing is considered to be "an elaborate internal response, one requiring time and energy," it is generally believed to be more effortful than source derogation (Miller, Maruyama, Beaber and Valone 1976, p. 616). On the other hand, individuals "exposed to a
highly qualified source will be forced to counterargue to prevent persuasion, because derogation would be difficult" (Hass 1981, p. 168). Support for the "least-effort hypothesis" can be found in social psychology and marketing. For example, Kiesler and Mathog (1968) investigated the effect of distraction on persuasion and found that individuals deal differentially with highly qualified and less qualified persuasive sources. The findings indicate that while a less qualified speaker can be easily derogated and dismissed in the initial stages of a communication without having to resort to counterarguing, a highly qualified source cannot be so easily disposed of but rather has to be met with counterarguing to successfully resist persuasion. Consequently, distraction is found to increase the effectiveness of persuasive communications by a highly qualified source, whereas it apparently may even decrease the effect of persuasion attempts by a less qualified source. Festinger and Maccoby's (1964) findings are similar. These authors exposed fraternity members under varying conditions of distraction (high and none) to a persuasive communication arguing strongly against college fraternities. The findings indicate that a distractive persuasive communication appears to be more effective than its nondistractive counterpart. That is, a distractive persuasive message apparently leads to less-favorable attitudes toward college fraternities and to less rejection of the source than a nondistractive version. The results further suggest that
distracted individuals are not able to effectively counterargue and thus are more susceptible to persuasion, unless they are able to derogate the source. This, of course, assumes that it is less effortful to derogate and reject a source than to develop effective counterarguments. Conversely, undistracted individuals are able to focus on counterargumentation and therefore are able to resist influence without having to derogate the speaker, especially in a situation where the source is perceived to be highly qualified (e.g., a college professor who used to be a fraternity member). Gillig and Greenwald's (1974) findings lend further support to the "least-effort hypothesis." The authors investigated the effects of source credibility (i.e., source qualification) and defense pretreatment on cognitive responses and persuasion. The experimental subjects were exposed to persuasive communications on controversial health issues by either a "leading medical researcher" (the highly qualified source) or a "nature therapist" (the less qualified source) who was described as a person opposed to the use of medical drugs and other modern medical technology. Half of the subjects were further supplied with a counterargument defense that preceded the persuasive communication and was not attributed to any particular source. The results show that exposure to a highly qualified source produces approximately twice as many support arguments and correspondingly fewer counterarguments and source derogations than exposure to an unqualified source. The findings further
reveal that cognitive responses to an unqualified communicator differ depending on whether a counterargument defense preceded exposure to the persuasive communication or not. Specifically, individuals who are supplied with a counterargument defense before having to face an unqualified source produce more counterarguing responses, whereas individuals who have to resist without outside help produce more source derogating responses. Similarly, Wright (1974, 1975) investigated the effect of involvement on cognitive responses of women knowledgeable on the subject matter and found the different cognitive resistance strategies of knowledgeable individuals to be a function of their acute involvement with the communication. More specifically, highly involved women tend to use counterarguing to resist persuasion, whereas their low involvement counterpart rely on source derogation. According to Wright (1975, p. 8), these findings suggest that individuals who are not sufficiently motivated to counterargue rely on source derogation, which he calls "a lazy mode of resistance."

Consequently, the "least-effort hypothesis" gives us a theoretical foundation for hypothesizing what type of cognitive responses are most probable if a mismatch between relevant endorser and product features occur. In the present study such a mismatch could take one of the following two forms: (1) an expert endorser who touts experience attribute claims of a product or (2) an experienced endorser who presents credence attribute claims. In both cases we would expect consumers to
notice the discrepancy between the incoming situational information and their internal belief system and consequently react with negative cognitive responses. As may be recalled, the evaluation of experience attribute claims is fairly straightforward and having an expert endorser tout such attribute claims is thus proposed to give consumers the feeling that the cues used in the advertisement are too strong; that is, consumers might feel that the endorser does not give them enough credit or talks down to them (e.g., who needs an expert to figure out that a candy bar is crunchy and tastes good?). Since resisting a highly qualified source through derogation has been found to be more difficult than resisting it through counterarguing, we would expect consumers who are exposed to an advertisement that features an expert endorser presenting experience attribute claims to react with counterarguing. Conversely, the evaluation of credence quality claims is generally perceived to be objectively very difficult for non-expert individuals and having an experienced endorser tout such claims is thus suggested to have consumers question the qualifications of the endorser (e.g., how does this person know that this medical procedure is better and safer than the more traditional techniques?). Since source derogation has been found to be less effortful than counterarguing when dealing with the persuasion attempts of an unqualified source, we would expect consumers who are exposed to an advertisement that features an experienced endorser praising credence attribute
claims to resist through source derogation. Finally, based on the above discussion, we would further expect decreased support arguing and source bolstering in both instances of a mismatch.

**Summary**

This chapter began by reviewing past research on the effects of source characteristics on individuals in the persuasion process. Specifically, source credibility was suggested to be the most important source characteristic in the determination of persuasion, with source expertise being its most important dimension. After reviewing the research on the effects of source expertise, definitions for source expertise and source experience were proposed.

This was followed by a review of past research on the effects of product characteristics on persuasion. Here Nelson's (1970, 1974) and Darby and Karni's (1973) classification of experience and credence attributes were discussed. The conceptual evidence showed that consumers are more skeptical when faced with credence attribute claims as relative to experience attribute claims.

The next step consisted of an introduction of the "match-up hypothesis", which suggests that effective advertisements need to match product features with corresponding endorser features. This was followed by a review of the literature on cognitive responses and a discussion of the "least effort hypothesis." Accordingly, cognitive responses under product and
endorser congruence conditions differ from those under incongruence conditions. Consequently, congruence conditions are believed to result in more support arguing and source bolstering, and respectively less counterarguing and source derogations, whereas incongruence conditions are expected to produce reverse effects.

Chapter 3 will propose testable hypotheses of the above developed theories based on the information provided in this review of the relevant literature.
CHAPTER III

RESEARCH HYPOTHESES

Overview

The research hypotheses in this study are divided into three groups, which is a reflection of the relevant questions raised in the literature. These three questions are:

(1) What are the effects of source expertise and source experience on individuals exposed to an advertisement?

(2) What are the effects of credence and experience attribute claims on individuals exposed to an advertisement?

(3) What are the combined effects of the above source and product characteristics on individuals exposed to an advertisement?

Each of these research questions is examined using a series of dependent measures, which are discussed in detail in chapter 4. The hypotheses for each of the three research questions as they relate to the dependent measures are listed in Table 3.1.
## TABLE 3.1
### LIST OF HYPOTHESES

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Main Effects of Source Features</th>
<th>Main Effects of Product Features</th>
<th>Interaction of Source and Product Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes toward the Endorser</td>
<td>1a, 2a</td>
<td></td>
<td>4a, 5a</td>
</tr>
<tr>
<td>Attitudes toward the Ad</td>
<td>1b, 2b</td>
<td></td>
<td>4b, 5b</td>
</tr>
<tr>
<td>Skepticism toward Product Claims</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cognitive Responses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counterargument Frequency</td>
<td></td>
<td></td>
<td>6a, 7a, 9a</td>
</tr>
<tr>
<td>Source Derogation Frequency</td>
<td></td>
<td></td>
<td>6b, 7b, 8a</td>
</tr>
<tr>
<td>Support Argument Frequency</td>
<td></td>
<td></td>
<td>6c, 7c, 8b, 9b</td>
</tr>
<tr>
<td>Source Bolstering Frequency</td>
<td></td>
<td></td>
<td>6d, 7d, 8c, 9c</td>
</tr>
</tbody>
</table>

### Research Hypotheses

**Source Main-Effects: Source Expertise**

It has been found that a source high in expertise tends to be more persuasive than a source low in expertise (Crano 1970; Crisci and Kassinove 1973; Homer and Kahle 1990; Maddux and Rogers 1980; Ross 1973; Whittaker and Meade 1968; Wood and Kallgren 1988). Not only does a source high in expertise seem to evoke more agreement than a source low in expertise (Crano 1970; Crisci and Kassinove 1973; Maddux and Rogers 1980), it also appears to be perceived to present fairer and more carefully thought out views (Wood and Kallgren 1988).

Based on the above evidence, we would expect consumers
who are exposed to an advertisement featuring an endorser who is high in expertise to be more favorably disposed to the communicator and to have a more positive attitude toward the ad than those who are exposed to an ad featuring an endorser who is low in expertise (Kamins 1990; Peterson and Kerin 1977). Thus, the first hypothesis states:

Hypothesis 1: Prepurchase information about a product communicated by an endorser who is high in expertise as compared to an endorser who is low in expertise will lead to more positive attitudes toward (a) the endorser and (b) toward the ad.

See Figure 3.1 (Appendix F) for a diagram of the expected results.

Source Main-Effects: Source Experience

As suggested by the above discussion, we would further expect consumers who are exposed to an advertisement featuring a highly experienced endorser to be more favorably disposed to the communicator and to have a more positive attitude toward the ad than those who are exposed to an ad featuring an endorser who is low in experience. Thus, the next hypothesis states:

Hypothesis 2: Prepurchase information about a product communicated by an endorser who is high in experience as compared to an endorser who is low in experience will lead to more positive attitudes toward (a) the endorser and (b) toward the ad.

See Figure 3.2 (Appendix F) for a diagram of the expected results.
Main-Effects: Credence Attribute Claims
versus Experience Attribute Claims

It has been suggested that consumers tend to be more skeptical of credence attribute claims than experience attribute claims (Darby and Karni 1973), because they are generally aware that the lack of complete information in the former case creates more favorable conditions for fraud. The study conducted by Ford et al., (1990), however, indicates that although consumers tend to perceive experience attribute claims as being more believable than credence attribute claims, they do not seem to display a higher level of skepticism toward credence attribute claims as relative to experience attribute claims. Ford et al., (1990), suggest that these discrepant findings might be due to problems in the product attribute manipulations. That is, whereas all experience attribute claims used in their study were performance-related claims, most of the credence attribute claims were nonperformance-related (e.g., claims about product ingredients, etc.). This might have confounded the attribute manipulations, because consumers may be more skeptical of performance-related than nonperformance-related claims. Therefore, it appears to be worthwhile to test Darby and Karni's theory (1973) while trying to control possible confounds.

Based on the above theories we would expect consumers to exhibit more skepticism toward credence than experience attribute claims. Therefore, the next hypothesis states:
Hypothesis 3: Prepurchase information about a product's experience attribute claims will be met by less skepticism than that about its credence attribute claims.

See Figure 3.3 (Appendix F) for a diagram of the expected results.

The Combined Effects of Source and Product Characteristics

Measures of Attitude

Based on the empirical evidence for the "match-up hypothesis" (Cooper et al., 1984; Forkan 1980; Hawkins et al., 1983; Kahle and Homer 1985; Kamins 1990; Langmeyer and Walker 1991; Maddux and Rogers 1980; Peterson and Kerin 1977) and Nelson's (1970, 1974) and Darby and Karni's (1973) classification systems, we propose a "product and endorser feature congruence hypothesis," under which the endorser who best communicates a certain type of product information (i.e., experience versus credence attributes) is the one most congruent with that type of information (i.e., experienced versus expert endorser).

Accordingly, it is proposed that if a consumer is using an advertisement to gain prepurchase information about experience attributes, an endorser who has had prior experience with those attributes and the resulting benefits would be the best match and thus best be able to communicate such information. On the other hand, a consumer trying to evaluate credence attributes of a product should have reason to
believe that such attributes are objectively difficult to judge (Darby and Karni 1973) and should therefore be more favorably disposed toward prepurchase information communicated by an endorser who is an expert in the particular field. Based on the previous discussion of the "match-up hypothesis," we would further expect, under product and endorser feature congruence conditions as relative to incongruence conditions, consumers to display a more positive attitude toward the ad (Kamins 1990; Peterson and Kerin 1977). Therefore, the next two hypotheses state:

Hypothesis 4: Prepurchase information about a product's credence attributes communicated by an expert endorser as compared to an experienced endorser will lead to more positive attitudes toward (a) the endorser and (b) the ad.

Hypothesis 5: Prepurchase information about a product's experience attributes communicated by an experienced endorser as compared to an expert endorser will lead to more positive attitudes toward (a) the endorser and (b) the ad.

See Figures 3.4 and 3.5 (Appendix F) for diagrams of the expected results.

Cognitive Response Measures under Congruence Conditions

As will be recalled, matching of relevant communicator characteristics to a specific topic area has been found to lead to greater agreement with the source (Maddux and Rogers 1980). Thus, a highly qualified source tends to lead to more agreement
and subsequent opinion change. This outcome has been suggested
to be a function of decreased counterarguing, decreased source
derogation, and increased support arguing (Cook 1969; Aronson
et al., 1963; Gillig and Greenwald 1974). As mentioned before,
it further seems reasonable to propose that a highly qualified
source also leads to increased source bolstering. Thus, the
next hypothesis states:

Hypothesis 6: Prepurchase information about a product's
credence attributes communicated by an
expert endorser as compared to an
experienced endorser will lead to (a)
decreased counterarguing; (b) decreased
source derogation; (c) increased support
arguing; and (d) increased source
bolstering.

See Figures 3.6a and 3.6b (Appendix F) for diagrams of the
expected results.

In light of Kamins' (1990) findings it seems reasonable
to hypothesize that a successful match between an experienced
endorser and experience attribute claims should produce effects
in terms of counterarguing, source derogation, support arguing,
source bolstering and resulting attitude that are similar to
those proposed for a successful match between source expertise
and credence attribute claims. Based on this reasoning, the
next hypothesis states:

Hypothesis 7: Prepurchase information about a product's
experience attributes communicated by an
experienced endorser as compared to an
expert endorser will lead to (a) decreased
counterarguing; (b) decreased source
derogation; (c) increased support arguing;
and (d) increased source bolstering.
Cognitive Response Measures under Incongruence Conditions

As illustrated above, the "least-effort hypothesis" (Festinger and Maccoby 1964; Gillig and Greenwald 1974; Hass 1981; Kiesler and Mathog 1968; Wright 1974, 1975) provides a theoretical foundation for hypothesizing what type of cognitive responses are most probable if a mismatch between relevant endorser and product features occurs.

Thus, according to the "least-effort hypothesis," consumers who are exposed to an advertisement that features an expert endorser presenting experience attribute claims are expected to react with counterarguing. Conversely, we would expect consumers who are exposed to an advertisement that features an experienced endorser praising credence attribute claims to resist through source derogation. Finally, we would further expect decreased support arguing and source bolstering in both instances of a mismatch. Therefore, the next two hypotheses state:

Hypothesis 8: Prepurchase information about a product's credence attributes communicated by an experienced endorser as compared to an expert endorser will lead to (a) increased source derogation; (b) decreased support arguing; and (c) decreased source bolstering.
Hypothesis 9: Prepurchase information about a product's experience attributes communicated by an expert endorser as compared to an experienced endorser will lead to (a) increased counterarguing; (b) decreased support arguing; and (c) decreased source bolstering.

See Figures 3.8a, 3.8b, 3.9a and 3.9b (Appendix F) for diagrams of the expected effects.

Summary

The hypotheses proposed in this chapter were divided into three groups that reflected the three major research issues of interest. The first group assessed the expected main-effects of source expertise and source experience on individuals exposed to an advertising message. The second group of hypotheses dealt with the expected main-effects of credence and experience attribute claims on individuals receiving such a message. And the third set of hypotheses examined the effects of the above source characteristics in interaction with the above product characteristics.

Each group of hypotheses was related to a number of dependent measures. These measures included attitudes toward the endorser, attitudes toward the ad, skepticism toward product attribute claims, the frequency of the four categories of cognitive responses, and other dependent measures relating to the theoretical issues.
CHAPTER IV

METHODOLOGY

Overview

This chapter describes the methodology used to test the hypotheses discussed in chapter 3. The research issues will be presented in the following order: research strategy and design, product selection, development of the experimental message, pre-testing the source characteristic and product attribute claim manipulations, subjects, the chronology of the experimental procedures, and the analytical model.

Research Strategy and Design

The purpose of this study was to test relationships between certain source characteristics, product features and persuasion. Thus, a laboratory experiment was used to test the hypotheses proposed in chapter 3. Since this research strategy permits control over the setting (i.e., extraneous variables), it gives the maximum amount of precision with regard to measurement of behavior and is thus the research strategy best suited to test relationships proposed by theory (Calder, Phillips and Tybout 1981; Cook and Campbell 1976; McGrath,
The research design used in this study was a 2x2x2 between-subjects, crossed factorial design. The first factor of interest, source expertise, was manipulated by having the advertisement presented by a source who was either high or low in expertise. The second factor, source experience, was varied by having the advertisement presented by a source who was either high or low in experience. And the third factor of interest, product attribute claims, was manipulated by presenting claims in the radio advertisement that were either experience or credence attribute claims.

Consequently, this study examined eight distinct treatment groups. Since this was a between-subjects design, each subject was assigned to one treatment only. The use of a completely crossed design allowed the examination of main effects as well as the investigation of interaction effects.

Product Selection Procedure

The selection of a product was a very important initial step in the design of this study that affected the development and pilot-testing of the advertisement and questionnaires. Although it is realized that product choice is basically a subjective process, the aim was to select a product according to a number of criteria that would meet the objectives of this study:
(1) The subject population should be reasonably familiar with the product class, but not with the particular product chosen. That is, the subject population should not hold previously formed attitudes concerning the selected product.

(2) It should be reasonable to expect the subject population to be at least moderately involved with the product class.

(3) It should be realistic for the subject population to expect the consumption of the product at some point in time.

(4) The product should be complex enough to warrant multiple attribute claims that are typically presented in the form of an advertisement.

After consideration of a number of products, a health care service, or more specifically a hospital, was selected as a product class that fulfills the above four criteria. To fully satisfy the first criterion and ensure that the subject population does not have previously formed attitudes toward the product, a fictitious hospital was used.

The choice of a hospital seemed appropriate for a number of additional reasons. First of all, health care has been found to be one of the fastest growing sectors in the service industry. As Folland, Goddman and Stano (1993) point out, approximately 12.5 percent of all moneys spent on final goods and services is currently being spent on health care, which represents a significant increase from the estimated eight percent that were spent in 1976. Second, due to a more relaxed regulatory environment, hospital advertising has sharply increased during the last years and it is believed that this trend will continue (Andaleeb 1994). Third, the deregulation in
combination with oversupply (Steiber 1987) has led to sharply increased competitive pressures for hospitals (Nelson and Goldstein 1989). A study reported by Petite and Andersen (1986) showed that 43 percent of the surveyed hospital administrators feared that their hospitals might have to close within the following five years. As a result, many hospitals have established marketing departments (Fontana 1984) and have substantially increased their marketing efforts (Solomon 1990). Fourth, consumers of health care services have become more informed and sophisticated buyers of these services (Andaleeb 1994; Nelson and Goldstein 1989), who are relying less than ever before on their family doctor to guide the selection of a hospital (Heistand 1986; Kurz and Wolinsky 1985). Instead, as Wagner (1985) suggests, more and more consumers are using advertisements to obtain information about physicians. For example, a recent SRI/Gallup poll has shown that 62 percent of consumers believe that hospitals should advertise (Steiber 1987), and it has also been found that 75 percent of consumers display a favorable attitude toward hospital advertising if it is perceived to be informative (Christensen and Inguanzo 1989). Thus, it has been suggested that advertising has become an important competitive tool that can help hospitals to both gain and retain clients (Andaleeb 1994).
Development of the Experimental Message

In accordance with the experimental design, eight experimental messages or manipulations had to be developed. Each of these messages depicted one of the situations given by the three experimental factors. As will be recalled, the three factors under consideration were source expertise (i.e., high versus low), source experience (i.e., high versus low), and product attribute claims (i.e., experience versus credence attribute claims). To assure a constant delivery of each message treatment, one radio advertisement was developed for each of the experimental conditions.

Pilot Testing of Source Manipulations

Pilot Test I

To ensure realistic source manipulations, descriptions of a source (1) high in expertise and high in experience; (2) high in expertise and low in experience; (3) low in expertise and high in experience; and (4) low in expertise and low in experience were developed (see Appendix A).

