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Directiveness in Promotional Communications

by

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(ABSTRACT)

The style of a communication may influence a receiver's responses as well as the message's factual, informational content. The degree to which a promotional communication attempts to control a receiver's responses can be defined as a relational and therefore a stylistic variable. This dissertation operationalizes a stylistic variable, directiveness, as the degree to which a persuasive communication instructs the receiver how to respond in terms of action, attitudes and beliefs. Directive messages attempt to limit the receiver's responses while less directive or suggestive messages encourage the reader to make up his or her own mind. Using Attribution Theory and the Cognitive Processing Model as theoretical bases, experimental hypotheses were tested involving the impact of directive versus suggestive messages on receiver responses to one-sided and two-sided communications and high and low involvement topics. Directiveness was found to have significant impact on receiver responses depending on the receiver's level of involvement. The main implication of this research is that how a persuasive communication is worded may influence a receiver's responses to what informational content is presented.

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CHAPTER 1: OVERVIEW

Communication theorists have long held that communications may convey two broad classifications of information: the literal (i.e., the actual words and specific types of information) meaning of a communication; and a wide range of other information for the receiver as to how the literal information is to be taken (Watzlawick, Beavin and Jackson 1967). A receiver's responses to a communication can be seen as a function of the literal information, the information as to how the literal information is to be taken, and an interaction of the two. This distinction of communication structure parallels the notion of style versus product information in advertising. In responding solely to an advertisement, a receiver may be responding to the information in the ad as well as to something about how that information is presented. If a receiver is responding to product information given in an ad, then minor changes in how that information is given should not significantly affect responding. However, if the receiver is not responding to the product information per se, but instead to some aspect of how that product information is given, then modifications of the style should affect responding.

This distinction between a receiver's responses to the product information in an advertisement or to how the information is presented is the topic of this dissertation. This dissertation examines the potential effects that varying degrees of attempted control or pressure exerted on a receiver's responses. In a general sense this project seeks

to discover if information presented in a manner such that the receiver is encouraged to make up his or her own mind about the presented information is more or less effective than giving the same information in a more direct and absolute vein.

INTRODUCTION

The concept of style or tone in advertising can be used to refer to many different aspects of an advertisement that influence how the receiver may respond to the communication. While it is not a clear distinction, stylistic aspects can be seen as more concerned with how the ad conveys its information rather than the specific information presented. Style directs the receiver as to how literal meaning (i.e., informational content such as product attributes) should be taken (Norton 1983.) For example, information can be presented humorously or emotionally, both of which could be considered stylistic variables in that the same (or highly similar) product attribute information could be presented in both of these ways. Much research in promotional communications seems to have centered more on informational content areas than stylistic areas (e.g., Smith and Hunt 1978, Swinyard 1981, Belch 1981). Topics that center on product information, such as the amount of information presented as determined by product attributes (e.g., information overload), the mentioning of competitor products (comparative versus non-comparative advertising) and the mentioning of negative information about one's own product (two-sided and refutational advertising) have all been studied.

Although it is intuitively obvious that the style or tone of an advertisement should influence its effectiveness, moving this perception to an application or empirical test requires operationalizing some aspect of style. An example of style is the degree of control or directiveness with which the advertisement presents product information. Directiveness can be defined as information within an advertisement that instructs the receiver how the informational content is to be taken. For instance, does the ad "make up" the receiver's mind, or are conclusions about the relative merit or importance left to the receiver? When attributes are presented, is their relative superiority given directly (i. e. , Product X is the best) or is it given with qualification (i. e. , You may find Product X the best.)? Both of these examples can be seen as differing attempts to control how the receiver is to take or respond to the informational content of the communication.

This dissertation studies various degrees of directiveness or attempted control on an advertisement's effectiveness. Of particular interest is the exploration of potential effects of directiveness on previously found effects of differing types of informational content such as message sidedness. If directiveness as a stylistic variable can be shown to alter an advertisement's effectiveness, or enhance the effects of other techniques such as two-sided communications, then it has positive implications for marketing practitioners. Similarly, the potential impact of directiveness on receivers is of interest from a theoretical standpoint as it deals with how people respond to communications and what aspects of the communication to which they may be responding.

AN OVERVIEW OF DIRECTIVENESS IN PROMOTIONAL COMMUNICATIONS

Directiveness refers to the degree that the communication attempts to instruct the receiver in how to respond to the informational content given in the communication. Examples of directiveness are statements that guide or lead the receiver in whether to have a certain belief or attitude, or act in certain way such as purchase or considering a product for purchase. Receivers can be allowed to draw their own conclusions about the claims in an ad, or the ad can draw the conclusions for them. Similarly, an ad can tell consumers that a product is the best they will be able to find, and by doing so draw a conclusion about the results of consumers' future behaviors. Informational content can be defined as statements about product attributes such as "product X has attributes A and B."

For a specific example, an advertisement could state "Sony T.V.s have the best color you will find." This message can be seen as attempting control of a receiver's responses at two different levels. Receivers' responses may be at the informational content level where receivers reply "so what, tell me about the price!" From an informational content perspective, the receiver is adding another attribute to be considered, and the advertiser might adjust his or her message accordingly to include positive price information.

However, suppose that another advertiser with Sony T.V.s had run an advertisement that stated "Sony T.V.s have the best price you will find," and receivers responded with "so what, tell me about the color!" Now one might suspect that the receivers are not responding to informa-

tional content alone, in that the receivers' responses in both cases take issue with the ad. At this point, an advertiser might ask whether the negative responses are to the ad's informational content, or to something about the ad independent of the informational content. In the latter case, one possible explanation is that the receivers' responses are not to the informational content per se, but to the degree of control attempted by the communication over the receivers' potential responses. In both cases, attributes were presented in a manner that left the receivers with very little latitude of response other than accepting or rejecting the communication's assertions. This is especially true if the receivers view or are used to arriving at these types of conclusions (i. e. , which T.V has the best color) on their own. By drawing conclusions for the consumer, the ads may be seen as attempts to control the freedom to choose.