The endorser high in both expertise and experience was depicted as a medical student who was about to complete his residency at the advertising hospital (i.e., high expertise). This person had also recently been hospitalized for several weeks in the hospital under consideration and was, due to prior experience with other hospitals, capable of comparing the
services delivered by these facilities (i.e., high experience). The endorser who was high in expertise but low in experience, on the other hand, was described as a medical student who had almost completed his residency at the advertising hospital (i.e., high expertise), but had never been hospitalized (i.e., low experience). The source low in expertise and high in experience was described as a student who had been attending medical school for a short while (i.e., low expertise). This source had also been working as a volunteer at the advertising hospital and had recently spent several weeks as patient at that facility (i.e., high experience). Due to prior experiences as a patient with other hospitals, this person was further capable of comparing the services delivered by different facilities (i.e., high experience). Finally, the endorser low in both expertise and experience was depicted as a student who had started attending medical school only a short while ago (i.e., low expertise). Although this person had never been hospitalized (i.e., low experience), he had been working as a volunteer at the hospital under consideration for a short while (i.e., low expertise).

Since the students recruited for the pilot studies were enrolled in basic marketing classes at the university at which the actual experiment was to be conducted, it may be assumed that both the piloting groups and the experimental sample had similar perceptions of the endorser. Each of the forty-four respondents was presented with one of the four source
manipulations and asked to complete a series of questions developed to measure the perceived degree of expertise and experience (see Appendix A). The development of these measures was aided by prior research (Hovland et al., 1953; Jacoby et al., 1986; McGuire 1969) and the above proposed definitions of source expertise and source experience. Accordingly, the perceived degree of expertise was measured by asking the respondents to indicate the magnitude of their agreement to the following two statements: the endorser (1) has a great deal of formal education in his professional field, and (2) has been well trained. The answers to these statements were assessed on two seven-point semantic differential scales each (true/false and agree/disagree). The four items were then used to derive a summary measure to distinguish between high and low source expertise. According to Cronbach's Alpha, the reliability of these scale items was very high ($\alpha = .97$).

The perceived degree of experience was measured by asking the subjects to indicate the extent of their agreement to the following two statements: the endorser (1) has had a high degree of use of the health care facility, and (2) has a high degree of familiarity with the patient care at the facility (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters. The answers to these statements were assessed on two seven-point semantic differential scales each (true/false and agree/disagree). The four items were then used to derive a
summary measure to distinguish between high and low source experience. According to Cronbach's Alpha, the reliability of these scale items was reasonably high ($\alpha = .84$). Thus, the results of the pilot test tend to suggest that the newly developed measures for source expertise and source experience appear to be satisfactory.

Subsequent one-way analyses of variance showed that all source manipulations were successful. The mean responses on the expertise summary measure were 5.88 and 3.85 for the high and low expertise conditions, respectively. This difference was statistically significant ($F = 16.94, p = .0002$). Likewise, the mean responses on the experience summary measure were 5.58 for the high experience condition and 4.32 for the low experience condition. This difference was statistically significant ($F = 7.26, p = .0102$).

**Pilot Test II**

Although the above described differences in the mean responses were statistically significant, a second pilot study was performed to test whether the following minor changes in the source manipulations would further increase these differences. In the high expertise/high experience condition, the source had received his degree to practice medicine from a major medical school about two years ago, and was about to complete his residency (i.e., high expertise) at the advertising hospital. He had further spent several weeks as a
patient at the hospital under consideration and was, due to prior experience with other hospitals, capable of comparing the services delivered by these facilities (i.e., high experience). The endorser who was high in expertise but low in experience, on the other hand, was described as a medical student who had almost completed his residency at a competing hospital (i.e., high expertise). This person had already accepted a position at the advertising hospital and had, for that purpose, visited some of the facilities at that hospital. He further had never been hospitalized (i.e., low experience).

The source low in expertise and high in experience was described as a volunteer worker at the advertising hospital, who was so inspired by his work that he was planning to attend medical school to become a doctor (i.e., low expertise). This source had further spent several weeks as a patient at the hospital in question and was, due to prior encounters with other hospitals, capable of comparing health care facilities (i.e., high experience). The low expertise/low experience endorser, finally, was depicted as a volunteer worker (i.e., low expertise) at a competing health care facility, who had recently visited the advertising hospital for the purpose of a job interview. This person also had never been hospitalized (i.e., low experience).

Forty-four students in basic marketing classes were exposed to one of the four source descriptions (see Appendix B) and asked to complete the series of questions developed to
measure the perceived degree of expertise and experience. According to Cronbach's Alpha, the reliabilities of the previously developed scale items for the summary measures of source expertise ($\alpha = .89$) and source experience ($\alpha = .93$) were reasonably high. One-way analyses of variance showed that the changes in the source manipulations led to a decrease in the mean response for the summary measure assessing low expertise. Here it was possible to decrease the mean response value of the first pilot study from 3.85 to 3.53 in the second pilot study. Likewise, the minor changes in the source manipulations also led to a decrease in the mean response value assessing low experience from 4.32 in the first pilot test to 3.82 in the second pilot test.

Due to comments by a number of respondents, the source manipulations were slightly modified to include some additional information about the endorser's qualifications (e.g., for how long has he been involved in volunteer work at a hospital?).

Pilot Testing of Product Attribute Claims

Several steps were taken to ensure the development of realistic radio advertisements. To assure the selection of appropriate product attribute claims, advertisements designed by local area hospitals were accumulated. Then all product attribute claims contained in these advertisements were amassed. The next step consisted of pilot-testing. For this purpose, a group of thirty-four undergraduate students was
recruited. Each of the respondents participating in the pilot study was presented with a list of forty product claims and asked to complete a series of seven-point semantic differential scale items (Appendix C). The first three scale items had been designed to divide the claims into experience and credence attribute claims and had the following anchoring points: (1) I will know after I have used it/I have to take on faith; (2) I can fully know/I can never fully know; and (3) would be obvious to any patient/only an expert would know. The three items were subsequently used to derive a summary measure to distinguish between experience and credence attribute claims. According to Cronbach's Alpha, the reliability of these scale items was reasonably high (α = .83). The next scale item had been designed to measure the importance (less important/more important) of each of the forty claims.

Subsequently twelve of the product attribute claims were chosen for inclusion in the experimental messages. The six claims that ranked among the lowest on the above described summary measure were selected as experience attribute claims. The lowest mean response value in this category was 2.11, whereas the highest was 2.54. Likewise, the six claims that ranked among the highest on the summary measure were chosen as credence attribute claims (see Table 4.1). The lowest mean response value was 4.99, whereas the highest was 5.69. The difference between experience and credence attribute claims was statistically significant (F = 139.65, p = .0001). In terms of
importance to the respondents there was no significant difference between the chosen experience and credence attribute claims \( (F = 1.76, p = .19) \).

### TABLE 4.1

**PRODUCT ATTRIBUTE CLAIMS**

<table>
<thead>
<tr>
<th>Claim</th>
<th>Degree</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>City View Hospital provides the highest quality of customer care available in the health care industry.</td>
<td>5.69</td>
<td>5.50</td>
</tr>
<tr>
<td>City View Hospital prides itself on being on the cutting edge of technology.</td>
<td>5.66</td>
<td>5.00</td>
</tr>
<tr>
<td>Our team includes orthopaedic spine surgeons, physiatrists (physical medicine and rehabilitation specialists), neurologists, neuroradiologists, chronic pain anesthesiologists, psychologists, and physical therapy specialists. By providing these various specialists with state-of-the-art technologies we have helped thousands of patients find relief from pain rapidly and efficiently.</td>
<td>5.49</td>
<td>5.79</td>
</tr>
<tr>
<td>You know how crucial a precise diagnosis is. That is exactly why we put so much emphasis on providing it at City View Hospital.</td>
<td>5.15</td>
<td>6.21</td>
</tr>
<tr>
<td>It is our expert medical staff that has made us a leading health care center - highly skilled physicians and medical professionals.</td>
<td>5.06</td>
<td>5.79</td>
</tr>
<tr>
<td>Our MRI system helps physicians discover earlier, and treat more efficiently, a variety of medical conditions, including bone, joint and muscle disorders, tumors, cancer and cardiovascular heart disease.</td>
<td>4.99</td>
<td>5.62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Claims</th>
<th>Degree</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our staff will help you file your insurance claims for diagnostic services.</td>
<td>2.11</td>
<td>5.06</td>
</tr>
<tr>
<td>You will be pleasantly surprised by the speed and ease of our admission procedures.</td>
<td>2.29</td>
<td>5.00</td>
</tr>
<tr>
<td>Our nurses are very quick to respond when called.</td>
<td>2.41</td>
<td>5.50</td>
</tr>
<tr>
<td>At City View Hospital you will receive plenty of individual attention.</td>
<td>2.53</td>
<td>5.53</td>
</tr>
<tr>
<td>Our doctors will give you all the time and attention you need.</td>
<td>2.53</td>
<td>5.71</td>
</tr>
<tr>
<td>You will enjoy the warm, friendly, and attentive service at City View Hospital.</td>
<td>2.54</td>
<td>5.18</td>
</tr>
</tbody>
</table>

**The Experimental Message**

The above pilot studies aided the development of eight experimental advertisements that differed only in terms of
source characteristics and product attribute claims. All other content (e.g., number of product attribute claims, length, enthusiasm of the endorser, etc.) were consistent to minimize possible confounds. Care was taken to design advertisements that contain features that are found in most ads (Munch 1983):

(1) an endorser introduction stage,
(2) a problem definition stage,
(3) a stage that introduces the product attribute claims in accordance with the experimental condition,
(4) and a closing stage that summarizes the product attribute claims and reinforces the endorser legitimization.

Taping of the Experimental Message

The media center of the university was involved in the development of the audio tapes. Each experimental message consisted of two parts (see Appendix D). The first part was spoken by the experimenter, who introduced the study and gave instructions to all participants. This part of the recording was taped once and used for all experimental conditions to avoid unintended variations. For the second part of each manipulation, a professionally sounding male speaker with a deep and soothing voice was recruited to impersonate the endorser. For this part, eight master tapes, one for each of the message conditions, were prepared. To keep unintended variations as low as possible, each of the four source manipulations was recorded only once. Likewise, each of the
product attribute claim manipulations was recorded once. Subsequently, the recordings were edited to create the eight experimental manipulations. The length of each experimental message was about 1.5 minutes.

As pointed out above, each version of the radio advertisement contained four stages. The first stage included the source manipulations. Here the speaker introduced himself in accordance with the experimental condition (high expertise/high experience; high expertise/low experience; low expertise/high experience; or low expertise/low experience). During the second stage, the speaker identified the problem (i.e., the choice of a hospital) and raised awareness (of the advertising hospital). The third stage contained the product attribute claim manipulations. Here, the speaker introduced either six experience or credence attribute claims that had previously been tested to be of importance and relevance to the subject pool. During the fourth and final stage, the endorser provided a short summary of these claims and ended with a reinforcement of the source legitimization.

Subjects

The experiment was conducted at The University of Texas at Arlington. Respondents were recruited from several undergraduate marketing classes and were offered extra credit points in exchange for participation in the experiment. A total of 214 participants was recruited.
In compliance with University regulations, this study was reviewed and approved by the Human Subjects Committee of the University before testing could be conducted. Further, each subject was required to read and sign an informed consent form. This form informed the subjects about their rights during the experiment and was further used to have subjects certify their voluntary participation.

The use of a student sample can be defended as follows. First, it has been argued that the use of convenience samples, such as students, is appropriate when conducting theoretical consumer research, because a relatively homogenous subject population tends to reduce within-group variance on dependent measures and thus leads to more conclusive tests of a theory (Calder, Phillips and Tybout 1981). That is, the use of homogeneous samples is believed to increase the internal validity of a study. Even though some argue that the use of such convenience samples reduces external validity and thus renders research results less generalizable or even meaningless (Burnett and Dunne 1986; Ferber 1977; McNemar 1946), Cook and Campbell (1979) maintain that theoretical research is mainly concerned with internal validity, whereas external validity is of little importance. Further, as Lynch (1982) points out, because internal validity is needed to detect causal relationships that are then to be generalized to the population of interest, external validity cannot be increased at the expense of internal validity.
Second, research in social psychology has found that the responses of college student samples can be quite similar to those given by extremely different nonstudent samples (Browne and Brown 1993; Burne, Griffitt, Hudgins and Reeves 1969). Burne et al., (1969), for example, investigated whether previous findings indicating that college students' attraction to a stranger tends to increase as the stranger's attitudes becomes more similar to their own, can be replicated using nonstudent samples. The samples used during the first experiment were quite different from college students in that they consisted of older and considerably less educated individuals representing a lower socioeconomic class. The sample used during the second experiment differed from college students in that it consisted of less educated, lower class individuals. The findings of both studies indicate that the results derived in a sample of college students can be used "to predict the attraction responses of a quite different sample of subjects," (Byrne et al., 1969, p. 159). This conclusion finds support in a more recent study conducted by Browne and Brown (1993). The authors administered a survey of lottery use to both a student and a random nonstudent sample. A comparison of the results indicates that students appear to be quite similar to the general population and the authors maintain that "similarities between groups suggest that samples of students might be sufficiently representative of the general population to provide valid information" (Browne and Brown 1993, p. 1297).
Chronology of the Experimental Procedure

The experimental sessions were conducted in the Behavioral Laboratory of the College of Business Administration at The University of Texas at Arlington. Since the behavioral laboratory's sound system consists of a wall unit, only one treatment could be administered per session. Further, because the seating capacity is restricted to a maximum of seventeen students, two sessions had to be scheduled for each of the experimental conditions. Two additional sessions were scheduled to provide for potential problems, resulting in a total of eighteen experimental sessions. The number of participants per session ranged from eight to seventeen.

As mentioned above, one experimental treatment was administered per session. During the first sixteen sessions, the treatment to be administered was determined randomly. The remaining two sessions were used to increase the cell sizes of two of the treatments to more acceptable levels. All data were collected in a period of four days.

A total of 214 students participated in the experiment. The data collected in one of the sessions were discarded (14 students), because the majority of participants consisted of foreign students who had problems understanding both the experimental message and the questionnaire. Two of the questionnaires had to be excluded because both participants firmly believed that they had been hospitalized at the advertising health care facility. Further, seven questionnaires
had to be discarded due to excessive amounts of missing data or random patterns in answering. This resulted in a total number of 191 usable questionnaires.

Study Explanation

Upon arrival at the behavioral lab, subjects were greeted and assigned seating. To minimize any potential bias due to differential experimenter interaction, the same experimenter was used for all sessions (Orne, 1962).

The experimenter then played the first part of the experimental audio message, which explained that subjects were about to listen to a newly developed advertisement for a hospital and would subsequently be asked to complete a series of questionnaires relating to that advertisement. Subjects were further asked to listen to the advertisement in a natural manner and were reminded that, while listening to the ad, they should assume that they are considering the use of the hospital by either themselves, a relative, or a close personal friend. Finally, subjects were asked to read and sign informed consent forms.

After the respondents had put the signed consent forms in the envelopes provided for this purpose, they were exposed to the experimental message. Subsequently, all respondents were asked to complete the questionnaire (see Appendix E).
Dependent Measures

Thought Reporting

After having listened to the ad, subjects were asked to complete the thought reporting task.

Attitude Measures

Next, subjects were requested to complete a series of semantic differential scales, which had been designed to measure several of the dependent variables of interest (not all of which are to be analyzed in this study) and were administered in the following order: attitudes toward the product, attitudes toward the advertisement, purchase intentions, attitudes toward the endorser, perceived credibility of the endorser, perceived believability of the endorser, and attitudes toward the product claims (addressed in two of the six questionnaire booklets). Most of these dependent variables were assessed through several items and the mean value of these related items were then used to determine a subject's attitude.

Manipulation and Confound Checks

Several items pertaining to perceived source expertise and experience as well as items assessing the product attribute claims were included to determine whether source and product
attribute claim manipulations worked as intended. Further, since previous research has often confounded source expertise with trustworthiness and likability (Hovland and Weiss 1951; Johnson et al., 1968; Warren 1969), items to measure these two constructs were included as well.

Recall

The above was followed by the unaided recall measure, where subjects were asked to write down as many of the claims made in the advertisement as they could remember. Since this measure was collected for future research, the results are not reported in this study.

Thought Categorization

Subjects were then asked to return to the thought reporting task and indicate whether a thought was message or source related and whether it was positive, neutral or negative. The results of this self-scoring task is to be used in future research comparing categorization of thoughts into counterarguments, support arguments, source derogations and source bolstering by subjects and independent judges. Thus, the results of this task will not be reported in this study.
Classification Variables

Upon completion of the thought categorization measures, subjects were instructed to answer a number of questions pertaining to additional dependent measures of interest. These included familiarity and actual experience with hospitals, gender of the respondent, and age. Information on these variables was collected to check for possible confounds.

Demand Characteristics

Subjects were then requested to state their thoughts about the purposes and major objectives of this study. None of the subjects was able to determine the actual purpose of the study. Most subjects thought that a newly developed advertisement for a hospital was to be tested or that it was to be determined how much they could remember after having been exposed to an advertisement. Further, subjects were asked to indicate, on a seven-point scale, the clarity of the questionnaire. This measure was included to check whether lack of understanding could be a possible alternative explanation for the result of the study.

Debriefing of Subjects

Subjects were then thanked and debriefed. That is, subjects were told that the purpose of the experiment was to assess the effectiveness of source characteristics in
combination with product attribute claims in an advertisement. Subjects were then dismissed as a group. See Figure 4.1 for a diagram depicting the chronological order of the experimental stages.

Figure 4.1. Chronology of the Experimental Procedure.
Analytical Model

The analytical model used was a three-factor fixed effects analysis of variance (ANOVA) model. The effects were considered to be fixed, because the two levels of the first factor (i.e., high and low expertise), the two levels of the second factor (i.e., high and low experience), and the two levels of the third factor (i.e., credence and experience attribute claims), had been predetermined by the experimenter.

As has been pointed out before, the use of a completely crossed design allows the examination of the main-effects for the factors source expertise, source experience, and product attribute claims as well as the investigation of interaction effects among those three factors.

Summary

This chapter described the methodology used to test the hypotheses discussed in chapter 3. The chosen research strategy was a controlled laboratory experiment. The research design was a 2x2x2 between-subjects factorial design. The respondent population consisted of undergraduate students at The University of Texas at Arlington. Each subject was exposed to an experimental advertisement and was then asked to complete a battery of questions measuring the dependent and independent variables. The results of the study are presented in chapter 5.
CHAPTER V

RESULTS AND ANALYSIS

Overview

First, details about the sample are given. This is followed by manipulation checks. Then the results and analyses for the hypotheses presented in chapter 3 are reported. The hypotheses are reported according to the dependent variables studied: attitudes toward the endorser, attitudes toward the ad, skepticism toward the product attribute claims, and frequency of the relevant types of cognitive responses (i.e., counterarguing, source derogation, support arguing, and source bolsters). As may be recalled, this order is not equivalent to the order the hypotheses had been presented in chapter 3. However, the analysis of variance procedure makes the reporting of the results based on the dependent measures studied more expedient.

The Sample

As mentioned above, a total of 191 usable questionnaires was obtained. Individual cell sizes ranged from 20 to 32. However, because the use of equal factor level sample sizes
tends to both increase the robustness of the fixed analysis of variance model (i.e., minimizes the effects of unequal variances) and to simplify calculation procedures (Neter, Wasserman and Kutner 1990), it was decided to randomly select observations to achieve equal cell sizes of 20.

The above procedure resulted in a sample size of 160. The sample consisted of 82 male (51.25%) and 78 female (48.75%) undergraduate students. While the youngest respondent was 18 and the oldest was 47 years old, the majority of respondents (122 or 76%) was between 20 and 26 years old, resulting in a mean age of 25.

Manipulation Checks

Source Manipulations

Source Expertise

To assess the perceived degree of expertise, the scales developed and tested during the pilot studies were used. That is, the perceived degree of expertise was measured by asking the respondents to indicate the magnitude of their agreement to the following two statements: the endorser (1) has a great deal of formal education in his professional field, and (2) has been well trained. The answers to these statements were assessed on two seven-point semantic differential scales each (true/false and agree/disagree). As before, the four items were then used to derive a summary measure to distinguish between high and low
source expertise. As in the pilot studies, Cronbach's Alpha was used to estimate the reliability of the above scale items. Here again, the reliability of the four scale items was extremely high ($\alpha = .94$).

A subsequent one-way analysis of variance showed that the source expertise manipulation was successful. The mean response value in the high expertise condition was 4.89, whereas it was 3.84 in the low expertise condition. This difference is statistically significant ($F = 20.07, p = .0001$).

**Source Experience**

To measure the perceived degree of source experience, a slightly modified version of the scale items developed during the pilot studies was used. The minor modification had been suggested by subjects during the pilot study, and was believed to increase the clarity of the measures. Thus, the perceived degree of experience was measured by asking the respondents to indicate the extent of their agreement to the following two statements: the endorser (1) has had a high degree of use of health care facilities, and (2) has had a high degree of familiarity with the patient care at the facility (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters. The answers to these statements were assessed on two seven-point semantic differential scales each (true/false and agree/disagree). Here again, the four items were then used to derive a summary
measure to distinguish between high and low source experience. According to Cronbach's Alpha, the reliability of these scale items was reasonably high ($\alpha = .89$).

A one-way analysis of variance showed that the source experience manipulation was successful. The mean response value for the high experience condition was 4.72, whereas it was 3.91 for the low experience condition. This difference is statistically significant ($F = 11.13, p = .0011$).

**Product Attribute Claims**

To assess whether the product attribute claim manipulation was successful, respondents were presented with a written list of the six claims (i.e., experience or credence attribute claims) they had been exposed to and were asked to complete the three seven-point semantic differential scale items that had been developed during the pilot study. As may be recalled, these items had been designed to divide the claims into experience and credence attribute claims and had the following anchoring points: (1) I will know after I have used it/I have to take on faith; (2) I can fully know/I can never fully know; and (3) would be obvious to any patient/only an expert would know. The three items were then used to derive a summary measure to distinguish between experience and credence attribute claims. According to Cronbach's Alpha, the reliability of these scales items was reasonably high ($\alpha = .86$).
The subsequent one-way analysis of variance showed that the product attribute claim manipulation was successful. The mean response value for experience attribute claims was 2.41, whereas it was 4.29 for credence attribute claims. This difference is statistically significant ($F = 137.56$, $p = .0001$).

**Dependent Measures**

**Attitude Measures**

**Attitude Toward the Endorser**

Attitude toward the endorser was assessed by asking the respondents to indicate their feelings toward the spokesperson on three seven-point semantic differential scales with the anchoring points bad/good, unpleasant/pleasant, and dislike/like. These items were then used to derive a summary measure of attitude toward the endorser. According to Cronbach's Alpha, the reliability of the three scale items was extremely high ($\alpha = .95$).

Then an analysis of variance was performed. The first step was to evaluate the aptness of the analysis of variance model. Both Cochran's C Test ($C = .18$, $p = .78$) and Bartlett's Box F Test ($F = .81$, $p = .58$) could not find any significant difference in the variances of the error terms across the factor levels. Plotting the standardized residuals against observed (Appendix F, Figure 5.1a) and predicted values
(Appendix F, Figure 5.1b) confirms this finding. Further, a normal probability plot of the residuals (Appendix F, Figure 5.1c) suggests reasonable agreement with normality.

The analysis of variance (Table 5.1b) shows a main effect for source expertise ($F = 4.68, p = .032$). As hypothesized, a source high in expertise leads to more positive attitudes toward the endorser than a source low in expertise (Appendix F, Figure 5.1). Thus, hypothesis 1a is confirmed. However, the analysis of variance does not indicate any main effect for source experience. Although the difference in mean response values (Table 5.1a) points in the correct direction, this difference is not statistically significant ($F = .03, p = .870$). Thus, hypothesis 2a cannot be confirmed. Further, no interaction effects can be shown. Plotting the mean response values of the experience conditions against those of the product attribute claim conditions (Appendix F, Figure 5.2) indicates that high source experience as compared to low source experience may only lead to a slightly higher attitude toward a spokesperson endorsing experience attribute claims. It is suggested that the reverse might be the case if that spokesperson endorses credence attribute claims. However, as pointed out, above none of these differences in mean response values are statistically significant. Thus, hypotheses 4a and 5a cannot be supported.
TABLE 5.1a
MEANS FOR THE MEASURE OF ATTITUDE TOWARD THE ENDORSER

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>High</th>
<th>Low</th>
<th>Experience Attribute Claims</th>
<th>Credence Attribute Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expertise</td>
<td>5.07</td>
<td>4.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>4.82</td>
<td>4.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Attribute Claims</td>
<td></td>
<td></td>
<td>4.80</td>
<td>4.78</td>
</tr>
</tbody>
</table>

TABLE 5.1b
ANOVA TABLE

DEPENDENT MEASURE: ATTITUDE TOWARD THE ENDORSER

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>393.36</td>
<td>152</td>
<td>2.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>12.10</td>
<td>1</td>
<td>12.10</td>
<td>4.68</td>
<td>.032</td>
<td>.572</td>
</tr>
<tr>
<td>Experience</td>
<td>.07</td>
<td>1</td>
<td>.07</td>
<td>.03</td>
<td>.870</td>
<td>.377</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.00</td>
<td>.948</td>
<td>.033</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>3.21</td>
<td>1</td>
<td>3.21</td>
<td>1.24</td>
<td>.267</td>
<td>.196</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.23</td>
<td>1</td>
<td>.23</td>
<td>.09</td>
<td>.769</td>
<td>.046</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>2.18</td>
<td>1</td>
<td>2.18</td>
<td>.84</td>
<td>.360</td>
<td>.172</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.63</td>
<td>1</td>
<td>.63</td>
<td>.24</td>
<td>.624</td>
<td>.043</td>
</tr>
<tr>
<td>Model</td>
<td>18.42</td>
<td>7</td>
<td>2.63</td>
<td>1.02</td>
<td>.422</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>411.78</td>
<td>159</td>
<td>2.59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared = .045
Adjusted R-Squared = .011

Even though the hypotheses are uni-dimensional, due to a desire to use a more conservative technique, all statistical analyses are based on two-tailed tests.
Attitude Toward the Advertisement

Attitude toward the ad was measured by asking the subjects to indicate their feelings toward the ad on three seven-point semantic differential scales with the anchoring points bad/good, unpleasant/pleasant, and dislike/like. These items were then used to calculate a summary measure of attitude toward the ad. According to Cronbach's Alpha, the reliability of the three scale items was reasonably high ($\alpha = .90$).

Subsequently, an analysis of variance was performed. Here again, the aptness of the analysis of variance model was evaluated first. According to both Cochran's C Test ($C = .16, p = 1.0$) and Bartlett's Box F Test ($F = .37, p = .92$), the error term variances do not differ significantly across the factor levels. Plotting the standardized residuals against observed (Appendix F, Figure 5.2a) and predicted values (Appendix F, Figure 5.2b) confirms this finding. Further, a normal probability plot of the residuals (Appendix F, Figure 5.2c) suggests reasonable agreement with normality.

The analysis of variance (Table 5.2b) shows a main effect for source expertise ($F = 3.98, p = .048$). As hypothesized, a source high in expertise leads to more positive attitudes toward the ad than a source low in expertise (Appendix F, Figure 5.3). Thus, hypothesis 1b is confirmed. However, the analysis of variance does not indicate any main effect for source experience. Although the difference in mean response values (Table 5.2a) points in the correct direction (Appendix
F, Figure 5.4), this difference is not statistically significant ($F = .66, p = .419$). Thus, hypothesis 2b cannot be confirmed. Further, no interaction effects can be shown. Thus, hypotheses 4b and 5b cannot be supported.

TABLE 5.2a

MEANS FOR THE MEASURE OF ATTITUDE TOWARD THE ADVERTISEMENT

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>High</th>
<th>Low</th>
<th>Experience Attribute Claims</th>
<th>Credence Attribute Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expertise</td>
<td>4.55</td>
<td>4.23</td>
<td>4.46</td>
<td>4.42</td>
</tr>
<tr>
<td>Experience</td>
<td>4.52</td>
<td>4.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Attribute Claims</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 5.2b

ANOVA TABLE

DEPENDENT MEASURE: ATTITUDE TOWARD THE AD

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>270.33</td>
<td>152</td>
<td>1.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>7.08</td>
<td>7</td>
<td>1.08</td>
<td>3.98</td>
<td>.048</td>
<td>.507</td>
</tr>
<tr>
<td>Experience</td>
<td>1.17</td>
<td>1</td>
<td>1.17</td>
<td>.66</td>
<td>.419</td>
<td>.168</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.08</td>
<td>1</td>
<td>.08</td>
<td>.05</td>
<td>.828</td>
<td>.041</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>1.67</td>
<td>1</td>
<td>1.67</td>
<td>.94</td>
<td>.334</td>
<td>.173</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>.20</td>
<td>1</td>
<td>.20</td>
<td>.11</td>
<td>.737</td>
<td>.048</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.02</td>
<td>1</td>
<td>.02</td>
<td>.03</td>
<td>.859</td>
<td>.034</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.06</td>
<td>1</td>
<td>.06</td>
<td>.03</td>
<td>.859</td>
<td>.038</td>
</tr>
<tr>
<td>Model</td>
<td>10.28</td>
<td>7</td>
<td>1.47</td>
<td>.03</td>
<td>.568</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>280.60</td>
<td>159</td>
<td>1.76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared = .037
Adjusted R-Squared = .000

* Even though the hypotheses are uni-dimensional, due to a desire to use a more conservative technique, all statistical analyses are based on two-tailed tests.
Skepticism Toward the Product Claims

To assess skepticism toward the product claims, each respondent was presented with a list of the six product claims s/he had been exposed to (i.e., either six experience or six credence attribute claims). Each respondent was then asked to indicate on a seven-point semantic differential scale (not at all skeptical/very skeptical) the degree of skepticism felt toward each of the claims.

An analysis of variance was performed. First, the aptness of the analysis of variance model was evaluated. Both Cochran's C Test ($C = .21, p = .16$) and Bartlett's Box F Test ($F = 1.52, p = .16$) could not find any significant difference in the error term variances across the factor levels. Plotting the standardized residuals against observed (Appendix F, Figure 5.3a) and predicted values (Appendix F, Figure 5.3b) tends to support this finding. Further, a normal probability plot of the residuals (Appendix F, Figure 5.3c) indicates agreement with normality.

The analysis of variance (Table 5.3b) does not indicate any main effect for type of product attribute claim ($F = .31, p = .577$). Furthermore, the mean response values (Table 5.3a), although not statistically significant, suggest that subjects may be more skeptical of experience than credence attribute claims (Appendix F, Figures 5.5 and 5.6). Thus, not only is hypothesis 3 not supported, the observed effect points to a
contradictory direction. Finally, no interaction effects are indicated.

**TABLE 5.3a**

MEANS FOR THE MEASURE OF SKEPTICISM TOWARD THE PRODUCT ATTRIBUTE CLAIMS

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>High</th>
<th>Low</th>
<th>Experience Attribute Claims</th>
<th>Credence Attribute Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expertise</td>
<td>4.31</td>
<td>4.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>4.19</td>
<td>4.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Attribute Claims</td>
<td>4.27</td>
<td>4.17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 5.3b**

ANOVA TABLE

DEPENDENT MEASURE: SKEPTICISM TOWARD THE PRODUCT ATTRIBUTE CLAIMS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>163.59</td>
<td>152</td>
<td>1.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>1.34</td>
<td>1</td>
<td>1.34</td>
<td>1.25</td>
<td>.265</td>
<td>.197</td>
</tr>
<tr>
<td>Experience</td>
<td>.16</td>
<td>1</td>
<td>.16</td>
<td>.15</td>
<td>.704</td>
<td>.049</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.34</td>
<td>1</td>
<td>.34</td>
<td>.31</td>
<td>.577</td>
<td>.040</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.10</td>
<td>1</td>
<td>.10</td>
<td>.09</td>
<td>.761</td>
<td>.047</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>1.53</td>
<td>1</td>
<td>1.53</td>
<td>1.43</td>
<td>.234</td>
<td>.218</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.34</td>
<td>1</td>
<td>.34</td>
<td>.31</td>
<td>.577</td>
<td>.040</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.67</td>
<td>1</td>
<td>.67</td>
<td>.62</td>
<td>.432</td>
<td>.162</td>
</tr>
<tr>
<td>Model</td>
<td>4.47</td>
<td>7</td>
<td>.64</td>
<td>.59</td>
<td>.760</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168.07</td>
<td>159</td>
<td>1.06</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared = .027

Adjusted R-Squared = .000

* Even though the hypotheses are unidimensional, due to a desire to use a more conservative technique, all statistical analyses are based on two-tailed tests.
Cognitive Responses

The thoughts that had been produced by the respondents during the thought reporting task were subsequently categorized into counterarguments, source derogations, support arguments, and source bolsters. Two independent judges (Ph.D. students at The University of Texas at Arlington) were presented with definitions (Belch and Belch 1995) of the different types of cognitive responses (Table 5.4) and asked to place all thoughts into one of the categories. The judges reached agreement on 67% (468) of all thoughts. For the remaining thoughts, the tie was broken by a third independent judge (Ph.D. student at The University of Texas at Arlington). Thus, it was possible to categorize 100% (696) of the reported thoughts.

<table>
<thead>
<tr>
<th>TABLE 5.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitions of the Different Types of Cognitive Responses</td>
</tr>
</tbody>
</table>

| Counterarguments | Thoughts the recipient has that are opposed to the position taken in the message. For example, assume that the hospital ad claims that the hospital's doctors will give each patient all the time and attention s/he needs. A consumer may express disbelief or disapproval of that claim (e.g., "I don't believe that for a minute. Doctors don't really care about anything but the money they can get out of their patients."). |
| Support Arguments | Thoughts the recipient has that affirm the claims made in the message. For example, the above mentioned ad may lead the consumer to agree with the benefit claim made in the message (e.g., "This looks like...") |
TABLE 5.4 (continued)

| Source Derogations | a really good hospital - I think I will try it should the need arise.
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Bolsters</td>
<td>Negative thoughts about the spokesperson making the claim (e.g., &quot;Who is this guy? He has never been a patient at any hospital. So what does he know about hospital care?&quot;).</td>
</tr>
<tr>
<td>Positive Ad</td>
<td>Favorable thoughts about the spokesperson making the claim (e.g., &quot;This guy has been working in the medical field for a long time. It looks like he knows what he is talking about.&quot;).</td>
</tr>
<tr>
<td>Execution Thoughts</td>
<td>Favorable thoughts about the ad itself. These thoughts may include reactions to the creativity of the ad, colors, voice tones, and the quality of the visual effects.</td>
</tr>
<tr>
<td>Neutral Thoughts</td>
<td>Unfavorable thoughts about the ad itself. These thoughts may include reactions to the creativity of the ad, colors, voice tones, and the quality of the visual effects.</td>
</tr>
</tbody>
</table>

Counterarguments

Seventy-one counterarguments were produced. After performance of an analysis of variance, the aptness of the model was examined. Both Cochran's C Test ($C = .26, p = .02$) and Bartlett's Box F Test ($F = 2.21, p = .03$) indicate that the error variances differ significantly across the factor levels. This finding is confirmed by plots of the standardized residuals against observed (Appendix F, Figure 5.4a) and predicted values (Appendix F, Figure 5.4b). Further, a normal
probability plot of the residuals (Appendix F, Figure 5.4c) indicates severe departure from normality.

To eliminate the problems of unequal variance and nonnormality, several transformations were performed. A square-root transformation was found to be successful. Both Cochran's C Test (C = .18, p = .70) and Bartlett's Box F Test (F = .59, p = .76) indicate that the error term variances now do not differ significantly across the factor levels. Plotting the standardized residuals against observed (Appendix F, Figure 5.5a) and predicted values (Appendix F, Figure 5.5b) tends to support this finding. Further, a normal probability plot of the residuals (Appendix F, Figure 5.5c) indicates reasonable agreement with normality.

However, the analysis of variance did not show any significant effects (Table 5.5). Thus, hypotheses 6a, 7a, and 9a cannot be supported.

Source Derogations

One hundred and thirteen source derogations were produced. Here again, an analysis of variance model was performed. Then the aptness of the model was evaluated. Both Cochran's C Test (C = .20, p = .27) and Bartlett's Box F Test (F = 1.61, p = .13) indicate that the error variances do not differ significantly across the factor levels. This finding is confirmed by plots of the standardized residuals against observed (Appendix F, Figure 5.6a) and predicted values (Appendix F, Figure 5.6b). However, a normal probability plot
of the residuals (Appendix F, Figure 5.6c) indicates severe departure from normality.

**TABLE 5.5**

ANOVA TABLE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>45.13</td>
<td>152</td>
<td>.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>1.07</td>
<td>1</td>
<td>1.07</td>
<td>3.61</td>
<td>.059</td>
<td>.470</td>
</tr>
<tr>
<td>Expertise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>.55</td>
<td>1</td>
<td>.55</td>
<td>1.86</td>
<td>.175</td>
<td>.271</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.63</td>
<td>1</td>
<td>.63</td>
<td>2.12</td>
<td>.148</td>
<td>.303</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.00</td>
<td>1</td>
<td>.00</td>
<td>.00</td>
<td>.947</td>
<td>.037</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.03</td>
<td>.874</td>
<td>.040</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.09</td>
<td>1</td>
<td>.09</td>
<td>.29</td>
<td>.509</td>
<td>.040</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.03</td>
<td>.862</td>
<td>.038</td>
</tr>
<tr>
<td>Total</td>
<td>47.49</td>
<td>159</td>
<td>.30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared = .050

Adjusted R-Squared = .006

Even though the hypotheses are uni-dimensional, due to a desire to use a more conservative technique all statistical analyses are based on two-tailed tests.

A square-root transformation was found to reduce the nonnormality problem to a reasonable level (Appendix F, Figure 5.7c). According to both Cochran's C Test (C = .16, p = 1.00) and Bartlett's Box F Test (F = .33, p = .94), the error variances do not differ significantly across the factor levels. Plotting the standardized residuals against observed (Appendix F, Figure 5.7a) and predicted values (Appendix F, Figure 5.7b) tends to lend support to this finding.
The analysis of variance, however, did not show any significant effects (Table 5.6). Thus, hypotheses 6b, 7b, and 8a cannot be confirmed.

**TABLE 5.6**

**ANOVA TABLE**

**DEPENDENT MEASURE: FREQUENCY OF SOURCE DEROGATIONS**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>59.94</td>
<td>152</td>
<td>.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>.62</td>
<td>1</td>
<td>.62</td>
<td>1.56</td>
<td>.213</td>
<td>.234</td>
</tr>
<tr>
<td>Experience</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.02</td>
<td>.890</td>
<td>.036</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.14</td>
<td>1</td>
<td>.14</td>
<td>.37</td>
<td>.546</td>
<td>.049</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.08</td>
<td>1</td>
<td>.08</td>
<td>.20</td>
<td>.653</td>
<td>.047</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>1.17</td>
<td>1</td>
<td>1.17</td>
<td>2.97</td>
<td>.087</td>
<td>.401</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.84</td>
<td>1</td>
<td>.84</td>
<td>2.13</td>
<td>.147</td>
<td>.304</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.05</td>
<td>1</td>
<td>.05</td>
<td>.13</td>
<td>.715</td>
<td>.049</td>
</tr>
<tr>
<td>Model</td>
<td>2.91</td>
<td>7</td>
<td>.42</td>
<td>1.05</td>
<td>.396</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62.85</td>
<td>159</td>
<td>.40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared = .046  
Adjusted R-Squared = .002

Even though the hypotheses are unidimensional, due to a desire to use a more conservative technique all statistical analyses are based on two-tailed tests.

Support Arguments

One hundred and thirty support arguments were produced. After performance of an analysis of variance, the aptness of the model was examined. Although Cochran's C Test (C = .22, p = .11) could not find any significant differences in the error variances across the factor levels, Bartlett's Box F Test (F = 2.86, p = .00) indicates significantly different error
variances. However, both tests are sensitive to a violation of the normality assumption. The normal probability plot of the residuals (Appendix F, Figure 5.8c) indicates severe departure from normality. Further, plotting the standardized residuals against observed (Appendix F, Figure 5.8a) and predicted values (Appendix F, Figure 5.8b) shows unequal error variances.

To eliminate the problems of unequal variance and nonnormality, several transformations were performed. A natural log transformation was found to be reasonably successful. However, the analysis could only be performed on sixty-five of the observations, and Bartlett's Box F Test could not be performed. Cochran's C Test \(C = .19, p = 1.00\) indicates that the error term variances do not differ significantly across the factor levels. Plotting the standardized residuals against observed (Appendix F, Figure 5.9a) and predicted values (Appendix F, Figure 5.9b) tends to support this finding. Further, a normal probability plot of the residuals (Appendix F, Figure 5.9c) indicates reasonable agreement with normality.