Suppose instead the ad had stated "if having the best color is important to you, then you may want to consider Sony." While this message still draws the association between "the best color" and "Sony," it acknowledges two potential choice areas for the receiver: the choice of what is important such as color or other attributes; and the choice of acting or not acting on the information, i. e. , the receiver "may" or "may not" want to consider Sony.

The concept of directive versus non-directive or suggestive communication can be seen as an example of a large class of communication phenomena known as relational communication (Watzlawick et al. 1967, Bateson 1972, Ruesch and Bateson 1968). This is usually defined as any aspect of a communication that pertains to the control of the sender-

receiver relationship. Given the persuasive nature of advertising, the potential for control over a receiver's responses, even if it is just enhancing the receptivity of a receiver for a message, is an important concept. Having defined directiveness as a stylistic variable, the next step is to present a theoretical base and model to examine the potential impact of varying directiveness.

Theoretical Models

Two related theoretical models will be employed that are relevant to directiveness: the cognitive processing model (Wright 1973, 1980, Petty, Ostrum and Brock 1983, Greenwald 1968); and attribution theory (Kelly 1973). Current cognitive theory in persuasion has centered on subjects' cognitive responses while attending to or immediately after attending to a persuasive communication. These responses, as opposed to the actual content of the communication alone, have been hypothesized to be what the receiver may remember and incorporate into subsequent attitudes and behaviors (Greenwald 1968.) These immediate responses are based on existing beliefs and attitudes of the receiver as well as the information given in the communication, and can be directed toward the informational content and/or the source of the communication. The more receivers are involved with the communication, the more they are hypothesized to attend and respond to the message itself (e.g., claims or information about a product), while when less involved receivers are hypothesized to attend to peripheral cues such as source characteristics (Petty and Cacioppo 1981).

The attribution theory position states that the perceived causes of (or "attributions" about) the source's communicating is also a strong determinant in subsequent beliefs and attitudes (Kelly 1973). Sources are seen as more truthful and credible when they are giving their own feelings and beliefs about an issue, rather than speaking because of external pressures such as financial remuneration or pressure from others. Receivers are hypothesized to evaluate the likelihood of source motives other than the given motive in assessing the causes of the source's behavior; the more alternative motives, the less likely the source is to be believed. Therefore, responses to a persuasive communication can be responses made about the source's intent, with negative responses being ones that attribute the sender's behavior to causes outside of the sender. Potentially positive responses to a source could be ones that attribute the cause of the communication to the source's true feelings or beliefs rather than other causes (i. e. , personal gain or a desire to persuade the receiver to the source's point-of-view.)

Directiveness in a persuasive communication may affect cognitive responding by either increasing or decreasing responding to the source rather than the message substance. If the issue is one of low relevance to the receiver, then receivers may attend more to peripheral cues such as message style. In this case directiveness should impact on receiver responses more than when receivers are highly involved and attending to message substance. Also, if receivers are attending more to message style, then they also may be more sensitive to stylistic cues utilized in making attributions about the causes or intent of the communication. This latter position indicates the compatibility of using both the cog-

nitive processing model and attribution theory as bases for examining varying directiveness.

Some research streams studying advertising content have stressed informational content while not systematically studying style. This opens the interesting possibility that findings thought to be a function of content information (i. e. , message sidedness, comparative or non-comparative, argument strength or amount) may have been influenced in part by style as well as informational content. By incorporating stylistic manipulations such as directiveness into existing streams of research this hypothesis can be tested. Style as a class of variables has not been systematically manipulated in many studies, which invites potential alternative explanations.

RESEARCH OBJECTIVES

The major goal of the proposed study is to examine the persuasive effects of varying degrees of directiveness in promotional communications. The conceptual area of major interest is message structure - the stylistic and informational aspects of the promotional communication itself. While cognitive response and attribution theoretical models are employed, the study is not intended to be a test of either theory. These theories are applied to provide hypotheses about the potential effects of directiveness through providing models of how people respond to advertising communications.

A second objective is to operationalize directiveness. This step requires some background on directiveness as an example of relational

communication, and how communications can be described as varying in directiveness or attempted control impact on persuasion.

RESEARCH JUSTIFICATION

While the concept of relational communication has received substantial attention in both psychology and communications literature, it has received minimal attention in marketing (Soldow and Thomas 1984) and none in advertising research. In this regard directiveness is a new message construct with potential academic and managerial implications. Ray (1978) advocates that advertising research, particularly research investigating communication strategy, is probably characterized by uncovering increasingly complex interactions rather than broad covering laws. Directiveness or attempted control is another stylistic structure variable such as rhetorical questions (Swasy and Munch 1985). As has been mentioned previously, existing findings about advertising persuasiveness thought to be a function of message substance or informational content may have been in due part to some stylistic aspect. Directiveness may also yield insight into persuasion processes in terms of how information is processed as well as what aspects of a communication are more salient than others. Also, the desirability of expanding theoretical perspectives of marketing issues has received recent support (Olson 1981, Anderson 1983, Arndt 1984), with a goal being broadening the perspectives of marketing.

The practical or applied aspects of studying directiveness are several. First, if directiveness influences consumer receptivity, then

its use may enhance consumers' attending to product attributes, rather than discounting or counterarguing an ad because of non-product aspects. Second, real world contingencies often involve how to communicate product information since product changes are unfeasible in the short-run. For example, while the previous examples of differing control implied that less attempted control might be more effective in those examples, consumers at different stages of the buying cycle might be more receptive to direct and controlling communications. Finally, as directiveness offers a different perspective from which academicians can view promotional communications, the same is true for practitioners. If creative activity involves allowing oneself to see world from different viewpoints, and thereby change one's view of that world, then any new vantage point can help the creative process.