However, the analysis of variance did not show any significant effects (Table 5.7). Thus, hypotheses 6c, 7c, 8b, and 9b cannot be supported.

Source Bolsters

Fifty-one source bolsters were produced. Here again, an analysis of variance model was performed. Then the aptness of the model was evaluated. Both Cochran's C Test \(C = .34, p = .00\) and Bartlett's Box F Test \(F = 5.17, p = .00\) indicate
TABLE 5.7

ANOVA TABLE

DEPENDENT MEASURE: FREQUENCY OF SUPPORT ARGUMENTS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>20.52</td>
<td>57</td>
<td>.36</td>
<td></td>
<td>.356</td>
<td>1.00</td>
</tr>
<tr>
<td>Expertise</td>
<td>.03</td>
<td>1</td>
<td>.03</td>
<td>.09</td>
<td>.763</td>
<td>.049</td>
</tr>
<tr>
<td>Experience</td>
<td>.00</td>
<td>1</td>
<td>.00</td>
<td>.00</td>
<td>.983</td>
<td>.035</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.36</td>
<td>1</td>
<td>.36</td>
<td>.99</td>
<td>.324</td>
<td>.172</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.04</td>
<td>1</td>
<td>.04</td>
<td>.10</td>
<td>.748</td>
<td>.050</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>.24</td>
<td>1</td>
<td>.24</td>
<td>.67</td>
<td>.417</td>
<td>.164</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.34</td>
<td>1</td>
<td>.34</td>
<td>.95</td>
<td>.334</td>
<td>.170</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.57</td>
<td>1</td>
<td>.57</td>
<td>1.59</td>
<td>.213</td>
<td>.234</td>
</tr>
<tr>
<td>Model</td>
<td>1.61</td>
<td>7</td>
<td>.26</td>
<td>.72</td>
<td>.657</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22.33</td>
<td>64</td>
<td>.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared .081
Adjusted R-Squared .000

Even though the hypotheses are uni-dimensional, due to a desire to use a more conservative technique all statistical analyses are based on two-tailed tests.

that the error variances differ significantly across the factor levels. This finding is confirmed by plots of the standardized residuals against observed (Appendix F, Figure 5.10a) and predicted values (Appendix F, Figure 5.10b). Further, a normal probability plot of the residuals (Appendix F, Figure 5.10c) indicates departure from normality. A square-root transformation was found to reduce the nonnormality problem to a reasonable level (Appendix F, Figure 5.11c). According to both Cochran's C Test (C = .21, p = .17) and Bartlett's Box F Test (F = 1.50, p = .16), the error term variances now do not differ significantly across the factor levels. Plots of the
standardized residuals against observed (Appendix F, Figure 5.11a) and predicted values (Appendix F, Figure 5.11b) seem to somewhat support this finding.

The analysis of variance, however, did not show any significant effects (Table 5.8). Thus, hypotheses 6d, 7d, 8c, and 9c cannot be confirmed.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>36.18</td>
<td>152</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>.05</td>
<td>1</td>
<td>.05</td>
<td>3.58</td>
<td>.060</td>
<td>.467</td>
</tr>
<tr>
<td>Experience</td>
<td>.21</td>
<td>1</td>
<td>.21</td>
<td>.88</td>
<td>.350</td>
<td>.172</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.27</td>
<td>1</td>
<td>.27</td>
<td>1.15</td>
<td>.286</td>
<td>.187</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.00</td>
<td>1</td>
<td>.00</td>
<td>.00</td>
<td>.997</td>
<td>.032</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>.06</td>
<td>1</td>
<td>.06</td>
<td>.26</td>
<td>.611</td>
<td>.041</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.46</td>
<td>1</td>
<td>.46</td>
<td>1.95</td>
<td>.165</td>
<td>.282</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.05</td>
<td>1</td>
<td>.05</td>
<td>.21</td>
<td>.644</td>
<td>.046</td>
</tr>
<tr>
<td>Model</td>
<td>1.91</td>
<td>7</td>
<td>.27</td>
<td>1.15</td>
<td>.337</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38.10</td>
<td>159</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared = .050
Adjusted R-Squared = .006

Even though the hypotheses are uni-dimensional, due to a desire to use a more conservative technique all statistical analyses are based on two-tailed tests.

Summary

This chapter has reported the results and analyses of the hypotheses that had been presented in chapter 3. In accordance
with the analysis of variance procedure, the chapter has been organized around the dependent variables measured. Only main effects for source expertise could be found. None of the other hypotheses could be supported (Table 5.9). Chapter 6 will present a summary and discussion of the results, as well as suggestions for future research.

**TABLE 5.9**

**SUMMARY OF THE RESEARCH RESULTS**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Outcome</th>
<th>Hypothesis</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>confirmed</td>
<td>7a</td>
<td>not confirmed</td>
</tr>
<tr>
<td>1b</td>
<td>confirmed</td>
<td>7b</td>
<td>not confirmed</td>
</tr>
<tr>
<td>2a</td>
<td>not confirmed</td>
<td>7c</td>
<td>not confirmed</td>
</tr>
<tr>
<td>2b</td>
<td>not confirmed</td>
<td>7d</td>
<td>not confirmed</td>
</tr>
<tr>
<td>3</td>
<td>not confirmed</td>
<td>9a</td>
<td>not confirmed</td>
</tr>
<tr>
<td>4a</td>
<td>not confirmed</td>
<td>9b</td>
<td>not confirmed</td>
</tr>
<tr>
<td>4b</td>
<td>not confirmed</td>
<td>9c</td>
<td>not confirmed</td>
</tr>
<tr>
<td>5a</td>
<td>not confirmed</td>
<td>9d</td>
<td>not confirmed</td>
</tr>
<tr>
<td>5b</td>
<td>not confirmed</td>
<td>9e</td>
<td>not confirmed</td>
</tr>
<tr>
<td>6a</td>
<td>not confirmed</td>
<td>9f</td>
<td>not confirmed</td>
</tr>
<tr>
<td>6b</td>
<td>not confirmed</td>
<td>9g</td>
<td>not confirmed</td>
</tr>
<tr>
<td>6c</td>
<td>not confirmed</td>
<td>9h</td>
<td>not confirmed</td>
</tr>
<tr>
<td>6d</td>
<td>not confirmed</td>
<td>9i</td>
<td>not confirmed</td>
</tr>
</tbody>
</table>
CHAPTER VI
DISCUSSION AND IMPLICATIONS

Overview

In this chapter, the results reported in the previous chapter are summarized and examined. This is followed by a discussion of the theoretical and managerial implications of this study. Next, the limitations and contributions of this research will be discussed. And finally, suggestions for future research are proposed.

Summary and Discussion of Results

Summary

The purpose of this study was to test the "product and endorser feature congruence hypothesis." In other words, it was tested whether a match between certain source and product characteristics (i.e., source expertise/credence attributes and source experience/experience attributes) affects consumers' cognitive responses as well as their attitudes toward both the endorser and the ad. Source expertise was manipulated by having the endorser in the hospital advertisement either describe himself as a medical student about to finish his residency
(i.e., high expertise) or as a volunteer at a hospital who is thinking about attending medical school (i.e., low expertise). Source experience was varied by having the endorser either state that he had been hospitalized at several medical facilities including the advertising one (i.e., high experience) or that he has never been hospitalized (i.e., low experience). Claim type was manipulated by having the endorser list either six experience or six credence attribute claims. This resulted in eight different treatments and consequently eight individual advertisements had to be developed. Each subject was exposed to one of the radio ads and asked to complete a thought reporting task and supply evaluations of the ad and the endorser. The evaluations were assessed on a series of seven-point semantic differential scales. A total score was computed for each subject with respect to the different types of cognitive responses and attitudes toward the ad and the endorser. These total scores were used as the dependent variables in a series of analysis of variance procedures.

Discussion of Results

Source Expertise versus Source Experience

The results indicate that although all source and product attribute claim manipulations were successful, only one of the initial hypotheses can be supported. Specifically, although subjects seem to be perfectly capable of distinguishing between
source expertise and source experience, only main effects for source expertise can be found. As hypothesized, prepurchase information about a product communicated by an endorser high in expertise as compared to an endorser low in expertise leads to more positive attitudes toward the endorser and toward the ad. However, neither the hypothesized main effects for source experience nor any of the suggested interaction effects between the above mentioned source and product characteristics can be supported.

There are several reasons that might account for these unexpected results. First, some of the cognitive responses collected during the thought reporting task suggest that respondents might have been under the impression that, due to quality controls performed by state and federal agencies, there is little or no variation in the quality of patient care provided by health care facilities. That is, some of the respondents stated that all hospitals are about the same and that there cannot be any real differences among hospitals in terms of quality of patient care. Many of the respondents exposed to the experience attribute claim condition further indicated that they found several of the claims to be relatively low in believability (see below for a more detailed discussion) as measured by a seven-point semantic differential scale and cognitive responses. For example, the claim stating that the hospital's doctors will provide patients with all the time and attention they need, appeared to produce certain
negative cognitive responses (e.g., "you want me to believe this?" "yeah, right," etc.) and relatively low ratings on the seven-point semantic differential scale assessing believability. Another claim that led to a number of negative cognitive responses stated that the hospital's staff will help with the filing of insurance claims (e.g., "of course they will, they are after our money," etc.). On the other hand, subjects exposed to the credence attribute claim manipulations found these claims to be relatively high in believability. Thus, it appears that this study assessed two dimensions of quality of care provided by health care facilities. The first dimension could be called quality of personal care provided by the hospital staff and is measured by the experience attribute claim ratings. Further, subjects appear to expect the level of this dimension to be generally low and seem to be discounting experiential claims. The second dimension assesses the degree and type of technology hospitals have at their disposal as well as the expertise of their medical staff. This dimension could be named quality of professional care and is apparently assessed by the credence attribute claim ratings. Subjects seem to expect the level of this dimension to be generally high, while admitting that it would be difficult for nonexperts to evaluate it properly. Thus, it is possible that using a hospital as the advertised product might have affected the outcome of this study.

Some of the additional dependent measures taken lend
support to this reasoning. Specifically, although a source high in expertise as compared to one low in expertise has been found to lead to more positive attitudes toward the endorser and the ad, it does not lead to more positive attitudes toward the hospital (Table 6.1) or higher purchase intentions (Table 6.2). In other words, it appears that although respondents prefer an expert over a nonexpert endorser as measured by attitudes toward the endorser and the advertisement, they do not seem to believe that there are variations in terms of quality of care provided by hospitals and thus neither attitude toward the hospital nor purchase intentions are affected by the type of endorser. It further appears that level of experience does not have any significant effect on any of the attitude measures or purchase intentions. One possible explanation for this finding could be that subjects tend to discount not only experiential claims but also claims made by an experienced endorser as being too subjective.

Another reason that could account for these unexpected findings is that it might be easier for consumers to assess expertise than experience. Evaluating expertise in this experimental setting was fairly straightforward. The endorser in the high expertise condition went to an accredited medical school in the U.S. and had almost completed his residency requirement. The endorser in the low expertise condition, on the other hand, had been working as a volunteer at a hospital for a short while and was contemplating to attend medical
school. Consequently, the perceived level of expertise was directly related to the degree of skill and knowledge in the medical area as obtained through professional education and training. Thus, it might have been relatively easy for respondents to process information provided about a person's level of expertise and subsequently categorize the endorser as being either an expert or nonexpert.

Source experience, however, appears to be much more ambiguous and thus more difficult to evaluate. What is an experienced patient? How many stays at different hospitals does it take before a person can be considered to have a high degree

TABLE 6.1
ANOVA TABLE

DEPENDENT MEASURE: ATTITUDE TOWARD THE HOSPITAL

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>152.93</td>
<td>152</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>.28</td>
<td>1</td>
<td>.28</td>
<td>.28</td>
<td>.600</td>
<td>.040</td>
</tr>
<tr>
<td>Experience</td>
<td>.80</td>
<td>1</td>
<td>.80</td>
<td>.80</td>
<td>.373</td>
<td>.172</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.07</td>
<td>1</td>
<td>.07</td>
<td>.07</td>
<td>.793</td>
<td>.044</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.63</td>
<td>1</td>
<td>.63</td>
<td>.62</td>
<td>.432</td>
<td>.162</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>2.34</td>
<td>1</td>
<td>2.34</td>
<td>2.32</td>
<td>.130</td>
<td>.328</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>.04</td>
<td>1</td>
<td>.04</td>
<td>.04</td>
<td>.834</td>
<td>.040</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.01</td>
<td>.916</td>
<td>.034</td>
</tr>
</tbody>
</table>

Model: 4.17 7 .60 .59 .762
Total: 157.10 159 .99

R-Squared: .027
Adjusted R-Squared: .000
of familiarity with the quality of patient care at health care facilities? How long do these stays have to be?

**TABLE 6.2**  
ANOVA TABLE  
DEPENDENT MEASURE: PURCHASE INTENTIONS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>84.72</td>
<td>152</td>
<td>.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expertise</td>
<td>.02</td>
<td>1</td>
<td>.02</td>
<td>.63</td>
<td>.853</td>
<td>.038</td>
</tr>
<tr>
<td>Experience</td>
<td>.21</td>
<td>1</td>
<td>.21</td>
<td>.37</td>
<td>.544</td>
<td>.050</td>
</tr>
<tr>
<td>Product Claims</td>
<td>.53</td>
<td>1</td>
<td>.53</td>
<td>.96</td>
<td>.329</td>
<td>.174</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.17</td>
<td>1</td>
<td>.17</td>
<td>.31</td>
<td>.579</td>
<td>.040</td>
</tr>
<tr>
<td>Expertise by Product</td>
<td>.86</td>
<td>1</td>
<td>.86</td>
<td>1.55</td>
<td>.215</td>
<td>.233</td>
</tr>
<tr>
<td>Experience by Product</td>
<td>.53</td>
<td>1</td>
<td>.53</td>
<td>.96</td>
<td>.329</td>
<td>.174</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.03</td>
<td>1</td>
<td>.03</td>
<td>.06</td>
<td>.812</td>
<td>.042</td>
</tr>
<tr>
<td>Modal</td>
<td>2.36</td>
<td>7</td>
<td>.34</td>
<td>.61</td>
<td>.751</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87.08</td>
<td>159</td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-Squared .027  
Adjusted R-Squared .000

Further, experience appears to be perceived as being much more subjective than expertise. Some of the cognitive responses collected during the thought reporting task seem to support this notion. Several of the subjects stated that they were not amazed that the endorser received excellent care, because he either was a medical professional or worked at the advertising facility. Further, some of the subjects pointed out that they could not believe the claim stating that the nurses at City
View Hospital were helpful and responsive, because they had never been treated nicely by nurses. Finally, the cognitive responses revealed that subjects had more questions about the source's experience than his expertise. Thus, it appears that evaluation of source experience requires more information about a source's qualification than necessary for the evaluation of source expertise. Consequently, processing information on source experience seems to be relatively difficult and ambiguous, and subsequent categorization of an endorser as being experienced or inexperienced appears to be problematic. If this reasoning should hold true for processing of information on source expertise and source experience in general, it might have some important implications for future research (see below for a more detailed discussion).

A third reason that could account for the unexpected findings is that, in a hospital setting, information provided by an expert source is considered to be much more important than that provided by an experienced source. An expert in this setting is expected to know what he is talking about, whereas an experienced source could be perceived to be subjective and/or not knowledgeable enough.

The findings of this study could also be explained by the fact that the sample was relatively young. As mentioned before, although the age range spanned from 18 to 47 years, the majority of respondents (122 or 76%) was between the ages of 20 and 26. For such a young and vital age group, the choice of a
hospital might not be as important as for an older age group which is likely to be subject to more frequent health problems. Further, such a young sample might not have had much firsthand experience with hospitals and thus might not know what type of information to look for. This notion is supported by some of the data provided by the respondents. Specifically, 48 (30%) of the respondents had never been hospitalized, 74 (46.25%) had been hospitalized between one and two times, whereas the remaining 38 (23.75%) had been to a hospital as in-patients more than two times. Thus, using an older, more experienced sample to which the choice of a hospital is a very real and relevant matter might lead to different results.

Another finding that appears to be puzzling is that there are no significant differences in the frequency of the various cognitive response types across the experimental conditions. Considering that high source expertise as compared to low source expertise leads to significantly more positive attitudes toward the endorser and the ad, it seems reasonable to expect more negative (i.e., counterarguments and source derogations) and less positive (i.e., support arguments and source bolsters) cognitive responses in the low expertise than in the high expertise condition. These expectations are based on prior research in social psychology and marketing (Anderson 1981; Fishbein and Ajzen 1976) that suggests attitude formation to be a reflective process. Accordingly, the information an individual acquires about an object is used to form beliefs
about the object's attributes. These beliefs then direct formation of an overall positive or negative attitude toward the object. In the present study, however, this reflective process apparently was not followed. That is, even though subjects had formed either overall negative or positive attitudes toward the endorser and the ad, these attitudes were not preceded and directed by negative or positive beliefs about these objects, as measured by cognitive responses.

One possible explanation for this finding could be that subjects used an alternative process to develop attitudes. This process, called automatic activation of attitudes, leads the individual to activate the attitude "spontaneously and without any conscious effort on his or her part upon observation of the attitude object" (Fazio, Sanbonmatsu, Powell and Kardes 1986). Automatic activation is only possible for well-learned attitudes, and may be affected by the confidence with which an attitude is held (Sample and Warland 1973; Fazio and Zanna 1978) and by how clearly defined the attitude is (Fazio and Zanna 1978). In other words, it is possible that individuals are led to develop positive attitudes toward experts early on in their lives. After all, this society places a premium on higher-level education and experts are generally well-respected and trusted. Thus, adult members of this society are likely to hold well-learned, firmly established, and clearly defined attitudes toward both experts and nonexperts. Whenever these individuals are exposed to a source high in expertise, positive
attitudes toward this person and possibly the message delivered by this person, will be automatically activated. On the other hand, exposure to a nonexpert will lead to automatic activation of less positive (i.e., negative) attitudes toward this source, and maybe even the communication.

If the above is a viable explanation, these automatically activated attitudes must be established firmly enough to override reflective thinking. As may be recalled, respondents were asked to complete the thought reporting task before being subjected to any of the attitude measures. Thus, respondents were prompted to engage in reflective thinking before being asked to report their attitudes. However, although respondents did not indicate that this prompted reflective process led them to form more positive beliefs toward an expert than a nonexpert source, the subsequent attitude measures reflect such a difference.

Product Attribute Claims

Even though the product attribute claim manipulations were successful, there was no statistical evidence that respondents were more skeptical of credence than experience attribute claims. Although this result directly contradicts Darby and Karni's theory (1973), it coincides with Ford et al.'s findings (1990). However, whereas Ford et al. (1990) were able to detect a nonsignificant difference in means that pointed in the hypothesized direction, the findings of this study indicate
that consumers exhibit slightly more skepticism toward
everience than credence attribute claims. Further, whereas
Ford et al., (1990), found that consumers tend to rate
experience claims as being more believable than credence
claims, the findings of the present study indicate the opposite
(Tables 6.3a and 6.3b). However, as pointed out above, these
contradictory findings could be entirely product driven. The
study conducted by Ford et al., (1990), tested claims
concerning a variety of consumer products, such as domestic
trucks, automobile repair service, and realty firms. Consumers
are probably more likely to use these products on a regular
basis than they are to use the services provided by a hospital.
In other words, the respondents in the study conducted by Ford
et al., (1990), probably had a higher level of personal
experience with the included products, whereas the degree of
personal experience with the services provided by a health care
facility is more likely to be relatively lower. The lower level
of personal experience in the latter case could have led
respondents to discount experiential claims as indicated by
the cognitive responses collected during the thought reporting
task. Further, as mentioned before, respondents were apparently
under the impression that the level of personal care provided
by a hospital's staff is generally low and does not differ much
among hospitals. This could have led to a further discounting
of the experience claims addressing issues such as responsive
nurses and caring doctors. On the other hand, the credence
TABLE 6.3a
MEANS FOR THE MEASURE OF BELIEVABILITY OF PRODUCT ATTRIBUTE CLAIMS

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expertise</td>
<td>3.71</td>
<td>3.88</td>
</tr>
<tr>
<td>Experience</td>
<td>3.75</td>
<td>3.81</td>
</tr>
<tr>
<td>Product Attribute Claims</td>
<td>4.04</td>
<td>3.53</td>
</tr>
</tbody>
</table>

Note: This scale is reverse coded (i.e., "extremely believable" = 1 to "not all believable" = 7).

TABLE 6.3b
ANOVA TABLE
DEPENDENT MEASURE: BELIEVABILITY OF PRODUCT ATTRIBUTE CLAIMS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Significance of F</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within &amp; Residual</td>
<td>140.41</td>
<td>152</td>
<td>.92</td>
<td></td>
<td></td>
<td>.177</td>
</tr>
<tr>
<td>Expertise</td>
<td>.95</td>
<td>1</td>
<td>.95</td>
<td>1.03</td>
<td>.312</td>
<td>.177</td>
</tr>
<tr>
<td>Experience</td>
<td>.14</td>
<td>1</td>
<td>.14</td>
<td>1.15</td>
<td>.702</td>
<td>.049</td>
</tr>
<tr>
<td>Product Claims</td>
<td>10.68</td>
<td>1</td>
<td>10.68</td>
<td>11.56</td>
<td>.001</td>
<td>.921</td>
</tr>
<tr>
<td>Expertise by Experience</td>
<td>.16</td>
<td>1</td>
<td>.16</td>
<td>1.17</td>
<td>.681</td>
<td>.049</td>
</tr>
<tr>
<td>Expertise by Product Claims</td>
<td>1.41</td>
<td>1</td>
<td>1.41</td>
<td>1.52</td>
<td>.219</td>
<td>.230</td>
</tr>
<tr>
<td>Experience by Product Claims</td>
<td>5.14</td>
<td>1</td>
<td>5.14</td>
<td>5.56</td>
<td>.020</td>
<td>.646</td>
</tr>
<tr>
<td>Expertise by Experience by Product Claims</td>
<td>.00</td>
<td>1</td>
<td>.00</td>
<td>.00</td>
<td>.978</td>
<td>.646</td>
</tr>
</tbody>
</table>

R-Squared: .116
Adjusted R-Squared: .076

attribute claims included in this study related to the degree of technology hospitals have at their disposal and to the educational level of their professional staff, and are thus
believed to measure level of professional care. Although subjects indicated that they found it more difficult to evaluate these types of claims, they also implied that hospitals generally provide a high level of professional care. Therefore, it does not appear to be surprising that the level of skepticism displayed toward experience attribute claims is somewhat higher than that toward credence attribute claims. And it further does not seem unreasonable to find subjects rate experience attribute claims as being less believable than credence attribute claims.

The analysis further revealed an interaction between source experience and product claim type (Appendix F, Figure 6.1, and Table 6.4).

**TABLE 6.4**

**INTERACTION BETWEEN SOURCE EXPERIENCE AND PRODUCT ATTRIBUTE CLAIMS**

DEPENDENT MEASURE: BELIEVABILITY OF PRODUCT ATTRIBUTE CLAIMS

<table>
<thead>
<tr>
<th>Source Experience</th>
<th>Product Attribute Claims</th>
<th>Believability Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Experience Attribute Claims</td>
<td>3.83</td>
</tr>
<tr>
<td>High</td>
<td>Credence Attribute Claims</td>
<td>3.68</td>
</tr>
<tr>
<td>Low</td>
<td>Experience Attribute Claims</td>
<td>4.25</td>
</tr>
<tr>
<td>Low</td>
<td>Credence Attribute Claims</td>
<td>3.38</td>
</tr>
</tbody>
</table>

Note: This scale is reverse coded (i.e., "extremely believable" = 1 to "not at all believable" = 7).

According to the interaction, although respondents find experience attribute claims to be slightly less believable than credence attribute claims if the source is high in experience,
this difference is not significant. However, in the low experience condition subjects rate the experience attribute claims to be significantly less believable than the credence attribute claims. In light of the above discussion, this finding is not surprising at all. As mentioned before, subjects do not expect hospitals to provide a high level of personal care, and thus tend to discount experience attribute claims in general. If the source is low in experience (i.e., has never been hospitalized himself), this discounting and the resulting low ratings in believability become much more pronounced. Since the credence attribute claims, on the other hand, apparently represent the level of professional care which is expected to be generally high, even an unexperienced source appears to be believable.

**Theoretical and Managerial Implications**

As indicated above, one of the most important theoretical implications of this study is that individuals are very capable of distinguishing between source expertise and source experience. Thus, operationalizing source expertise in terms of source experience is likely to lead to either misleading or nonsignificant findings. Another related theoretical implication is that individuals might process information on source expertise and source experience differently. First, it might be easier to evaluate source expertise because information about a source's professional qualifications is
usually straightforward and thus might be easier to categorize. Source experience, on the other hand, appears to be more difficult to assess because information about a source's familiarity with a certain subject area might be perceived to be more ambiguous and subjective. Thus, it might not be surprising that some of the previous studies that operationalized source expertise in terms of source experience failed to show the expected results (Burnkrant and Cousineau 1975). It appears reasonable to argue that the participants in Burnkrant and Cousineau's study (1975) were able to determine that female home economic students majoring in food and nutrition are not experts regarding the taste of coffee. It seems further reasonable that these subjects also decided that the information provided on the sources' experience with coffee was too ambiguous or subjective to have a significant effect on respondents' subsequent ratings regarding the taste of this coffee.

Second, it is possible that, due to early social conditioning, positive attitudes toward experts are so well-learned and firmly entrenched that they are activated automatically whenever individuals are faced by an expert.

The implications of the above are that it is very important to carefully develop source expertise manipulations and make sure that they are not confounded with source experience.

One of the managerial implications of this study should be
of interest to hospital administrators. First, quality of care provided by health care facilities appears to consist of at least two dimensions. The first dimension could be called quality of personal care provided by the hospital's staff and appears to be experiential. That individuals seem to expect the level of this dimension to be generally low should be a red flag to hospital administrators. Further, the second dimension apparently assesses the degree and type of technology hospitals have at their disposal as well as the expertise of their medical staff, and could be named quality of professional care. Also, because the level of this dimension is believed to be generally high, it might not be necessary for hospitals to focus on it in their advertising. Instead, it is suggested that medical care facilities place increased emphasis on the personal care dimension. A hospital that succeeds in the development of believable experiential claims should be able to gain a competitive advantage.

Contribution and Limitations

The major contributions of this study are (1) the development of precise and operationalizable definitions of the constructs source expertise and source experience; and (2) to show that individuals are capable of distinguishing between these two source characteristics. These contributions should help to clarify some of the more ambiguous results of past studies (Burnkrant and Cousineau 1975; McGinnies and Ward
1980), and should further academic research concerning the effect of source characteristics on persuasion.

One of the limitations of this study is the use of a student sample. While the use of such a homogeneous sample has increased the internal validity of this study, it has probably also reduced external validity. Even though research in social psychology has found that the responses of college students may be quite similar to those given by extremely different nonstudent samples (Browne and Brown 1993; Burne et al., 1969), it might be advisable to exercise caution when trying to generalize the results of this study to other populations of interest.

The use of a laboratory experiment can be named as a second limitation. Individuals exposed to radio advertisements in a natural setting (e.g., in their car or at home) are likely to pay limited attention to these ads. Subjects in the laboratory, however, paid close attention to the ad, were prompted to think about it and to fill out a series of related measures. This has probably led to an increased sense of awareness and involvement. Thus, it might not be possible to reproduce the results in a real-life setting. A third limitation is related to the choice of radio as the medium. It is possible that the use of either audiovisual (e.g., a television ad) or print media (e.g., a magazine or newspaper ad) might have led to differing results. The last limitation stems from the product choice. It is likely that evaluation of
services provided by a health care facility are considered to be more difficult than the evaluation of consumer products that are used on a more regular basis. Therefore, it might not be appropriate to generalize the findings of this study to other types of consumer products.

**Suggestions for Future Research**

First, it might be worthwhile to test whether a sample of elderly individuals who are more prone to health problems might produce different results. These individuals are more likely to be experienced consumers of services provided by hospitals and are also more likely to consider the choice of a hospital to be a relevant matter.

Second, it might be interesting to replicate Burnkrant and Cousineau's study (1975). Manipulating both source expertise and source experience might help determine why the source manipulation in the original study was not successful.

Finally, it might be worthwhile to use a collection of products that differ in terms of their credence and experience attributes. This might help determine whether product choice was responsible for the failure to show the hypothesized relationships. Thus, products to be included could range from automobile repair services to carpeting services.
Summary and Conclusion

This chapter provided a summary and discussion of the results reported in chapter 5. Several reasons for the failure to show some of the hypothesized effects were explored. These reasons included issues related to the sample, the product, and differential processing and attitude activation of source expertise and experience. This was followed by a discussion of both theoretical and managerial implications of this study. Theoretical implications that were discussed included the differential effects of source expertise and experience. Specifically, it was discussed how a confounding of these two constructs could affect possible research findings. The managerial implications should be of interest to hospital administrators. Here, it seems that individuals tend to expect relatively low personal care provided by a hospital's staff, whereas they expect the level of professional care to be uniformly high. Then the limitations and contributions of this research were discussed. Limitations included the use of a student sample, the laboratory setting, and product choice. All factors that might have influenced the results of this study. Thus, generalization to other populations of interest should be handled with care. And finally, suggestions for future research were proposed, including the use of an older nonstudent sample, replication of prior studies, and use of other consumer products.

This dissertation is the first study to systematically
examine the differential effects of source expertise and source experience. Although it is obvious that much work remains to be done, this study provides a considerable amount of new and important information about the effects of these source characteristics on persuasion.
APPENDIX A

QUESTIONNAIRE FOR PILOT STUDY I: SOURCE MANIPULATIONS
Questionnaire I

Instructions: The following questions ask for your evaluations of the spokesperson. Please evaluate these questions by placing a checkmark in the position that best describes your feelings/degree of agreement.

For example, if you agree that this person has received a great deal of formal education in his professional area, you would place checkmarks as follows:

true _ X __ __ __ __ false
disagree __ __ __ __ __ _ X agree

However, if you feel that the person has received relatively little formal education in his professional area you would place checkmarks as follows:

true __ __ __ __ __ _ X false
disagree __ _ X __ __ __ __ agree

PLEASE ANSWER FOR EACH AND EVERY ITEM, MOST IMPORTANTLY, PLEASE TAKE SUFFICIENT TIME TO ANSWER THESE QUESTIONS HONESTLY AND SINCERELY.

THANKS.
Hello, my name is John Martin. I received my medical degree to practice medicine about two years ago and will complete my residency at City View Hospital in a couple of weeks. Since I have received practical training at several major hospitals and have also been a patient at three of them, you could say I know a good hospital when I see one. And to be real honest, even though there are differences in the degree and type of technology hospitals have at their disposal, I always thought that most of them were pretty much the same in terms of patient care. Until last month. Last month I had to undergo surgery and spent three weeks as a patient at City View Hospital. And I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital. Great quality from a great hospital from a man who knows the health care industry.

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

true ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 false (MS1 a01)

disagree ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 agree (MS1 b01)

... I feel that this person has been well trained:

true ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 false (MS1 a02)

disagree ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 agree (MS1 b02)

... I feel that this person has had a high degree of use of the health care facility:

true ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 false (MS1 a03)

disagree ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 agree (MS1 b03)

... I feel that this person has a high degree of familiarity with the patient care at the facility (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

true ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 false (MS1 a04)

disagree ___ 2 ___ 3 ___ 4 ___ 5 ___ 6 ___ 7 agree (MS1 b04)
... I feel that this person has a great deal of knowledge about health care:

true → 1 2 3 4 5 6 → false
disagree → 1 2 3 4 5 6 → agree

... I feel that this person has a great deal of knowledge about City View Hospital:

true → 1 2 3 4 5 6 → false
disagree → 1 2 3 4 5 6 → agree

... I feel that this person is an expert:

true → 1 2 3 4 5 6 → false
disagree → 1 2 3 4 5 6 → agree

... I feel that this person is experienced:

true → 1 2 3 4 5 6 → false
disagree → 1 2 3 4 5 6 → agree
Hello, my name is John Martin. I received my medical degree allowing me to practice medicine about two years ago and will complete my residency at City View Hospital in a couple of weeks. Since I have received practical training at several major hospitals, you could say I know a good hospital when I see one. And even today, there are differences in the degree and type of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week I visited the unit for the terminally ill at City View Hospital and I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care. Great quality from a great hospital from a man who knows the health care industry.

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

true | 1 | 2 | 3 | 4 | 5 | 6 | false
disagree | 1 | 2 | 3 | 4 | 5 | 6 | agree

(MS2 a01)

... I feel that this person has been well trained:

true | 1 | 2 | 3 | 4 | 5 | 6 | false
disagree | 1 | 2 | 3 | 4 | 5 | 6 | agree

(MS2 a02)

... I feel that this person has had a high degree of use of the health care facility:

true | 1 | 2 | 3 | 4 | 5 | 6 | false
disagree | 1 | 2 | 3 | 4 | 5 | 6 | agree

(MS2 a03)

... I feel that this person has a high degree of familiarity with the patient care at the facility (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

true | 1 | 2 | 3 | 4 | 5 | 6 | false
disagree | 1 | 2 | 3 | 4 | 5 | 6 | agree

(MS2 a04)
... I feel that this person has a great deal of knowledge about health care:

true \[1, 2, 3, 4, 5, 6\] false \[MS2 \text{ a05}\]
disagree \[1, 2, 3, 4, 5, 6\] agree \[MS2 \text{ b05}\]

... I feel that this person has a great deal of knowledge about City View Hospital:

true \[1, 2, 3, 4, 5, 6\] false \[MS2 \text{ a06}\]
disagree \[1, 2, 3, 4, 5, 6\] agree \[MS2 \text{ b06}\]

... I feel that this person is an expert:

true \[1, 2, 3, 4, 5, 6\] false \[MS2 \text{ a07}\]
disagree \[1, 2, 3, 4, 5, 6\] agree \[MS2 \text{ b07}\]

... I feel that this person is experienced:

true \[1, 2, 3, 4, 5, 6\] false \[MS2 \text{ a08}\]
disagree \[1, 2, 3, 4, 5, 6\] agree \[MS2 \text{ b08}\]
Hello, my name is John Martin. I started medical school earlier this year and whenever I find time I am also working as a volunteer at City View Hospital. I really have learned a great deal about hospitals during these last couple of months. Even today, there are differences in the degree and type of technology hospitals have at their disposal. Since I have experienced several hospitals as a patient, I also know that hospitals tend to differ in terms of patient care. Last month, for example, I had to undergo surgery and spent three weeks as a patient at City View Hospital. And I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital. Great quality from a great hospital from a man who has experienced

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

true 1 2 3 4 5 6 7 false (MS3 a01)
disagree 1 2 3 4 5 6 7 agree (MS3 b01)

... I feel that this person has been well trained:

true 1 2 3 4 5 6 7 false (MS3 a02)
disagree 1 2 3 4 5 6 7 agree (MS3 b02)

... I feel that this person has had a high degree of use of the health care facility:

true 1 2 3 4 5 6 7 false (MS3 a03)
disagree 1 2 3 4 5 6 7 agree (MS3 b03)

... I feel that this person has a high degree of familiarity with the patient care at the facility (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

true 1 2 3 4 5 6 7 false (MS3 a04)
disagree 1 2 3 4 5 6 7 agree (MS3 b04)
... I feel that this person has a great deal of knowledge about health care:

true 1 2 3 4 5 6 false

MS3 a05

disagree 1 2 3 4 5 6 agree

MS3 b05

... I feel that this person has a great deal of knowledge about City View Hospital:

true 1 2 3 4 5 6 false

MS3 a06

disagree 1 2 3 4 5 6 agree

MS3 b06

... I feel that this person is an expert:

true 1 2 3 4 5 6 false

MS3 a07

disagree 1 2 3 4 5 6 agree

MS3 b07

... I feel that this person is experienced:

true 1 2 3 4 5 6 false

MS3 a08

disagree 1 2 3 4 5 6 agree

MS3 b08
Hello, my name is John Martin. I started medical school earlier this year and whenever I find time I am also working as a volunteer at City View Hospital. I really have learned a great deal about hospitals during these last couple of months. Even today, there are differences in the degree and type of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week I visited the unit for the terminally ill at City View Hospital and I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care. Great quality from a great hospital from a man who has experienced it.

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

<table>
<thead>
<tr>
<th>true</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>false</th>
<th>(MS4 a01)</th>
</tr>
</thead>
<tbody>
<tr>
<td>disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>agree</td>
<td>(MS4 b01)</td>
</tr>
</tbody>
</table>

... I feel that this person has been well trained:

<table>
<thead>
<tr>
<th>true</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>false</th>
<th>(MS4 a02)</th>
</tr>
</thead>
<tbody>
<tr>
<td>disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>agree</td>
<td>(MS4 b02)</td>
</tr>
</tbody>
</table>

... I feel that this person has had a high degree of use of the health care facility:

<table>
<thead>
<tr>
<th>true</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>false</th>
<th>(MS4 a03)</th>
</tr>
</thead>
<tbody>
<tr>
<td>disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>agree</td>
<td>(MS4 b03)</td>
</tr>
</tbody>
</table>

... I feel that this person has a high degree of familiarity with the patient care at the facility (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

<table>
<thead>
<tr>
<th>true</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>false</th>
<th>(MS4 a04)</th>
</tr>
</thead>
<tbody>
<tr>
<td>disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>agree</td>
<td>(MS4 b04)</td>
</tr>
</tbody>
</table>
... I feel that this person has a great deal of knowledge about health care:

true: 1 2 3 4 5 6 false (MS4 a05)
disagree: 1 2 3 4 5 6 agree (MS4 b05)

... I feel that this person has a great deal of knowledge about City View Hospital:

true: 1 2 3 4 5 6 false (MS4 a06)
disagree: 1 2 3 4 5 6 agree (MS4 b06)

... I feel that this person is an expert:

true: 1 2 3 4 5 6 false (MS4 a07)
disagree: 1 2 3 4 5 6 agree (MS4 b07)

... I feel that this person is experienced:

true: 1 2 3 4 5 6 false (MS4 a08)
disagree: 1 2 3 4 5 6 agree (MS4 b08)
In the space below, please list as many of the points made in the scenario as you can remember. Please do not turn back to the scenario when performing this task. We are interested to find out how much you can remember without returning to the scenario. About three (3) minutes of your time should be sufficient for this task. When you have listed the points that you can remember, please turn over this section of the questionnaire.
APPENDIX B

QUESTIONNAIRE FOR PILOT STUDY II: SOURCE MANIPULATIONS
**Questionnaire II**

**Instructions:** The following questions ask for your evaluations of the spokesperson. Please evaluate these questions by placing a checkmark in the position that best describes your feelings/degree of agreement.

For example, if you agree that this person has received a great deal of formal education in his professional area, you would place checkmarks as follows:

true $\boxed{\text{X}}$  __  __  __  __  __  __  false

disagree  __  __  __  __  __  _  X  agree

However, if you feel that the person has received relatively little formal education in his professional area you would place checkmarks as follows:

true  __  __  __  __  __  X  __  false

disagree _  X  __  __  __  __  __  agree

PLEASE ANSWER FOR EACH AND EVERY ITEM, MOST IMPORTANTLY, PLEASE TAKE SUFFICIENT TIME TO ANSWER THESE QUESTIONS HONESTLY AND SINCERELY.

THANKS.
Hello, my name is John Martin. I went to a major medical school in the U.S. and received my degree to practice medicine about two years ago. I will be completing my residency at City View Hospital in a couple of weeks. Since I have received practical training at several major hospitals and have also been a patient at three of them, you could say I know a good hospital when I see one. And to be real honest, even though there are differences in the degree and type of technology hospitals have at their disposal, I always thought that most of them were pretty much the same in terms of patient care. Until last month. Last month I had to undergo surgery and spent three weeks as a patient at City View Hospital. And I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital. Great quality from a great hospital from a man who knows the health care industry.