ORGANIZATION OF THE DISSERTATION

Chapter II addresses issues relating directiveness or attempted control to existing theoretical and empirical areas of marketing. Directiveness will be defined, and an empirical testing area defined. The latter part requires a review of existing theoretical approaches to promotional communication responses in order to integrate directiveness into an ongoing empirical stream. Chapter III presents experimental hypotheses derived from Chapter II's discussion and gives a design for an exploratory study. Chapters IV and V will present results and discuss these findings.

CHAPTER II: REVIEW

INTRODUCTION

The concept of directiveness or attempted control in promotional communications has not been systematically studied within advertising. As such, there is no direct body of literature relating directiveness or relational control in marketing communications. Defining the concept and building an empirical application is more in the discovery stages of analysis than the justification stage of inquiry (Hunt 1983.) Given this, the focus of Chapter II will be on conceptualizing directiveness and developing a viable theoretical framework in which to examine directiveness. This builds nomological validity by incorporating directiveness into existing nomological nets (Cronbach and Meehl 1955). Two general areas of examination are proposed: first, a test of the effects of directiveness on central (or high involvement) versus peripheral (or low involvement) cognitive processing; and second, the moderating impact of directiveness on one-sided versus two-sided communications.

Organization of Chapter II

First, directiveness will be defined and discussed. Next, the theoretical models that will be used to generate hypotheses about directiveness will be discussed: first, the cognitive processing model and second attribution theory's role in explaining responses to one-sided

versus two-sided communications. The first examines the potential impact of directiveness on different routes of cognitive processing; the second examines the effect of directiveness on differing types of informational content. Potential theoretical effects are drawn and used to form experimental hypotheses.

DIRECTIVENESS OR ATTEMPTED CONTROL IN PROMOTIONAL COMMUNICATIONS

Defining Advertisement "Style"

The degree of directiveness or attempted control in promotional communication was initially introduced as one potential aspect of message style. Style is a loose term: some advertising writers (e.g., Aaker and Myers 1982) do not use the term at all, while others (e.g., Ray 1982) use the word tone to discuss how a message is to be communicated. Ray states that tone refers to the emotionality of an ad, or "the way a position is stated." A more comprehensive definition is offered in the communication literature; Norton (1983) defines style as "the way one verbally, non-verbally, and paraverbally interacts to signal how literal meaning should be taken, interpreted, filtered, or understood." In marketing and promotional communications, the above definition refers to aspects of an advertisement that indicate how a receiver is to take and/or respond to the communication.

The purpose of separating the informational content from style is to separate product or issue related information from other aspects to which the receiver may also be responding. This distinction is obviously

a gray area (Crane 1972, Watzlawick et. al. 1967) given the complexity of human communication. What is most difficult is distinguishing between a stylistic variable versus an informational content variable. It requires being able to understand the same communication at two different levels -

- the informational content level and the stylistic level. Non-verbal communication is an easier frame in which to understand stylistic versus informational content, as the non-verbal aspect cannot easily transmit informational content. However, one can easily transmit how a communication is to be taken non-verbally by facial cues. When examining a written communication for relational versus informational content, the separation is not as apparent as in non-verbal versus verbal communication.

The use of fear in anti-smoking ads could be considered either an informational content variable or a stylistic variable. From the informational content side one could cite consequences of varying severity from smoking and these would be examples of factual content. From the stylistic perspective one could vary how those consequences were presented, i. e., humorously, as strong threats, or as very gentle suggestions. For example, the informational content of the smoking ad could say "smoking causes lung cancer." The stylistic aspects could be qualifying statements along with the ad such as "you must know that," or "did you know that?" or "what if you knew?" In each case the qualifying statements may induce the receiver to respond differentially to the informational content of the communication.

Directiveness as a Dimension of Style

Directiveness is the dimension of style that specifically refers to an attempt to control the receiver's responses to the information. It is the degree to which a communication instructs, orders, or commands the receiver to respond to the informational content of the communication. Highly directive communications do not convey the option that the receiver has a choice to accept or reject the communication; instead they attempt to instruct the receiver how to respond to the informational content. On the other hand, as a communication became less directive it could either be more vague as to how the receiver is to respond, or it could stress various options open to the receiver rather than giving only one option. This latter dimension will be referred to as "suggestive" in that it suggests options rather than attempting to give only one option. A suggestive orientation also stresses that it is the receiver's choice as how to respond.

Responses to a communication can include overt behavioral actions as well as having certain attitudes or beliefs. Examples of this are "We're the best" (draws the conclusion about the judgment); "You should know" (draws the conclusion about what beliefs to hold); "Switch to Brand X" (directs a specific behavior.) These all attempt to overtly direct the receiver in specific manners. One alternative to highly directive messages are suggestive messages that try to more subtly direct the receiver in a certain direction without the overt, direct instructions in the examples above. The suggestive style attempts to present conclusions drawn or judgments made about the information as choices of the receiver.

For instance, minor changes in the above examples change the degree of directiveness: "We may be the best", "You may want to know" and "Consider switching to Brand X" all overtly attempt to leave the decision as how to take the information (i. e. , what to do with the information) up to the receiver.

The Relational Aspects of Directiveness

Perhaps the key to understanding directiveness is the emphasis on the sender-receiver relationship in the above examples. In the directive examples the sender overtly is attempting to control the receiver's responses, while in the suggestive examples the control attempted is more covert. As directiveness concerns how a receiver may be instructed to respond to a communication, it relates to the relationship between the sender and receiver. Because of this the directiveness of a communication can also be seen as "relational communication" (Watzlawick, Beavins and Jackson 1967, Penman 1980). While this perspective has been primarily centered in Clinical Psychology (Haley 1976), it has recently begun to be used in marketing contexts (see Soldow and Thomas 1984) to describe control of the personal selling relationship. Soldow and Thomas (1984) distinguish between communication form and content, where form is defined as how the salesperson and customer communicate information about the control of the interaction and the relationship. The area of relational communication and the broader area of the Pragmatic approach to communication is a complex area. A discussion of selected aspects of relational communication is given in Appendix A.