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>true</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

(MSI a01)

... I feel that this person has been well trained:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>false</th>
</tr>
</thead>
<tbody>
<tr>
<td>true</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

(MSI b01)

... I feel that this person has had a high degree of use of health care facilities:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>false</th>
</tr>
</thead>
<tbody>
<tr>
<td>true</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

(MSI b02)
... I feel that this person has a high degree of familiarity with the patient care at City View Hospital (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 a04)

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 b04)

... I feel that this person has a great deal of knowledge about health care:

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 a05)

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 b05)

... I feel that this person has a great deal of knowledge about City View Hospital:

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 a06)

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 b06)

... I feel that this person is an expert:

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 a07)

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 b07)

... I feel that this person is experienced:

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 a08)

true 1 2 3 4 5 6 false

disagree 1 2 3 4 5 6 agree

(... MS1 b08)
Hello, my name is John Martin. I went to a major medical school in the U.S. and received my degree to practice medicine about two years ago. In a couple of weeks I will complete my residency at Shady Park Medical Center and then transfer to City View Hospital. I am very much looking forward to begin working at City View. Since I have received practical training at several major hospitals, you could say I know a good hospital when I see one. And even today, there are differences in the degree and type of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week during my interview I had a look at the unit for the terminally ill at City View Hospital and I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care. Great quality from a great hospital from a man who knows the health care industry.

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

true   1 2 3 4 5 6 false (MS2 a 01)

disagree   1 2 3 4 5 6 agree (MS2 b 01)

... I feel that this person has been well trained:

true   1 2 3 4 5 6 false (MS2 a 02)

disagree   1 2 3 4 5 6 agree (MS2 b 02)

... I feel that this person has had a high degree of use health care facilities:

true   1 2 3 4 5 6 false (MS2 a 03)

disagree   1 2 3 4 5 6 agree (MS2 b 03)
... I feel that this person has a high degree of familiarity with the patient care at City View Hospital (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

true \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ true (MS2 a04)
disagree \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ agree (MS2 b04)

... I feel that this person has a great deal of knowledge about health care:

true \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ true (MS2 a05)
disagree \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ agree (MS2 b05)

... I feel that this person has a great deal of knowledge about City View Hospital:

true \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ true (MS2 a06)
disagree \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ agree (MS2 b06)

... I feel that this person is an expert:

true \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ true (MS2 a07)
disagree \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ agree (MS2 b07)

... I feel that this person is experienced:

true \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ true (MS2 a08)
disagree \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ agree (MS2 b08)
Hello, my name is John Martin. Right now I am working two nights a week as a volunteer at City View Hospital. Since I really enjoy my work at the hospital, I have applied to several of the major medical schools. I really have learned a great deal about hospitals during these last couple of months. Even today, there are differences in the degree and type of technology hospitals have at their disposal. Since I have experienced several hospitals as a patient, I also know that hospitals tend to differ in terms of patient care. Last month, for example, I had to undergo surgery and spent three weeks as a patient at City View Hospital. And I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital. Great quality from a great hospital from a man who has experienced it.

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

true ____ 3 4 5 6 7 false (MS3 a01)
disagree ____ 3 4 5 6 7 agree (MS3 b01)

... I feel that this person has been well trained:

true ____ 3 4 5 6 7 false (MS3 a02)
disagree ____ 3 4 5 6 7 agree (MS3 b02)

... I feel that this person has had a high degree of use of health care facilities:

true ____ 3 4 5 6 7 false (MS3 a03)
disagree ____ 3 4 5 6 7 agree (MS3 b03)

... I feel that this person has a high degree of familiarity with the patient care at City View Hospital (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

true ____ 3 4 5 6 7 false (MS3 a04)
disagree ____ 3 4 5 6 7 agree (MS3 b04)
... I feel that this person has a great deal of knowledge about health care:

true -1 2 3 4 5 6 - false (MS3 a05)
disagree -1 2 3 4 5 6 - agree (MS3 b05)

... I feel that this person has a great deal of knowledge about City View Hospital:

true -1 2 3 4 5 6 - false (MS3 a06)
disagree -1 2 3 4 5 6 - agree (MS3 b06)

... I feel that this person is an expert:

true -1 2 3 4 5 6 - false (MS3 a07)
disagree -1 2 3 4 5 6 - agree (MS3 b07)

... I feel that this person is experienced:

true -1 2 3 4 5 6 - false (MS3 a08)
disagree -1 2 3 4 5 6 - agree (MS3 b08)
Hello, my name is John Martin. Right now I am working two nights a week as a volunteer at Shady Park Medical Center. Since I really enjoy my work at the hospital, I have applied to several of the major medical schools. I really have learned a great deal about hospitals during these last couple of months. Even today, there are differences in the degree and type of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week, for example, when I interviewed for a volunteer position at City View Hospital I had the opportunity to take a look at the unit for the terminally ill. And I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care. Great quality from a great hospital from a man who has experienced it.

Please indicate your agreement or disagreement with the following statements:

... I feel that this person has a great deal of formal education in his professional area:

true 1 2 3 4 5 6 false (MS4 a01)

disagree 1 2 3 4 5 6 agree (MS4 b01)

... I feel that this person has been well trained:

true 1 2 3 4 5 6 false (MS4 a02)

disagree 1 2 3 4 5 6 agree (MS4 b02)

... I feel that this person has had a high degree of use of health care facilities:

true 1 2 3 4 5 6 false (MS4 a03)

disagree 1 2 3 4 5 6 agree (MS4 b03)

... I feel that this person has a high degree of familiarity with the patient care at City View Hospital (e.g., knows whether patients would perceive the care they receive to be compassionate) through prior encounters:

true 1 2 3 4 5 6 false (MS4 a04)

disagree 1 2 3 4 5 6 agree (MS4 b04)
... I feel that this person has a great deal of knowledge about health care:

true

false

agree

MS4 a05

MS4 b05

... I feel that this person has a great deal of knowledge about City View Hospital:

true

false

agree

MS4 a06

MS4 b06

... I feel that this person is an expert:

true

false

agree

MS4 a07

MS4 b07

... I feel that this person is experienced:

true

false

agree

MS4 a08

MS4 b08
APPENDIX C

QUESTIONNAIRE FOR PILOT STUDY III: PRODUCT CLAIM MANIPULATIONS
QUESTIONNAIRE III

Instructions: Presume that you are in the process of choosing a hospital for the purpose of undergoing a surgical procedure. There are a number of hospitals in your area that are covered by your health insurance plan and you have to make a decision.

Attached you will find a list of claims often made by hospitals in their advertisements. Since we are interested in finding out what you think of these claims we would like you to rate the following claims on the provided scales.

To help you understand the rating task, consider the following example: Let's say you are about to see an ad for a pair of shoes. The ad claims that the shoes are comfortable. If you feel certain that you would be able to tell whether the claim is true or false once you have purchased and worn the shoes, you would place a checkmark as follows:

I will know after I have used it – I have to take on faith

Let's say the ad further claims that the shoes are made from the finest quality leather. If you feel certain that you would have to take the claim on faith, because you wouldn't be able to tell whether it is true or false even after you have worn the shoes for a while, you would place a checkmark as follows:

I will know after I have used it – I have to take on faith

Please answer for each and every item. Remember, you are rating the claims. You are to presume that you are actually contemplating the use of a hospital. Please begin and work carefully.

Thank you for participating.
Please indicate below how certain you feel that you would be able to tell whether each of the following advertising claims is true or false. Further, please let us know how skeptical you are of each of these claims, and how convincing, important, and believable you feel each of these claims is.

**City View Hospital is staffed with friendly and helpful nurses.**

<table>
<thead>
<tr>
<th>I have to take on faith</th>
<th>I will know after I have used it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can fully know</td>
<td>I can never fully know</td>
</tr>
<tr>
<td>only an expert would know</td>
<td>would be obvious to any patient</td>
</tr>
<tr>
<td>very skeptical</td>
<td>not at all skeptical</td>
</tr>
<tr>
<td>not convincing</td>
<td>convincing</td>
</tr>
<tr>
<td>more important</td>
<td>less important</td>
</tr>
<tr>
<td>not at all believable</td>
<td>extremely believable</td>
</tr>
</tbody>
</table>

**The single minded dedication of City View Hospital is to help our patients lead healthy lives free from pain.**

<table>
<thead>
<tr>
<th>I have to take on faith</th>
<th>I will know after I have used it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can fully know</td>
<td>I can never fully know</td>
</tr>
<tr>
<td>only an expert would know</td>
<td>would be obvious to any patient</td>
</tr>
<tr>
<td>very skeptical</td>
<td>not at all skeptical</td>
</tr>
<tr>
<td>not convincing</td>
<td>convincing</td>
</tr>
<tr>
<td>more important</td>
<td>less important</td>
</tr>
<tr>
<td>not at all believable</td>
<td>extremely believable</td>
</tr>
</tbody>
</table>

**A key to our success is our belief in strong, compassionate doctor-patient relationships.**

<table>
<thead>
<tr>
<th>I have to take on faith</th>
<th>I will know after I have used it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can fully know</td>
<td>I can never fully know</td>
</tr>
<tr>
<td>only an expert would know</td>
<td>would be obvious to any patient</td>
</tr>
<tr>
<td>very skeptical</td>
<td>not at all skeptical</td>
</tr>
<tr>
<td>not convincing</td>
<td>convincing</td>
</tr>
<tr>
<td>more important</td>
<td>less important</td>
</tr>
<tr>
<td>not at all believable</td>
<td>extremely believable</td>
</tr>
</tbody>
</table>
Our staff is courteous and will treat you with the respect you deserve.

<table>
<thead>
<tr>
<th></th>
<th>I have to take on faith</th>
<th>I will know after I have used it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can fully know</td>
<td>I can never fully know</td>
<td></td>
</tr>
<tr>
<td>only an expert would know</td>
<td></td>
<td></td>
</tr>
<tr>
<td>very skeptical</td>
<td>not at all skeptical</td>
<td></td>
</tr>
<tr>
<td>not convincing</td>
<td>convincing</td>
<td></td>
</tr>
<tr>
<td>more important</td>
<td>less important</td>
<td></td>
</tr>
<tr>
<td>not at all believable</td>
<td>extremely believable</td>
<td></td>
</tr>
</tbody>
</table>

You will enjoy the warm, friendly, and attentive service at City View Hospital.

<table>
<thead>
<tr>
<th></th>
<th>I have to take on faith</th>
<th>I will know after I have used it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can fully know</td>
<td>I can never fully know</td>
<td></td>
</tr>
<tr>
<td>only an expert would know</td>
<td></td>
<td></td>
</tr>
<tr>
<td>very skeptical</td>
<td>not at all skeptical</td>
<td></td>
</tr>
<tr>
<td>not convincing</td>
<td>convincing</td>
<td></td>
</tr>
<tr>
<td>more important</td>
<td>less important</td>
<td></td>
</tr>
<tr>
<td>not at all believable</td>
<td>extremely believable</td>
<td></td>
</tr>
</tbody>
</table>

We offer compassionate care.

<table>
<thead>
<tr>
<th></th>
<th>I have to take on faith</th>
<th>I will know after I have used it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can fully know</td>
<td>I can never fully know</td>
<td></td>
</tr>
<tr>
<td>only an expert would know</td>
<td></td>
<td></td>
</tr>
<tr>
<td>very skeptical</td>
<td>not at all skeptical</td>
<td></td>
</tr>
<tr>
<td>not convincing</td>
<td>convincing</td>
<td></td>
</tr>
<tr>
<td>more important</td>
<td>less important</td>
<td></td>
</tr>
<tr>
<td>not at all believable</td>
<td>extremely believable</td>
<td></td>
</tr>
</tbody>
</table>
We are here to maintain your good health.

I have to take on __ __ __ __ __ I will know after I have used it
faith
I can fully know __ __ __ __ __ I can never fully know

only an expert would know

very skeptical __ __ __ __ __ not at all skeptical
not convincing __ __ __ __ __ convincing
more important __ __ __ __ __ less important
not at all believable __ __ __ __ __ extremely believable

At City View Hospital you will receive considerate, respectful care.

I have to take on __ __ __ __ __ I will know after I have used it
faith
I can fully know __ __ __ __ __ I can never fully know

only an expert would know

very skeptical __ __ __ __ __ not at all skeptical
not convincing __ __ __ __ __ convincing
more important __ __ __ __ __ less important
not at all believable __ __ __ __ __ extremely believable

At City View Hospital you will always receive prompt treatment.

I have to take on __ __ __ __ __ I will know after I have used it
faith
I can fully know __ __ __ __ __ I can never fully know

only an expert would know

very skeptical __ __ __ __ __ not at all skeptical
not convincing __ __ __ __ __ convincing
more important __ __ __ __ __ less important
not at all believable __ __ __ __ __ extremely believable
You will enjoy dealing with our sympathetic and reassuring staff.

I have to take on ______ ______ ______ ______ ______ ______ I will know after I have used it
faith
I can fully know ______ ______ ______ ______ ______ ______ I can never fully know
only an expert
would know
very skeptical ______ ______ ______ ______ ______ ______ not at all skeptical
not convincing ______ ______ ______ ______ ______ ______ convincing
more important ______ ______ ______ ______ ______ ______ less important
not at all
believable ______ ______ ______ ______ ______ ______ extremely believable

At City View Hospital you will receive plenty of individual attention.

I have to take on ______ ______ ______ ______ ______ ______ I will know after I have used it
faith
I can fully know ______ ______ ______ ______ ______ ______ I can never fully know
only an expert
would know
very skeptical ______ ______ ______ ______ ______ ______ not at all skeptical
not convincing ______ ______ ______ ______ ______ ______ convincing
more important ______ ______ ______ ______ ______ ______ less important
not at all
believable ______ ______ ______ ______ ______ ______ extremely believable

You will experience that we have our patients' best interest at heart.

I have to take on ______ ______ ______ ______ ______ ______ I will know after I have used it
faith
I can fully know ______ ______ ______ ______ ______ ______ I can never fully know
only an expert
would know
very skeptical ______ ______ ______ ______ ______ ______ not at all skeptical
not convincing ______ ______ ______ ______ ______ ______ convincing
more important ______ ______ ______ ______ ______ ______ less important
not at all
believable ______ ______ ______ ______ ______ ______ extremely believable
You will be pleasantly surprised by the speed and ease of our admission procedures.

Although we can't promise everyone total relief from pain, you will leave City View Hospital with a complete and thorough evaluation including a diagnosis and prognosis.

A key to our success is our commitment to state-of-the-art technology from diagnostic testing through rehabilitation.
It is our expert medical staff that has made us a leading health care center - highly skilled physicians and medical professionals.

| I have to take on faith | I will know after I have used it |
|------------------------|---------------------------------
| I can fully know       | I can never fully know          |
| only an expert would know | would be obvious to any patient |
| very skeptical         | not at all skeptical            |
| not convincing         | convincing                     |
| more important         | less important                 |
| not at all believable  | extremely believable            |

Your health. Your well-being. Your pain-free life. These are the goals of City View Hospital.

| I have to take on faith | I will know after I have used it |
|------------------------|---------------------------------
| I can fully know       | I can never fully know          |
| only an expert would know | would be obvious to any patient |
| very skeptical         | not at all skeptical            |
| not convincing         | convincing                     |
| more important         | less important                 |
| not at all believable  | extremely believable            |

Our nurses are very quick to respond when called.

| I have to take on faith | I will know after I have used it |
|------------------------|---------------------------------
| I can fully know       | I can never fully know          |
| only an expert would know | would be obvious to any patient |
| very skeptical         | not at all skeptical            |
| not convincing         | convincing                     |
| more important         | less important                 |
| not at all believable  | extremely believable            |
Our nurses are always available to solve problems and answer your questions.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable

It is our policy to provide detailed explanations about medical tests, procedures and treatment.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable

You will always receive detailed instructions on personal care following your discharge.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable
Our team includes orthopaedic spine surgeons, physiatrists (physical medicine and rehabilitation specialists), neurologists, neuroradiologists, chronic pain anesthesiologists, psychologists, and physical therapy specialists. By providing these various specialists with state-of-the-art technologies we have helped thousands of patients find relief from pain rapidly and efficiently.

We utilize the latest technological advances to assure you of the most accurate diagnosis possible.

Our doctors care. You will see that they show personal interest in you and your medical problems.
Our doctors will give you all the time and attention you need.

I have to take on faith. I will know after I have used it.

I can fully know I can never fully know.

only an expert would know would be obvious to any patient.

very skeptical not at all skeptical.

not convincing convincing.

more important less important.

not at all believable extremely believable.

City View Hospital provides the highest quality of customer care available in the health care industry.

I have to take on faith. I will know after I have used it.

I can fully know I can never fully know.

only an expert would know would be obvious to any patient.

very skeptical not at all skeptical.

not convincing convincing.

more important less important.

not at all believable extremely believable.

When you come here for an appointment, we do everything we can to make the visit smooth and productive, so you may return home as soon as possible with your pain relieved.

I have to take on faith. I will know after I have used it.

I can fully know I can never fully know.

only an expert would know would be obvious to any patient.

very skeptical not at all skeptical.

not convincing convincing.

more important less important.

not at all believable extremely believable.
Our MRI system helps physicians discover earlier, and treat more efficiently, a variety of medical conditions, including bone, joint and muscle disorders, tumors, cancer and cardiovascular heart disease.

I have to take on [ ] [ ] [ ] [ ] [ ] [ ] I will know after I have used it

I can fully know [ ] [ ] [ ] [ ] [ ] [ ] I can never fully know

only an expert [ ] [ ] [ ] [ ] [ ] [ ] would be obvious to any patient

very skeptical [ ] [ ] [ ] [ ] [ ] [ ] not at all skeptical

not convincing [ ] [ ] [ ] [ ] [ ] [ ] convincing

more important [ ] [ ] [ ] [ ] [ ] [ ] less important

not at all believable [ ] [ ] [ ] [ ] [ ] [ ] extremely believable

All exams at our imaging center are supervised by a board-certified radiologists to ensure the highest quality and comfort for the patient.

I have to take on [ ] [ ] [ ] [ ] [ ] [ ] I will know after I have used it

I can fully know [ ] [ ] [ ] [ ] [ ] [ ] I can never fully know

only an expert [ ] [ ] [ ] [ ] [ ] [ ] would be obvious to any patient

very skeptical [ ] [ ] [ ] [ ] [ ] [ ] not at all skeptical

not convincing [ ] [ ] [ ] [ ] [ ] [ ] convincing

more important [ ] [ ] [ ] [ ] [ ] [ ] less important

not at all believable [ ] [ ] [ ] [ ] [ ] [ ] extremely believable

Our staff will help you file your insurance claims for diagnostic services.

I have to take on [ ] [ ] [ ] [ ] [ ] [ ] I will know after I have used it

I can fully know [ ] [ ] [ ] [ ] [ ] [ ] I can never fully know

only an expert [ ] [ ] [ ] [ ] [ ] [ ] would be obvious to any patient

very skeptical [ ] [ ] [ ] [ ] [ ] [ ] not at all skeptical

not convincing [ ] [ ] [ ] [ ] [ ] [ ] convincing

more important [ ] [ ] [ ] [ ] [ ] [ ] less important

not at all believable [ ] [ ] [ ] [ ] [ ] [ ] extremely believable
We are proud to offer you state-of-the-art technology.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable

You know how crucial a precise diagnosis is. That is exactly why we put so much emphasis on providing it at City View Hospital.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable

City View Hospital prides itself on being on the cutting edge of technology.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable
The high quality of care offered at City View Hospital is the result of a dedicated staff.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable

Professional radiologists supervise all imaging services. With the very latest technology in diagnostic equipment these specialists create crystal clear images.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable

City View Hospital provides the highest quality of customer service available in the health care industry.

I have to take on faith I will know after I have used it
I can fully know I can never fully know
only an expert would know would be obvious to any patient
very skeptical not at all skeptical
not convincing convincing
more important less important
not at all believable extremely believable
At City View Hospital we have very high standards and thus are recognized leaders in the health care industry.

| I have to take on | --|--|--|--| | I will know after I have used it |
|-------------------|-----------------|
| I can fully know  | --|--|--|--| | I can never fully know |
| only an expert    | --|--|--|--| | would be obvious to any patient |
| very skeptical    | --|--|--|--| | not at all skeptical |
| not convincing    | --|--|--|--| | convincing |
| more important    | --|--|--|--| | less important |
| not at all        | --|--|--|--| | extremely believable |
| believable        | --|--|--|--| | |

City View Hospital - a health care center of national caliber.

| I have to take on | --|--|--|--| | I will know after I have used it |
|-------------------|-----------------|
| I can fully know  | --|--|--|--| | I can never fully know |
| only an expert    | --|--|--|--| | would be obvious to any patient |
| very skeptical    | --|--|--|--| | not at all skeptical |
| not convincing    | --|--|--|--| | convincing |
| more important    | --|--|--|--| | less important |
| not at all        | --|--|--|--| | extremely believable |
| believable        | --|--|--|--| | |

We work one-on-one with our patients in physical therapy to get the best possible results. The physical therapy department is composed of experts who care.

| I have to take on | --|--|--|--| | I will know after I have used it |
|-------------------|-----------------|
| I can fully know  | --|--|--|--| | I can never fully know |
| only an expert    | --|--|--|--| | would be obvious to any patient |
| very skeptical    | --|--|--|--| | not at all skeptical |
| not convincing    | --|--|--|--| | convincing |
| more important    | --|--|--|--| | less important |
| not at all        | --|--|--|--| | extremely believable |
| believable        | --|--|--|--| | |
For many of our patients, physical therapy is a vital component of successful treatment. Consequently, City View Hospital offers state-of-the-art facilities and a large staff of registered physical and aquatic therapists.