The concept of directiveness is related to "symmetrical" (Watzlawick et. al. 1967) or "domineering" (Courtright, Millar and Rogers-Miller 1979) communications. Domineering communications attempt to control the receiver by attempting to "restrict severely the behavioral options of others" (O'Donnell-Trujillo 1981). The giving of instructions often characterizes directive or domineering communications (Rogers and Farace 1975). Alternative types of communication are complementary, which attempt to pass control of the interaction to the receiver. As advertisers present information, and usually have some intent or goals for the receiver, their messages can be seen as an attempt to control at some level. Therefore, a promotional communication is always symmetrical or domineering, although varying in degree. For this reason, "varying directiveness" has been chosen to describe the degree to which the sender attempts to control or direct the responses of the receiver.

One of the most difficult parts of the directive aspect of communication is distinguishing it from the informational content. As previously stated the difference can be seen as somewhat arbitrary, as demonstrated in the fear example. It is also functional in that it forces a different perspective on communication, and one that has not explicitly been used in promotional communications. There seems to be a subtle tendency to treat stylistic concerns as contextual, relating to variables such as perceived source attractiveness or credibility outside of the communication itself (Fishbein and Ajzen 1981). For example, Fishbein and Ajzen state: "It is important to note that, except for order of presentation, all message manipulations directly vary the kind or amount of information to which receivers are exposed. . . Clearly, then, com-

paring the relative effectiveness of different types of appeal is rather meaningless. Whether one type of appeal is more or less persuasive than another will depend primarily on the content of messages employed." The authors make it clear that they are referring to informational content as it has been defined here. By examining responses to varying directiveness while attempting to hold informational content constant, one gains insight into communication effectiveness.

Relationship of Directiveness to Conclusion Drawing

Directiveness differs from conclusion drawing (Hovland and Mandell 1952, Thistlethwaite, de Haan and Kamenetzky 1955) in that the latter either gives a specific conclusion to be drawn by the receiver, or leaves the conclusion undrawn. From this perspective conclusion drawing is more of an informational content manipulation than a stylistic manipulation. For example, a directiveness view of conclusion drawing would not be concerned with the conclusion per se, but instead how the conclusion is drawn: is the conclusion suggested as a possible conclusion, or is it presented as the only conclusion? A persuasive communication could state: "Based on the evidence, quitting smoking is the only alternative", or "Based on the evidence, you may want to consider quitting smoking as an alternative." Both communications draw conclusions, but in comparing one to the other, they do it with differing degrees of attempted control or directiveness.

However, it is also possible that communications that draw conclusions for the receiver may simultaneously be perceived as more direc-

tive than those that do not draw conclusions for the receiver. By drawing a conclusion the receiver may feel a greater pressure to adopt the sender's position. If the receiver is responding to some aspect about the communication such as attempted control, then a stylistic manipulation of the message should alter this responses. On the other hand, if the receiver is responding to the informational content, then minor stylistic changes should not alter responding. This mirrors the central topic of the dissertation: to what degree are receiver responses to communication informational content versus other aspects of the communication.

Varying directiveness may have subtle as well as overt effects. While a communication that was overtly directive would probably be seen as "pushy" or a hard sell, the suggestive style may go consciously unnoticed in that the receiver may not have a strong negative or positive response to the style, instead concentrating more on the informational content. The suggestive style may be seen as removing or reducing counterarguing elicited by the pushy style of the direct communication. This area will be explored in depth in discussion of measures of effectiveness and theoretical explanations of receiver responses. Its importance here is to highlight the potential subtlety of the suggestive dimension and to help differentiate the degree of directiveness from informational content.

An analogy to directiveness and its effects on receivers is non-verbal communication in personal selling interactions (Soldow and Thomas 1984, Bonoma and Felder 1977, Mehrabian 1972.) While both non-verbal cues and responses to these cues are difficult to measure, subjects seem to utilize substantial numbers of non-verbal cues in responding to differing

messages (Mehrabian 1972, Argyle, Salter, Nicholoso, Williams and Burgess 1970.) In particular, content information generally is used for communicating information external to the speakers, while non-verbal information is used to establish and maintain interpersonal relationships. Argyle et. al. (1970) found that non-verbal cues outweighed verbal content information in transmitting different attitudinal positions and that subjects utilized non-verbal cues more than verbal cues when the two were in conflict.

This analogy demonstrates how a message can be conceived as delivering different types of information within the same overall communication. The non-verbal aspects of a communication may transmit cues about relational issues such as control from the informational content; and the degree of directiveness may transmit cues about attempted control through written qualifiers. This analogy helps outline the distinction between informational content and other areas of a communication.

A related study to the verbal/non-verbal dimension was an attempt to test a "hard sell - soft sell" dimension by varying the intensity, aggressiveness and extraneous sound effects in radio commercials (Silk and Vavra 1974). The hard sell presentation used a more intense presentation while the soft sell used a more calm and soothing approach. According to the authors, only these paraverbal variables were manipulated; the copy, copytheme, frequency of brand name mentioning were identical. While their definition of hard sell is different than the proposed directiveness dimension, this type of manipulation can be seen as a stylistic manipulation in that content information was highly similar in both conditions. The hard sell was more effective after one exposure,

however after a second exposure both methods were equally effective as measured by attitudinal responses. The level of receiver involvement was most likely low as the product advertised was shoe polish. While this approach does not directly bear on an examination of directiveness, it does demonstrate that stylistic manipulations can influence responses to an advertisement.