<table>
<thead>
<tr>
<th>I have to take on</th>
<th>faith</th>
<th>I will know after I have used it</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can fully know</td>
<td></td>
<td>I can never fully know</td>
</tr>
<tr>
<td>only an expert</td>
<td></td>
<td>would be obvious to any patient</td>
</tr>
<tr>
<td>very skeptical</td>
<td></td>
<td>not at all skeptical</td>
</tr>
<tr>
<td>not convincing</td>
<td></td>
<td>convincing</td>
</tr>
<tr>
<td>more important</td>
<td></td>
<td>less important</td>
</tr>
<tr>
<td>not at all</td>
<td></td>
<td>extremely believable</td>
</tr>
</tbody>
</table>

Hospital staff of
APPENDIX D

EXPERIMENTAL MESSAGE: INTRODUCTORY REMARKS AND EXPERIMENTAL TREATMENTS
EXPERIMENTER'S INTRODUCTORY REMARKS

My name is Karin Braunsberger and, I would like to thank you for participating in this study. Since we are in close quarters, I would like to ask you not to do anything that might disturb your fellow participants. If you finish before your neighbors, please remain quietly in your seat. All participants will be dismissed as a group.

Please turn over your booklets and read the INFORMATION SHEET as I explain the study. Today's session involves the promotion of a health care facility. Specifically, the objective of today's session is to have you listen to the newly developed advertisement for a hospital and complete a questionnaire about it. The entire session will last approximately one hour.

Your participation is voluntary and each person will receive extra credit points for participating. If you do not want to participate in this task, you will have the option to complete another extra credit assignment as determined by your course instructor.

Aside from signing up for the study and signing the CONSENT and HUSH FORMS, the anonymity of all participants will be maintained.

Any data or answers to questions will remain confidential with regard to participants' identity. Your information will not be used individually but only as a part of the group.

While University policy requires that you are free not to answer any or all of the questions in the questionnaire, and that you are further free to withdraw your consent and terminate participation if you so desire, we believe that this study should be an enjoyable and interesting experience for you.

Participation in this study indicates that you have read and understood the basic purpose of this study. At this point I cannot explain the study completely, because it might BIASE your responses. A more complete explanation of the procedures will be given at the end of the session and you will have an opportunity to ask questions regarding it.

Now please read and sign Booklet A. Please turn it over and raise your hand when you have finished.

Now that everyone is ready, we will continue.
EXPERIMENTAL MANIPULATIONS:

CONDITION 1-1-1

High Expertise/High Experience - Experience Attribute Claims
Hello, my name is John Martin. I went to a major medical school in the U.S. and received my degree to practice medicine about two years ago. I will be completing my residency at City View Hospital in a couple of weeks. Since I have received practical training at several major hospitals and have also been a patient at three of them, you could say I know a good hospital when I see one. And to be real honest, even though there are differences in the degree and types of technology hospitals have at their disposal, I always thought that most of them were pretty much the same in terms of patient care. Until last month. Last month I had to undergo surgery and spent three weeks as a patient at City View Hospital. And, I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital.

Six key reasons why you should choose City View Hospital:

- CITY VIEW'S ADMISSION PROCEDURE IS FAST AND EASY. No long waits in line, no unfriendly nurses. You will be pleasantly surprised.

- AT CITY VIEW HOSPITAL YOU WILL RECEIVE PLENTY OF INDIVIDUAL ATTENTION. We will treat you with the respect you deserve.

- THE NURSES AT CITY VIEW ARE VERY QUICK TO RESPOND WHEN CALLED.

- CITY VIEW'S DOCTORS WILL GIVE YOU ALL THE TIME AND ATTENTION YOU NEED. And, as you know, few hospitals can honestly say this of their doctors.

- THE HOSPITAL'S STAFF WILL EVEN HELP YOU FILE YOUR INSURANCE CLAIMS FOR DIAGNOSTIC SERVICES.

- AS A RESULT, YOU WILL ENJOY THE WARM, FRIENDLY, AND ATTENTIVE SERVICE AT CITY VIEW HOSPITAL.

Great quality from a great hospital from a man who knows the health care industry.
CONDITION 1-1-2

High Expertise/High Experience - Credence Attribute Claims
Hello, my name is John Martin. I went to a major medical school in the U.S. and received my degree to practice medicine about two years ago. I will be completing my residency at City View Hospital in a couple of weeks. Since I have received practical training at several major hospitals and have also been a patient at three of them, you could say I know a good hospital when I see one. And to be real honest, even though there are differences in the degree and types of technology hospitals have at their disposal, I always thought that most of them were pretty much the same in terms of patient care. Until last month. Last month I had to undergo surgery and spent three weeks as a patient at City View Hospital. And, I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital.

Six key reasons why you should choose City View Hospital:

- CITY VIEW IS ON THE CUTTING EDGE OF TECHNOLOGY.
- CITY VIEW USES ITS STATE-OF-THE-ART TECHNOLOGY TO PROVIDE PRECISE DIAGNOSES. And, you know how crucial a precise diagnosis is.
- THE HOSPITAL'S COMPREHENSIVE DIAGNOSTIC TECHNOLOGY HELPS PHYSICIANS DISCOVER EARLIER, AND TREAT MORE EFFICIENTLY, A VARIETY OF SERIOUS MEDICAL CONDITIONS, including bone, joint and muscle disorders, tumors, cancer and heart disease.
- CITY VIEW'S EXPERT MEDICAL STAFF HAS MADE IT A LEADING HEALTH CARE CENTER - with highly skilled physicians and medical professionals.
- CITY VIEW'S MEDICAL TEAM INCLUDES A NUMBER OF SPECIALISTS, such as orthopaedic spine surgeons, neurologists, chronic pain anesthesiologists, and psychologists. By providing these various specialists with state-of-the-art technologies, City View Hospital has helped thousands of patients find relief from pain rapidly and efficiently.
- AS A RESULT, CITY VIEW HOSPITAL PROVIDES THE HIGHEST QUALITY OF CUSTOMER CARE AVAILABLE IN THE HEALTH CARE INDUSTRY.

Great quality from a great hospital from a man who knows the health care industry.
CONDITION 1-2-1

High Expertise/Low Experience - Experience Attribute Claims
Hello, my name is John Martin. I went to a major medical school in the U.S. and received my degree to practice medicine about two years ago. In a couple of weeks I will complete my residency at Shady Park Medical Center and then transfer to City View Hospital. Since I have received practical training at several major hospitals, you could say I know a good hospital when I see one. And even today, there are differences in the degree and types of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week during my interview I had a look at the unit for the terminally ill at City View Hospital, and I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care.

Six key reasons why you should choose City View Hospital:

- **CITY VIEW'S ADMISSION PROCEDURE IS FAST AND EASY.** No long waits in line, no unfriendly nurses. You will be pleasantly surprised.

- **AT CITY VIEW HOSPITAL YOU WILL RECEIVE PLENTY OF INDIVIDUAL ATTENTION.** We will treat you with the respect you deserve.

- **THE NURSES AT CITY VIEW ARE VERY QUICK TO RESPOND WHEN CALLED.**

- **CITY VIEW'S DOCTORS WILL GIVE YOU ALL THE TIME AND ATTENTION YOU NEED.** And, as you know, few hospitals can honestly say this of their doctors.

- **THE HOSPITAL'S STAFF WILL EVEN HELP YOU FILE YOUR INSURANCE CLAIMS FOR DIAGNOSTIC SERVICES.**

- **AS A RESULT, YOU WILL ENJOY THE WARM, FRIENDLY, AND ATTENTIVE SERVICE AT CITY VIEW HOSPITAL.**

Great quality from a great hospital from a man who knows the health care industry.
CONDITION 1-2-2

High Expertise/Low Experience - Credence Attribute Claims
Hello, my name is John Martin. I went to a major medical school in the U.S. and received my degree to practice medicine about two years ago. In a couple of weeks I will complete my residency at Shady Park Medical Center and then transfer to City View Hospital. Since I have received practical training at several major hospitals, you could say I know a good hospital when I see one. And even today, there are differences in the degree and types of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week during my interview I had a look at the unit for the terminally ill at City View Hospital, and I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care.

Six key reasons why you should choose City View Hospital:

- CITY VIEW IS ON THE CUTTING EDGE OF TECHNOLOGY.
- CITY VIEW USES ITS STATE-OF-THE-ART TECHNOLOGY TO PROVIDE PRECISE DIAGNOSES. And, you know how crucial a precise diagnosis is.
- THE HOSPITAL'S COMPREHENSIVE DIAGNOSTIC TECHNOLOGY HELPS PHYSICIANS DISCOVER EARLIER, AND TREAT MORE EFFICIENTLY, A VARIETY OF SERIOUS MEDICAL CONDITIONS, including bone, joint and muscle disorders, tumors, cancer and heart disease.
- CITY VIEW'S EXPERT MEDICAL STAFF HAS MADE IT A LEADING HEALTH CARE CENTER - with highly skilled physicians and medical professionals.
- CITY VIEW'S MEDICAL TEAM INCLUDES A NUMBER OF SPECIALISTS, such as orthopaedic spine surgeons, neurologists, chronic pain anesthesiologists, and psychologists. By providing these various specialists with state-of-the-art technologies, City View Hospital has helped thousands of patients find relief from pain rapidly and efficiently.
- AS A RESULT, CITY VIEW HOSPITAL PROVIDES THE HIGHEST QUALITY OF CUSTOMER CARE AVAILABLE IN THE HEALTH CARE INDUSTRY.

Great quality from a great hospital from a man who knows the health care industry.
CONDITION 2-1-1

Low Expertise/High Experience - Experience Attribute Claims
Hello, my name is John Martin. For the past three months I have been working two nights a week as a volunteer at City View Hospital. Since I really enjoy my work at the hospital, I am applying to several of the major medical schools. I really have learned a great deal about hospitals during these last couple of months. Even today, there are differences in the degree and types of technology hospitals have at their disposal. Since I have experienced several hospitals as a patient, I also know that hospitals tend to differ in terms of patient care. Last month, for example, I had to undergo surgery and spent three weeks as a patient at City View Hospital. And, I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital.

Six key reasons why you should choose City View Hospital:

- **CITY VIEW'S ADMISSION PROCEDURE IS FAST AND EASY.** No long waits in line, no unfriendly nurses. You will be pleasantly surprised.

- **AT CITY VIEW HOSPITAL YOU WILL RECEIVE PLENTY OF INDIVIDUAL ATTENTION.** We will treat you with the respect you deserve.

- **THE NURSES AT CITY VIEW ARE VERY QUICK TO RESPOND WHEN CALLED.**

- **CITY VIEW'S DOCTORS WILL GIVE YOU ALL THE TIME AND ATTENTION YOU NEED.** And, as you know, few hospitals can honestly say this of their doctors.

- **THE HOSPITAL'S STAFF WILL EVEN HELP YOU FILE YOUR INSURANCE CLAIMS FOR DIAGNOSTIC SERVICES.**

- **AS A RESULT, YOU WILL ENJOY THE WARM, FRIENDLY, AND ATTENTIVE SERVICE AT CITY VIEW HOSPITAL.**

Great quality from a great hospital from a man who has experienced it.
CONDITION 2-1-2

Low Expertise/High Experience - Credence Attribute Claims
Hello, my name is John Martin. For the past three months I have been working two nights a week as a volunteer at City View Hospital. Since I really enjoy my work at the hospital, I am applying to several of the major medical schools. I really have learned a great deal about hospitals during these last couple of months. Even today, there are differences in the degree and types of technology hospitals have at their disposal. Since I have experienced several hospitals as a patient, I also know that hospitals tend to differ in terms of patient care. Last month, for example, I had to undergo surgery and spent three weeks as a patient at City View Hospital. And, I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides the most compassionate care I have ever received at a hospital.

Six key reasons why you should choose City View Hospital:

- **CITY VIEW IS ON THE CUTTING EDGE OF TECHNOLOGY.**

- **CITY VIEW USES ITS STATE-OF-THE-ART TECHNOLOGY TO PROVIDE PRECISE DIAGNOSES.** And, you know how crucial a precise diagnosis is.

- **THE HOSPITAL'S COMPREHENSIVE DIAGNOSTIC TECHNOLOGY HELPS PHYSICIANS DISCOVER EARLIER, AND TREAT MORE EFFICIENTLY, A VARIETY OF SERIOUS MEDICAL CONDITIONS, including bone, joint and muscle disorders, tumors, cancer and heart disease.**

- **CITY VIEW'S EXPERT MEDICAL STAFF HAS MADE IT A LEADING HEALTH CARE CENTER - with highly skilled physicians and medical professionals.**

- **CITY VIEW'S MEDICAL TEAM INCLUDES A NUMBER OF SPECIALISTS, such as orthopaedic spine surgeons, neurologists, chronic pain anesthesiologists, and psychologists.** By providing these various specialists with state-of-the-art technologies, City View Hospital has helped thousands of patients find relief from pain rapidly and efficiently.

- **AS A RESULT, CITY VIEW HOSPITAL PROVIDES THE HIGHEST QUALITY OF CUSTOMER CARE AVAILABLE IN THE HEALTH CARE INDUSTRY.**

Great quality from a great hospital from a man who has experienced it.
CONDITION 2-2-1

Low Expertise/Low Experience - Experience Attribute Claims
Hello, my name is John Martin. For the past three weeks I have been working two nights a week as a volunteer at Shady Park Medical Center. Since I really enjoy my work at the hospital, I am applying to several of the major medical schools. I have learned a great deal about hospitals during these last weeks. Even today, there are differences in the degree and types of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week, for example, when I interviewed for a volunteer position at City View Hospital I had the opportunity to take a look at the unit for the terminally ill. And, I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care.

Six key reasons why you should choose City View Hospital:

• **CITY VIEW'S ADMISSION PROCEDURE IS FAST AND EASY.** No long waits in line, no unfriendly nurses. You will be pleasantly surprised.

• **AT CITY VIEW HOSPITAL YOU WILL RECEIVE PLENTY OF INDIVIDUAL ATTENTION.** We will treat you with the respect you deserve.

• **THE NURSES AT CITY VIEW ARE VERY QUICK TO RESPOND WHEN CALLED.**

• **CITY VIEW'S DOCTORS WILL GIVE YOU ALL THE TIME AND ATTENTION YOU NEED.** And, as you know, few hospitals can honestly say this of their doctors.

• **THE HOSPITAL'S STAFF WILL EVEN HELP YOU FILE YOUR INSURANCE CLAIMS FOR DIAGNOSTIC SERVICES.**

• **AS A RESULT, YOU WILL ENJOY THE WARM, FRIENDLY, AND ATTENTIVE SERVICE AT CITY VIEW HOSPITAL.**

Great quality from a great hospital from a man who has experienced it.
CONDITION 2-2-2

Low Expertise/Low Experience - Credence Attribute Claims
Hello, my name is John Martin. For the past three weeks I have been working two nights a week as a volunteer at Shady Park Medical Center. Since I really enjoy my work at the hospital, I am applying to several of the major medical schools. I have learned a great deal about hospitals during these last weeks. Even today, there are differences in the degree and types of technology hospitals have at their disposal. Even though I have never been hospitalized myself, I dare say that there are also differences in terms of patient care. Last week, for example, when I interviewed for a volunteer position at City View Hospital I had the opportunity to take a look at the unit for the terminally ill. And, I am here to tell you how impressed I am. City View Hospital is not only at the forefront of modern technology, but also provides compassionate care.

Six key reasons why you should choose City View Hospital:

> CITY VIEW IS ON THE CUTTING EDGE OF TECHNOLOGY.

> CITY VIEW USES ITS STATE-OF-THE-ART TECHNOLOGY TO PROVIDE PRECISE DIAGNOSES. And, you know how crucial a precise diagnosis is.

> THE HOSPITAL'S COMPREHENSIVE DIAGNOSTIC TECHNOLOGY HELPS PHYSICIANS DISCOVER EARLIER, AND TREAT MORE EFFICIENTLY, A VARIETY OF SERIOUS MEDICAL CONDITIONS, including bone, joint and muscle disorders, tumors, cancer and heart disease.

> CITY VIEW'S EXPERT MEDICAL STAFF HAS MADE IT A LEADING HEALTH CARE CENTER - with highly skilled physicians and medical professionals.

> CITY VIEW'S MEDICAL TEAM INCLUDES A NUMBER OF SPECIALISTS, such as orthopaedic spine surgeons, neurologists, chronic pain anesthesiologists, and psychologists. By providing these various specialists with state-of-the-art technologies, City View Hospital has helped thousands of patients find relief from pain rapidly and efficiently.

> AS A RESULT, CITY VIEW HOSPITAL PROVIDES THE HIGHEST QUALITY OF CUSTOMER CARE AVAILABLE IN THE HEALTH CARE INDUSTRY.

Great quality from a great hospital from a man who has experienced it.
APPENDIX E

EXPERIMENTAL MEASURES
Booklet A

General Information and Informed Consent:

The Study of the Advertising of a Health Care Facility

Please do not open until instructed to do so.
GENERAL INFORMATION

A Study of the Advertising of a Health Care Facility

To the Respondent:

Advertisements can provide important information about products to prospective consumers in the marketplace. This study is interested in peoples' opinions and reactions to such advertisements. Specifically, a newly developed advertisement for a health care facility will be presented to you. You will be asked to answer questions concerning the contents of this advertisement. You will also be asked some general background and opinion questions. The entire session will last approximately one hour.

During the advertisement you are to assume that you are considering the use of the health care facility by either yourself, a relative, or a close personal friend.

Thank you for helping us in this research project.

CONSENT FORM

I have read and understood the basic purpose of this study (i.e., the Information Sheet and the General Information as provided above). A more complete explanation of the procedures will be given at the end of the session and I will have an opportunity to ask questions regarding it.

In the event that I am injured in the course of this study, I may go to the UTA Health Service Center and be treated in the usual way providing that I am a student currently registered at UTA.

If I have previously been exposed to any part(s) of this study, I will notify the attendant. This WILL NOT result in the loss of any (extra credit) points I have been offered in return for my participation in this study.

I hereby consent to participate in this experiment and understand the above procedure.

__________________________
Name (please print)

__________________________
Signature

(After you have read and signed this form, please fold it and put it in the provided envelope. Do not seal the envelop. I will collect the envelopes at the end of the session. Thanks.)
Booklet B
"Thoughts"
We are interested in any thoughts, ideas, and reactions that went through your mind while you listened to the advertisement. While you are doing this task, please remember the following important points:

1. Please report any thoughts, no matter how simple, complex, relevant, or irrelevant they may seem to you. There are no right or wrong answers. We are only interested in the actual thoughts you had during the advertisement. Since your responses are anonymous, please do not hesitate to write down any of your thoughts. Further, if you did not have any thoughts during the communication, just leave the spaces provided blank. Please do not make up things to write down.

2. When you write down your thoughts, do not worry about grammar, spelling or punctuation. But please write or print clearly so that we can read your answers. In writing down your thoughts, you may find it convenient to state each one in a short phrase, or even a word or two. If you feel that you must use more words to express yourself completely or clearly, please feel free to do so.

3. If you had more than one thought during the advertisement, please write each thought in a separate space. Extra spaces have been provided, so don’t feel that all or any of the spaces have to be used. Please write down only what you thought about during the advertisement and do not make up additional thoughts.