In summary, directiveness is the degree of attempted control over a receiver's potential responses to a communication. Directiveness refers to the strength to which the message instructs the receiver in how to take the informational content. Directiveness differs from informational content in that the degree of directiveness can be manipulated while leaving informational content relatively unchanged. By separating directiveness as a variable apart from informational content, responses to both can be measured, and responses previously thought to be a function of informational content can be examined as a function of directiveness. Different means have been used to assess message effectiveness, and these are usually based on theoretical models of communication processing.

An Overview of Potential Effects of Directiveness

Intuitively, relational communication and directiveness should be likely to affect source perceptions such as intent, credibility and so on. As directiveness varies the manner in which a receiver is instructed to take a communication, varying levels of directiveness may elicit differing degrees of perceived pressure to adopt the advocated position. Perceptions of the source's intent and subsequent attitudes can be exam-

ined from attribution theory framework (Kelly 1973). This theoretical base has been used to study message sidedness (e.g., Goodwin and Etgar 1980, Belch 1981, Prasad 1976, Etgar and Goodwin 1982, Golden 1979, Settle and Golden 1974, Swinyard 1981, Smith and Hunt 1978, Sawyer 1973) with a general result being that one-sided messages are seen as having a greater intent to persuade and being less truthful. If varying directiveness can influence receivers' perceptions of intent to persuade, then decreasing directiveness may soften responses to one-sided communications, and heightened directiveness may attenuate negative responses to two-sided communications.

Another potential effect of directiveness is the notion that varying relational communication puts receivers in different positions, where different communication styles may encourage different responses. For example, the statement "You may want to consider . . ." or "Have you considered . . . ?" could be expected to elicit different responses from "Therefore, do this . . . (course of action)." An intriguing possibility is using different styles in messages is the potential effect on cognitive responses (Petty et. al. 1981). Immediate thinking in response to persuasive communications has been shown to mediate subsequent attitudes and beliefs (Olson, Toy and Dover 1982); a message structure approach would examine if differing styles could alter immediate responses. In the above example, it is feasible that the different wordings could lead to different responses; to the extent that cognitive responses mediate subsequent attitudes or actions of the receiver the messages should have different levels of persuasion.

These two general positions, the potential effects of directiveness on cognitive processing and the potential ability of directiveness to moderate effects of message sidedness are discussed next. First, the cognitive response theory and model are discussed and general theoretical hypotheses are developed concerning directiveness. Second, message sidedness and attribution theory (the usual theoretical format used in examining sidedness) are discussed and theoretical hypotheses developed concerning directiveness and sidedness.

Cognitive Models of Message Reception and Persuasion

The cognitive processing model is a traditional S-O-R psychological model that posits external or observable behaviors as caused by internal, unobservable events. The model presents a theory of communication effects that postulates subsequent attitudes, beliefs and behaviors as being moderated by immediate cognitive responses to an communication. In an advertising situation the advertisement is the stimulus and internal processing is characterized by thoughts generated by the ad. These thoughts are a function of the advertisement, the existing belief and attitudinal structure of the individual and contextual variables such as distraction. Key to the understanding of the cognitive model is Greenwald's (1968, see also Festinger and Maccoby 1964) assertion that receiver's actively respond to some communications with cognitive responses or sub-vocalizations. These responses are a function of the communication itself and the receiver's pre-existing attitudes and beliefs as stimulated by the communication. They are hypothesized to become

incorporated with the individual's existing belief structure and thus either reinforce or modify existing attitudes and beliefs based on these responses.

Alternative approaches (Hovland, Lumsdaine and Sheffield 1949) had stressed that attitude change and persuasion were a function of retained information from a communication. Along with receivers' pre-existing attitudes and beliefs, other variables hypothesized to affect processing are external distractions that allow retention of communication information but hinder counterarguing; and within message structural variables such as the use of humor and rhetorical questions. The latter variables may be seen as internal distractions as they are hypothesized to alter cognitive responding.

Cognitive Responses

Cognitive response theorists (Petty, Ostrum and Brock 1981, Wright 1980, 1973) have used different classifications for the different types of responses one can make to an advertisement. A list is given in Table 1.

The list given is not comprehensive; different researchers have employed different classifications of cognitive responses (Wright 1980). However, different classifications all share certain communalities: responses are usually either positive, negative or neutral. Some differences represent different theoretical tests - for example, some researchers do not include source derogations when the source of the ad is not apparent (e.g., Olson, Toy and Dover 1982). Others (e.g., Golden 1977) consider the source and

Table 1. Classifications of Cognitive Responses

Classifications of Cognitive Responses

1. Support Arguments: Cognitions favorable about the points stressed in the advertisement
 2. Counterarguments: Cognitions that counter claims made in the advertisement; can be to either a point made in ad, a conclusion of the ad, or information generated by the receiver counter to the ad's claims
 3. Source derogations: Cognitions that derogate the source of the ad; in ads where no direct source is apparent these can be global statements about the ad
 4. Source Bolstering: Positive cognitions about the source of the ad
 5. Curiosity Statements: Questions about the ad that express interest in more information without questioning the validity of the ad, expressing disbelief or giving a counterargument
-

the advertiser one in the same when there is no direct spokesperson such as a celebrity or company official.

General findings have been that as negative thoughts increase, message acceptance diminishes (Wright 1973, 1980, Toy 1982, Olson, Toy and Dover 1982, Sternthal, Dholakia and Leavitt 1978). However, classifying different types of cognitive responses (i. e. , counterarguments, support arguments etc.) results in the possibility that different types of cognitive responses may have differential effects on communication acceptance. It is possible that cognitions that derogate the source may impact differentially on acceptance from cognitions that counterargue. Furthermore, different cognitive responses may have different impact based on their importance to the receiver. For example, one may report having thought that a source was biased but that this bias was not very important to the receiver. Wright (1973) reports that when regressed on attitude and behavioral intention, counterargument is the best predictor of communication acceptance. The two next variables were support arguing and source derogation in that order. However, the more extensive the processing (i. e. , the longer time permitted and the use of written communications) the greater the impact of support arguments and source derogations in predicting attitudes and behavioral intentions.

Other research (Olson, Toy and Dover 1982) has in part replicated Wright's findings of the impact of cognitive responses on subsequent attitudes and behavioral intentions. They report the number of counterarguments and support arguments (source derogations were not measured) were the main mediators of message effects on product beliefs.

In summary, cognitive responses are hypothesized to be strong mediators of message acceptance. While there is some evidence that counterarguments are most critical, support arguments and source derogations also impact on communication effectiveness. The type of stimulus input (e.g., print versus audio) impacts differentially on the importance of counterarguing, source derogation and support statements. Other variables that impact on the generation of cognitive responses are distractions from counterarguing and pre-existing beliefs and attitudes.

Factors Affecting Cognitive Responses

Several factors can influence cognitive responding. Of primary importance is the finding that distraction from counterarguing can enhance message acceptance (Festinger and Maccoby 1964, Osterhouse and Brock 1970, Roberts and Maccoby 1973, Keating and Brock 1974). Generally, reducing counterarguing seems to lead to greater message acceptance. This position is in line with cognitive processing theory as presented: if a receiver cannot counterargue while receiving a communication, the chance that the communication will be favorably received should be enhanced. However, Festinger and Maccoby (1964) qualified this hypothesis to situations where the receiver was initially opposed to the advocated position. The majority of this literature studied distraction effects in order to reinforce the cognitive responses theory. Experimental designs (e.g., Keating and Brock 1974) usually involved an external distraction (flashing lights, attention to non-communication stimuli) while simultaneously receiving the communication.

While theoretically relevant to information processing, this experimental approach has been criticized as artificial and not relevant to advertising design (Nelson, Duncan and Frontczak 1985). Nelson et. al. (1985) attempted to move the distracting stimulus from one external to the communication to one within using humor. This approach is different from previous distraction designs as it utilizes stylistic aspects of the communication to alter receiver responses. Nelson et. al. (1985) theorized that humor in the message might distract the receiver from counterarguing. Therefore, receivers may be prevented from counterarguing or responding to the entire message by an external distraction (e. g. , as in Keating and Brock 1974); or distracted from counterarguing certain aspects of a communication by factors in the communication. The latter position includes the use of stylistic manipulations to alter responding to informational content. That messages may be able to influence cognitive responding by varying stylistic or non-informational content is a key question addressed by the proposed research. However, susceptibility to within message manipulations may also be interactive with the receiver's level of involvement with the position advocated.

Receiver Involvement with the Message Topic

Logic and common sense would indicate that receivers would respond positively to communication consonant with their personal beliefs, and would tend to reject a communication counter to their beliefs (Perloff and Brock 1980). When a receiver actively responds to a communication with positive or negative thinking, he or she usually must use some ex-

isting point of reference. In line with Greenwald's position (1968) that active responses are key to what is remembered and incorporated into subsequent attitudes and behaviors or receivers, the referent for message supplied information must be the receiver's existing thoughts and attitudes. This area has been approached from the perspective of level of involvement of the receiver and the degree of discrepancy between a communication and a receiver's position.

The most logical position is messages that are highly discrepant with the receiver's position and are in an area of high involvement will elicit the greatest counterarguing (Perloff and Brock 1980). However, messages can be varied such that they are difficult to counterargue; in this case they are more effective even if they are counter to the receiver's opinions. For example, forewarning receivers that a communication is persuasive resulted in greater counterarguing and more negative attitude than not forewarning when both were in a high involvement situation (Petty and Cacioppo 1979a). Apparently forewarning motivated counterarguing, thus making the message less persuasive. The non-forewarned group was less prepared to counterargue, and therefore more persuaded. The authors speculate that forewarning elicited a motivational state of reactance (Brehm 1966, Brehm and Brehm 1982) causing the increase in counterarguing.

Another approach investigating the effects of level of involvement on counterarguing by presenting strong or weak arguments to high or low involved subjects (Petty and Cacioppo 1979b). A theoretical aspect being examined was that strong arguments should be harder to counterargue and therefore more persuasive, thus lending support to the idea that the po-

sition advocated in a communication is not as important as the cognitive responses generated by the message. Following the position discussed earlier that high involvement situations result in greater attention to the message's informational content, strong arguments have more virtues (in that they are more difficult to counterargue) than weak ones and therefore should be more accepted by the receiver. This was confirmed by the study's findings.

Although argument quality is clearly an informational content variable, recent evidence indicates that stylistic manipulations can interact with informational content variables to enhance or detract from communication effectiveness. Rhetorical questions, where information is presented in the form of a question and the answer is implicit within the question and is understood by both sides, has influenced communication effectiveness (Petty, Cacioppo and Heesacker 1981, Swasy and Munch 1985). Petty et. al. (1981) found that communications with strong arguments, low personal relevance to the receiver and rhetorical questions were more persuasive than the same communication with rhetorical questions replaced by declarative statements or with weak arguments. Apparently the rhetorical questions caused the receiver to attend more actively to the communication; this in turn led to more cognitive processing enhancing the strong arguments. However, when high involvement issues were used, rhetorical questions apparently distracted receivers from processing the communications fully as strong arguments were not as effective when combined with rhetorical questions. However, rhetorical questions improved the persuasiveness of weak arguments as subjects were hypothesized to be distracted from fully attending to the communication.