4. Please respond in an honest and candid manner. Your responses are confidential and anonymous. Thanks.

When you have finished reading the above, please wait for further instructions. Thank you.
In the spaces below, please write down whatever thoughts, ideas or reactions you had during the advertisement. Please report any thoughts, no matter how simple, complex, relevant or irrelevant they may seem to you. When writing down your thoughts, ignore mistakes in spelling, grammar, or punctuation. Put one thought, idea or reaction in a separate space. You have five minutes to complete this task.
When you have finished reporting all thoughts about the advertisement, please wait for further instructions. Thank you.
Booklet C

"Evaluations"
The following questions ask for your evaluations of several aspects of the advertisement. Please evaluate these questions by placing a check mark in the position that best describes your feelings.

For example, if you feel that the advertisement was very clear, quite easy to hear, and fairly easy to understand, you would place check marks as follows:

<table>
<thead>
<tr>
<th>not clear</th>
<th>not easy to hear</th>
<th>not easy to understand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X clear</td>
</tr>
<tr>
<td></td>
<td>X</td>
<td>easy to hear</td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>easy to understand</td>
</tr>
</tbody>
</table>

However, if the advertisement was neither clear, nor unclear, neither easy nor difficult to hear, but quite difficult to understand, you would place the check marks as follows:

<table>
<thead>
<tr>
<th>not clear</th>
<th>not easy to hear</th>
<th>not easy to understand</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please answer for each and every item, most importantly, please take sufficient time to answer these questions honestly and sincerely. Thank you.
Please indicate your feelings toward City View Hospital.

bad ___ ___ ___ ___ ___ ___ good
unpleasant ___ ___ ___ ___ ___ pleasant
dislike ___ ___ ___ ___ ___ like

Please indicate your feelings toward the advertisement.

bad ___ ___ ___ ___ ___ ___ good
unpleasant ___ ___ ___ ___ ___ pleasant
dislike ___ ___ ___ ___ ___ like

Please indicate your feelings toward choosing City View Hospital for the purpose of receiving medical treatment.

definitely would __ __ __ __ __ __ __ definitely would choose not choose
foolish ___ ___ ___ ___ ___ ___ wise
harmful ___ ___ ___ ___ ___ ___ beneficial
would have bad consequences ___ ___ ___ ___ ___ would have good consequences

Please indicate your feelings toward the spokesperson.

bad ___ ___ ___ ___ ___ ___ good
unpleasant ___ ___ ___ ___ ___ pleasant
dislike ___ ___ ___ ___ ___ like

Please indicate your impression of the spokesperson.

awful ___ ___ ___ ___ ___ ___ nice
unfriendly ___ ___ ___ ___ ___ friendly
untrustworthy ___ ___ ___ ___ ___ trustworthy
unlikable ___ ___ ___ ___ ___ likable

Please indicate your agreement or disagreement with the following statements:

... I feel that the spokesperson was credible:
false ___ ___ ___ ___ ___ true
disagree ___ ___ ___ ___ ___ agree

... I feel that the spokesperson was believable:
false ___ ___ ___ ___ ___ true
disagree ___ ___ ___ ___ ___ agree
... I feel that this person has a great deal of formal education in his professional area:

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree

... I feel that this person has been well trained:

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree

... I feel that this person has had a high degree of use of health care facilities:

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree

... I feel that this person has a great deal of knowledge about health care:

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree

... I feel that this person has a great deal of knowledge about City View Hospital:

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree

... I feel that this person is an expert:

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree

... I feel that this person is experienced:

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree

... I feel that this person has a high degree of familiarity with the patient care at City View Hospital through prior encounters (e.g., knows whether patients would perceive the care they receive to be compassionate):

false __ __ __ __ __ __ true
disagree __ __ __ __ __ __ agree
The spokesperson presented several arguments in support of City View Hospital:

Overall, how would you rate the quality of these arguments?

- bad arguments ___ ___ ___ ___ ___ ___ good arguments
- weak arguments ___ ___ ___ ___ ___ ___ strong arguments

How convincing were these arguments?

- unconvincing ___ ___ ___ ___ ___ ___ convincing

Do you agree with these arguments?

- disagree ___ ___ ___ ___ ___ ___ agree

How skeptical are you about the truth of these arguments?

- extremely ___ ___ ___ ___ ___ ___ not at all
- skeptical ___ ___ ___ ___ ___ ___ skeptical

How believable were these arguments?

- unbelievable ___ ___ ___ ___ ___ ___ believable

How involved were you while listening to the advertisement?

- uninvolved ___ ___ ___ ___ ___ ___ involved

When you have completed all the questions in Booklet C, please wait for further instructions. Thank you.
Booklet D
"Points"
In the space below, please list as many of the message points made in the advertisements as you can remember. Please write or print clearly so that we can read your answers. Further, do not worry about grammar, spelling or punctuation. If you can remember more than one message point, please write each message point in a separate space. Extra spaces have been provided, so don't feel that all or any of the spaces have to be filled. About three (3) minutes of your time should be sufficient for this task. When you have listed the points that you can remember, please wait for further instructions. Thank you.

Please wait for further instructions. Thank you.
Booklet E

"Thought Categorizing"
To complete this task, please return to Booklet B. When you do this, please do not change any of your original thoughts and do not add any thoughts. We are interested in your first impressions.

On the dash to the right of each of the thoughts you reported in Booklet B, place one of the following:

**+S** for favorable thoughts about the spokesperson.

**-S** for negative thoughts about the spokesperson.

**+M** for favorable thoughts about the content of the message.

**-M** for negative thoughts about the content of the message.

**0** for thoughts that are not related to either the spokesperson or the message (neutral thoughts).

When you have finished categorizing all thoughts for the advertisement, place Booklet E aside and begin Booklet F.
Booklet F: Version for Experience Attribute Claims: Experimental Treatments 1-1-1, 1-2-1, 2-1-1, and 2-2-1

"Statements Made by the Advertisement"
Attached you will find a list of the claims made by the advertisement. Since we are interested in finding out what you think of these claims we would like you to rate the following claims on the provided scales.

To help you understand the rating task, consider the following example: Let's say you are about to see an ad for a pair of shoes. The ad claims that the shoes are comfortable. If you feel certain that you would be able to tell whether the claim is true or false once you have purchased and worn the shoes, you would place a checkmark as follows:

I will know after I X ___ ___ ___ ___ ___ I have to take on faith have used it

Let's say the ad further claims that the shoes are made from the finest quality leather. If you feel certain that you would have to take the claim on faith, because you wouldn't be able to tell whether it is true or false even after you have worn the shoes for a while, you would place a checkmark as follows:

I will know after I ___ ___ ___ ___ ___ X I have to take on faith have used it

Please answer for each and every item. Remember, you are rating the claims. You are to presume that you are actually contemplating the use of a hospital. Please begin and work carefully. Thank you.
Please indicate below how certain you feel that you would be able to tell whether each of the following advertising claims is true or false. Further, please let us know how skeptical you are of each of these claims, and how believable and convincing you feel each of them is.

City View's admission procedure is fast and easy. No long waits in line, no unfriendly nurses. You will be pleasantly surprised.

I will know after I ___ ___ ___ ___ ___ I have to take on faith
have used it

I can fully know ___ ___ ___ ___ ___ I can never fully know

would be obvious to ___ ___ ___ ___ ___ only an expert would know
any patient

not at all skeptical ___ ___ ___ ___ ___ very skeptical
not at all believable ___ ___ ___ ___ ___ extremely believable
not convincing ___ ___ ___ ___ ___ convincing

At City View Hospital you will receive plenty of individual attention. We will treat you with the respect you deserve.

I will know after I ___ ___ ___ ___ ___ I have to take on faith
have used it

I can fully know ___ ___ ___ ___ ___ I can never fully know

would be obvious to ___ ___ ___ ___ ___ only an expert would know
any patient

not at all skeptical ___ ___ ___ ___ ___ very skeptical
not at all believable ___ ___ ___ ___ ___ extremely believable
not convincing ___ ___ ___ ___ ___ convincing

The nurses at City View are very quick to respond when called.

I will know after I ___ ___ ___ ___ ___ I have to take on faith
have used it

I can fully know ___ ___ ___ ___ ___ I can never fully know

would be obvious to ___ ___ ___ ___ ___ only an expert would know
any patient

not at all skeptical ___ ___ ___ ___ ___ very skeptical
not at all believable ___ ___ ___ ___ ___ extremely believable
not convincing ___ ___ ___ ___ ___ convincing
City View's doctors will give you all the time and attention you need. And, as you know, few hospitals can honestly say this of their doctors.

I will know after I have used it. I have to take on faith.

I can fully know I can never fully know.

would be obvious to only an expert would know.

not at all skeptical very skeptical.

not at all believable extremely believable.

not convincing convincing.

The hospital's staff will even help you file your insurance claims for diagnostic services.

I will know after I have used it. I have to take on faith.

I can fully know I can never fully know.

would be obvious to only an expert would know.

not at all skeptical very skeptical.

not at all believable extremely believable.

not convincing convincing.

As a result, you will enjoy the warm, friendly, and attentive service at City View Hospital.

I will know after I have used it. I have to take on faith.

I can fully know I can never fully know.

would be obvious to only an expert would know.

not at all skeptical very skeptical.

not at all believable extremely believable.

not convincing convincing.

"Statements Made by the Advertisement"
Attached you will find a list of the claims made by the advertisement. Since we are interested in finding out what you think of these claims we would like you to rate the following claims on the provided scales.

To help you understand the rating task, consider the following example: Let's say you are about to see an ad for a pair of shoes. The ad claims that the shoes are comfortable. If you feel certain that you would be able to tell whether the claim is true or false once you have purchased and worn the shoes, you would place a checkmark as follows:

I will know after I X have used it have used it

I have to take on faith

Let's say the ad further claims that the shoes are made from the finest quality leather. If you feel certain that you would have to take the claim on faith, because you wouldn't be able to tell whether it is true or false even after you have worn the shoes for a while, you would place a checkmark as follows:

I will know after I have used it have used it

X I have to take on faith

Please answer for each and every item. Remember, you are rating the claims. You are to presume that you are actually contemplating the use of a hospital. Please begin and work carefully. Thank you.
Please indicate below how certain you feel that you would be able to tell whether each of the following advertising claims is true or false. Further, please let us know how skeptical you are of each of these claims, and how believable and convincing you feel each of them is.

City View is on the cutting edge of technology.

I will know after I ___ ___ ___ ___ ___ ___ I have to take on faith have used it

I can fully know ___ ___ ___ ___ ___ ___ I can never fully know

would be obvious to ___ ___ ___ ___ ___ ___ only an expert would know

not at all skeptical ___ ___ ___ ___ ___ ___ very skeptical

not at all believable ___ ___ ___ ___ ___ ___ extremely believable

not convincing ___ ___ ___ ___ ___ ___ convincing

City View uses its state-of-the-art technology to provide precise diagnoses. And, you know how crucial a precise diagnosis is.

I will know after I ___ ___ ___ ___ ___ ___ I have to take on faith have used it

I can fully know ___ ___ ___ ___ ___ ___ I can never fully know

would be obvious to ___ ___ ___ ___ ___ ___ only an expert would know

not at all skeptical ___ ___ ___ ___ ___ ___ very skeptical

not at all believable ___ ___ ___ ___ ___ ___ extremely believable

not convincing ___ ___ ___ ___ ___ ___ convincing

The hospital's comprehensive diagnostic technology helps physicians discover earlier, and treat more efficiently, a variety of serious medical conditions, including bone, joint and muscle disorders, tumors, cancer and cardiovascular heart disease.

I will know after I ___ ___ ___ ___ ___ ___ I have to take on faith have used it

I can fully know ___ ___ ___ ___ ___ ___ I can never fully know

would be obvious to ___ ___ ___ ___ ___ ___ only an expert would know

not at all skeptical ___ ___ ___ ___ ___ ___ very skeptical

not at all believable ___ ___ ___ ___ ___ ___ extremely believable

not convincing ___ ___ ___ ___ ___ ___ convincing
City View's expert medical staff has made it a leading health care center—highly skilled physicians and medical professionals.

I will know after I have used it to.

I can fully know only an expert would know.

would be obvious to any patient

not at all skeptical very skeptical

not at all believable extremely believable

not convincing convincing

City View's medical team includes a number of specialists, such as orthopaedic spine surgeons, neurologists, chronic pain anesthesiologists, and psychologists. By providing these various specialists with state-of-the-art technologies, City View Hospital has helped thousands of patients find relief from pain rapidly and efficiently.

As a result, City View Hospital provides the highest quality of customer care available in the health care industry.
Booklet G
"General Information"
How knowledgeable are you about hospitals?

not experienced — — — — — — experienced
not at all — — — — — — very familiar
familiar — — — — — —
not at all — — — — — — very knowledgeable

How often have you been to a hospital as an in-patient, not including your birth?

0 times __ 1-2 times ___ 3-5 times ___ 6+ times ___

How often have you been to a hospital as an out-patient, not including your birth?

0 times __ 1-2 times ___ 3-5 times ___ 6+ times ___

Have you or any of your family members ever worked in a hospital?

yes ___ no ___

If yes, in what capacity (i.e., what type of job)?

________________________________________________________________________________________

In your judgment, how clear were the instructions in this questionnaire?

not at all clear — — — — — — extremely clear

Do you think you know what this study was about?

yes ___ no ___

If yes, please explain: ________________________________________________________________

________________________________________________________________________________________

Are you ___ male ___ female?

How old are you? _________
HUSH FORM

It is very important that you avoid telling others what this study was about and what went on today until AFTER THE STUDY HAS BEEN COMPLETED. The study will be completed toward the END OF SEPTEMBER. In other words, we ask you to PLEASE REFRAIN from discussions about this study UNTIL THE END OF SEPTEMBER. We really appreciate your help and understanding. Thank you.

I have read the above request and understand that you are asking me to avoid discussing the study until the study is completed.

__________________________________________
Name (please print)

______
Date

______
Signature

This was the last part of the questionnaire. Please remove this form from the questionnaire, sign it, fold it and put it in the envelope that already contains your signed consent form. Once you have done that please notify the attendant that you have finished by raising your hand.

THANK YOU FOR YOUR PARTICIPATION
APPENDIX F

FIGURES & RESIDUAL PLOTS
Figure 3.1. Hypothesis 1.

Figure 3.2. Hypothesis 2.
Figure 3.3. Hypothesis 3.

Figure 3.4. Hypothesis 4.
Figure 3.5. Hypothesis 5.

Figure 3.6a. Hypotheses 6a & b.
Prepurchase Information about a Product's Credence Attributes

Expert Endorser

Experienced Endorser

(a) Countersuing
(b) Source Derogation

(c) Support Arguing
(d) Source Bolstering

Figure 3.6b. Hypotheses 6c & d.

Prepurchase Information about a Product's Experience Attributes

Experienced Endorser

Expert Endorser

(a) Countersuing
(b) Source Derogation

(c) Support Arguing
(b) Source Bolstering

Figure 3.7a. Hypotheses 7 a & b.
Figure 3.7b. Hypotheses 7c & d.

Figure 3.8a. Hypothesis 8a.
Figure 3.8b. Hypotheses 8b & c.

Figure 3.9a. Hypothesis 9a.
Prepurchase Information about a Product's Experience Attributes

Expert Endorser

Experienced Endorser

(b) Support Arguing
(c) Source Bolstering

(b) Support Arguing
(c) Source Bolstering

Figure 3.9b. Hypotheses 9b & c.
Figure 5.1. The Effect of Source Expertise on Attitude toward the Endorser.
Figure 5.2. The Effect of Source Experience on Attitude toward the Endorser.
Figure 5.3. The Effect of Source Expertise on Attitude toward the Ad.
Figure 5.4. The Effect of Source Experience on Attitude toward the Ad.
Figure 5.5. The Effect of Type of Product Attribute Claim on Skepticism toward Product Claims under Source Expertise Conditions.
Figure 5.6. The Effect of Type of Product Attribute Claim on Skepticism toward Product Claims under Source Experience Conditions.
Figure 6.1. Interaction Effects of Source Experience and Type of Product Attribute Claim on Believability of Product Attribute Claims.
Figure 5.1a. Residual Plot for the Dependent Variable "Attitude toward the Endorser".
Figure 5.1b. Residual Plots for the Dependent Variable "Attitude toward the Endorser".
Figure 5.1c. Normal Probability Plot for the Dependent Variable "Attitude toward the Endorser".
Figure 5.2a. Residual Plot for the Dependent Variable "Attitude toward the Ad".
Figure 5.2b. Residual Plots for the Dependent Variable "Attitude toward the Ad".
Figure 5.2c. Normal Probability Plot for the Dependent Variable "Attitude toward the Ad".
Figure 5.3a. Residual Plot for the Dependent Variable "Skepticism toward the Product Attribute Claims".
Figure 5.3b. Residual Plots for the Dependent Variable "Skepticism toward the Product Attribute Claims".
Figure 5.3c. Normal Probability Plot for the Dependent Variable "Skepticism toward the Product Attribute Claims".
Figure 5.4a. Residual Plot for the Dependent Variable "Frequency of Counterarguments".
Figure 5.4b. Residual Plots for the Dependent Variable "Frequency of Counterarguments".
Figure 5.4c. Normal Probability Plot for the Dependent Variable "Frequency of Counterarguments".
Figure 5.5a. Residual Plot for the Dependent Variable "Square Root of Frequency of Counterarguments".
Figure 5.5b. Residual Plots for the Dependent Variable "Square Root of Frequency of Counterarguments".
Figure 5.5c. Normal Probability Plot for the Dependent Variable "Square Root of Frequency of Counterarguments".
Figure 5.6a. Residual Plot for the Dependent Variable "Frequency of Source Derogations".
Figure 5.6b. Residual Plots for the Dependent Variable "Frequency of Source Derogations".
Figure 5.6c. Normal Probability Plot for the Dependent Variable "Frequency of Source Derogations".
Figure 5.7a. Residual Plot for the Dependent Variable "Square Root of Frequency of Source Derogations".
Figure 5.7b. Residual Plots for the Dependent Variable "Square Root of Frequency of Source Derogations".
Figure 5.7c. Normal Probability Plot for the Dependent Variable "Square Root of Frequency of Source Derogations".
Figure 5.8a. Residual Plot for the Dependent Variable "Frequency of Support Arguments".
Figure 5.8b. Residual Plots for the Dependent Variable "Frequency of Support Arguments".
Figure 5.8c. Normal Probability Plot for the Dependent Variable "Frequency of Support Arguments".
Figure 5.9a. Residual Plot for the Dependent Variable "Natural Log of Frequency of Support Arguments".
Figure 5.9b. Residual Plots for the Dependent Variable "Natural Log of Frequency of Support Arguments".
Figure 5.9c. Normal Probability Plot for the Dependent Variable "Natural Log of Frequency of Support Arguments".
Figure 5.10a. Residual Plot for the Dependent Variable "Frequency of Source Bolsters".
Figure 5.10b. Residual Plots for the Dependent Variable "Frequency of Source Bolsters".
Figure 5.10c. Normal Probability Plot for the Dependent Variable "Frequency of Source Bolsters".
Figure 5.11a. Residual Plot for the Dependent Variable "Square Root of Frequency of Source Bolsters".
Figure 5.11b. Residual Plots for the Dependent Variable "Square Root of Frequency of Source Bolsters".
Figure 5.11c. Normal Probability Plot for the Dependent Variable "Square Root of Frequency of Source Bolsters".
BIBLIOGRAPHY


Bither, Stewart W. and Peter Wright (1979), "Preferences Between Product Consultants: Choices vs. Preference Functions," Journal of Consumer Research, 4 (June), 39-


Cook, Thomas D. and Donald T. Campbell (1979), Quasi-Experimentation: Design and Analysis Issues for Field Settings, Chicago, IL: Rand McNally.


Dick, Alan, Dipankar Chakravarti, and Gabriel Biehal (1990), "Memory-Based Inferences During Consumer Choice," *Journal of Consumer Research*, 17 (June), 82-93.


Fishbein, Martin and Icek Ajzen (1975), Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research, Reading, MA: Addison-Wesley.


Forkan, James P. (1980), "Product Matchup Key to Effective Star Presenters," Advertising Age, October 6, 42.


---


Kurz, Richard S. and Fredric D. Wolinsky (1985), "Who Picks the Hospital: Practitioner or Patient?" Hospital and Health Services Administration, 30 (March-April), 95-106.


Mandese, Joe and Scott Donaton (1992), "Media, Promotion Gap to Narrow," Advertising Age, 29 June, p. 16.


Steiber, Steven R. (1987), "Hospital Advertising Okayed by 62% of Public," Hospitals, 61 (5 April), 81.