Swasy and Munch (1985) hypothesized that rhetorical questions may change how a receiver responds to a persuasive communication by causing more source-oriented responding (i. e. , source derogation) and less message-oriented responding. Rhetorical questions in a low involvement/strong argument situation would cause more message related processing as there is little motivation to resist the attempt to be persuaded. However, in high involvement situations rhetorical questions, particularly if repeated, should increase the perception of pressure and therefore cause more source-oriented responding. This explanation differs from the Petty et. al. (1981) position that the rhetorical questions are distracting, instead hypothesizing that responding shifts from message oriented to source oriented thoughts. Strong arguments would thus become less effective, while weak arguments may become more effective as they would not be seen as pressuring as strong ones.

The above differences in processing termed by Petty and Cacioppo (1981) as the "Elaboration Likelihood Model" or ELM that defines two different routes for processing communications. The central route is characterized by issues that are highly relevant for the receiver, the receiver's attitudes are directed towards the issues presented and the receiver's processing is rational (not necessarily following the laws of logic, "psycho-logical" to the receiver). The opposite route, the peripheral one, involves minimal cognitive processing, utilizing peripheral cues such as source credibility or attractiveness with message processing taking a secondary position to source processing. In the peripheral route message quality and argument strength may be secondary to other factors;

in the central route message quality and argument strength are seen as critical.

Along with the level of involvement being used as a variable determining central versus peripheral processing, message complexity in terms of quantitative versus non-quantitative information has been studied. Yalch and Elmore-Yalch (1984) varied the degree of quantitative information and source credibility in communications. They hypothesized that increasing amounts of quantitative information should force receivers into a peripheral mode of processing where source cues would be more important than when information was given in a qualitative manner. While the authors did not check for level of involvement (the communication concerned the use of automatic banking teller machines), they found that increasing quantitative information resulted in greater utilization of source as a cue.

Source characteristics have been theorized and shown to influence responses to persuasive communications (Aaker and Myers 1982, Sternthal, Dholakia and Leavitt 1978, Toy 1982.) When sources are seen as highly credible, then receivers usually respond with less negative responding or counterarguing. Highly credible sources are most effective when counterarguing would have preserved a receiver's existing beliefs. Therefore, a highly credible source should inhibit counterarguing and be most effective when the receivers are initially opposed to the source's position. Conversely, when a source is lower in credibility but presenting a position the receiver endorses, then the source will be more effective than a highly credible one. This rather paradoxical position

is due to the receiver generating support arguments to counter the perceived lower status of the source (Sternthal, Dholakia and Leavitt 1978.)

Other variables could also influence responses to directiveness: if directiveness is perceived as an attempt to constrain personal freedoms, then reactance (Brehm and Brehm 1982, Clee and Wicklund 1980) as a motivational state could be aroused and receivers could be expected to act in ways to either assert or regain threatened freedoms. It is also feasible to expect personality variables to moderate responses to directiveness. Along with reactance, different people may respond differentially to attempts to control their responses. Locus of control (Rotter 1966) or the perception that consequences incurred in one's life are the result of one's behavior (internal locus) or are more or less random (external locus), could moderate responses to directiveness. Intuitively one would expect high internal locus of control to respond more negatively to high directiveness than a high external locus of control. While neither source credibility or personal predispositions such as personality are directly studied in this dissertation, that these factors may influence responding are incorporated into experimental design. Recognition of potential background factors can enhance validity (Lynch 1982).

Theoretical Hypotheses about Directiveness and Cognitive Processes

Based on the above discussion, the following theoretical hypotheses are offered:

TH1: Low relevance or involvement communications will be more persuasive with a directive style than a suggestive style.

This hypothesis is based on the premise that peripheral processing is characterized by less resistance and less processing of message content. Therefore, the directiveness should act as effort minimizing factor by leading the receiver rather than encouraging the receiver to make up his or her own mind. The suggestive style with its encouraging the receiver to choose for themselves should require more cognitive effort and therefore be less effective.

TH2: Highly relevant or high involvement communications should be more persuasive with a suggestive style rather than a directive style.

Petty and Cacioppo (1981) contend that communication aspects that invite involvement or processing should enhance the persuasiveness of the communication. The suggestive style, by encouraging the receiver to make up his or her own mind, should thereby enhance processing.

TH3: The effect size should be larger for different levels of directiveness in low relevance or low involvement situations than in high relevance/involvement situations.

This hypothesis is based on the contention that peripheral cues will be more important in low relevance/involvement situations. To the extent that receivers are more sensitive to peripheral cues, stylistic differences should be more pronounced than in a high involvement situation where they are presumed to be more sensitive to informational content.

Summary of the Cognitive Response Model

The cognitive response model hypothesizes that communication acceptance will be a function in part of how the receiver cognitively responds to the communication. Immediate responses to a communication have been shown to correlate with attitudes about the subject matter, and message structure variables and external variables such as distraction that interfere with cognitive responding have been shown to enhance or detract from persuasion. The receiver's existing position on the subject matter is also key in message acceptance: highly involved receivers should be more attentive to message content than low involved receivers. Finally, stylistic manipulations can influence responses to informational content and to the receiver's level of involvement. That communication variables other than informational content can influence the degree of persuasion is key to understanding the potential role of directiveness in promotional communications. The next area of discussion is the impact of directiveness on perceptions of the source as predicted from attribution theory using message sidedness as an empirical base.

Attribution Theory and Informational Content in Promotional Communications

As directiveness or attempted control is concerned with either stressing the choices of the receiver to accept or reject communication, or with attempting to make these decisions for the receiver, it is logical to expect directiveness to influence the receiver's perception of the

communication and/or communicator's intent. As intent can be defined as what the communicator is perceived as attempting to accomplish by the communication, it can be seen as a relational concept. In other words, intent is how the sender would like the receiver to respond to the informational content, and therefore addresses the sender-receiver relationship. The perception of intent is a key concept in attribution theory approaches to persuasion. Attribution theory (Kelly 1973, Mizerski, Golden and Kernan 1979) addresses "how people make causal explanations about how they answer questions beginning with why." It theorizes that in attempting to "search for order and meaning in . . . environment, (that people) attempt to explain the causes of the events they observe" (Mizerski et. al. 1979).

This process has three main components. First, receivers are motivated to find out why the communication is being delivered. Next, the whys of a communication can be divided into two main groups: internally motivated, where the receiver believes the information given is a sincere belief of the communicator; and externally motivated, where the communication is being given for reasons other than personal beliefs or the stated purpose of the communication. Obviously, communications in the latter category should be less credible than the former. The final aspect of an attribution theory perspective is the process by which either external or internal attributions are generated. External attributions are more likely when several alternative explanations exist for the communication (the discounting principle) or when some factor is present that normally should have inhibited the communicator from delivering the communication (the augmentation principle).

At the broadest level there are two distinct situations that determine the attribution process: whether receivers have had the opportunity to see several instances of a particular event or class of events, or just a single episode (Kelly 1973, Mizerski et. al. 1979). As this study is concerned with immediate responses to a single ad presentation, the discussion will center on processes explaining responses to a single presentation. These processes are discussed beneath.

The discounting principle postulates: "The role of a given cause in producing a given effect is discounted if other plausible causes are also present" (Kelly 1973). For example, if an ad claims absolute superiority for a product, the discounting principle could predict that the causal statements are not being given because they are "true" (which would be an internal attribution), but instead because advertisers are trying to sell products (an external attribution). However, if an ad mentions two-sides (e.g., gives some negative information along with the positive) receivers may be more likely to attribute the intent of the ad to presenting straight forward information about the product.

The augmentation principle states that communications are more believable if the communication exists despite some inhibiting event (Kelly 1973). For example, when a source gives two-sided as well as one-sided information about a product or position, the presence of the two-sided information can be seen as potentially damaging to the communication. That the communication's effectiveness could be damaged by voluntary information is hypothesized to make the communication more believable. The augmentation principle is highly related to the discounting principle as when inhibiting factors are present, alternative

explanations for the communication may be ruled out, therefore leading to more internal attributions.

Relating Attribution Theory to Directiveness

As has been discussed, attribution theory can be seen as relational in that the receiver attempts to infer things about the communication or how it is meant to be taken. The believability of the communication is a function of the degree of alternative explanations for the communication. Directive communications are probably more common in advertising situations, and hard sell techniques can be highly directive communications: ones that attempt to put the consumer in a position where there is no alternative but to purchase. Such communications may be seen as putting the receiver in a position that benefits the sender (i. e., purchasing a product, holding some belief or opinion) in ways not revealed in the communication (i. e., making a profit, gaining support). If this is the case, then directive communications may elicit more external attributions.

The suggestive style of communication presents an intriguing alternative to directive communications. If a communication encourages the receiver to make up his or her own mind and stresses that the receiver is to choose how to respond, then the attributions that the communication is pressuring the receiver are more unlikely. If a communication is seen as directive, regardless of informational content, reducing the directiveness may increase the persuasiveness of the message. To the degree that receivers are responding to something about the message (such

as directiveness) rather than the informational content, they are responding to stylistic variables. If receivers are responding to stylistic variables rather than the informational content, changes in style should result in changes in responses to the communication. It is also possible that stylistic concerns can interact with informational content as has been suggested in using the cognitive processing model to study directiveness.

Directiveness, Attribution Theory and Communication Sidedness

Message sidedness studies (e.g., Sawyer 1973, Settle and Golden 1974, Smith and Hunt 1978, Belch 1981, Swinyard 1981) provide a stream of research that have studied an informational content variable while not systematically controlling for potential effects of directiveness. While different theoretical approaches have been used, variants of attribution theory are most common (Settle and Golden 1974, Smith and Hunt 1978, Swinyard 1981, Belch 1981). As the goal of this dissertation is to experimentally examine the potential role of directiveness in promotional communications, message sidedness and attribution theory have potential import. First, attribution theory is relevant because it makes predictions based on the perceived intent of the communication and can be used as a guide for possible effects. Message sidedness offers an opportunity to study the effects of directiveness on an informational content manipulation. The latter is especially relevant as studies of sidedness have attributed receiver responses to sidedness as a function of sidedness

alone, rather than as a function of potential stylistic as well as informational content factors.

The most obvious possibility is that receivers of one-sided messages respond to something about a one-sided message along with specific responses to the informational content. If this is true, then a successful stylistic change that leaves the sidedness dimension intact while altering stylistic concerns should modify responses to the communication. If this occurs, then the conclusion drawn by researchers that receiver responses were to message sidedness alone is brought into question. If stylistic changes do not alter responding, then the conclusion that receivers are specifically responding to message sidedness gains support. While it is intuitively speculative, it is possible that receivers who found one-sided communications less credible than two-sided communications were responding to pressure to be persuaded rather than sidedness per se. A more suggestive style should reduce this pressure, thus enhancing the persuasiveness of the one-sided communication. This contention will be formally proposed in the section dealing with theoretical hypotheses concerning sidedness, directiveness and attribution theory. First, a discussion of findings about sidedness is given.

Theoretical Approaches to Message Sidedness

The reasons that receivers respond differently to two-sided communications has been somewhat controversial. Early research (Settle and Golden 1974) used a "covariance" form of attribution theory, postulating that as one-sided claims are the norm, or always covary with advertisers,

then the causal attribution is that being an advertiser (i.e., a seller) rather than sincerely motivated is the cause of the claims. However, given that Settle and Golden (1974) used single stimulus presentations, others have commented that a discounting variant is more appropriate than a covariance approach (Smith and Hunt 1978, Golden 1977). Subsequent research (Smith and Hunt 1978, Swinyard 1981) have employed an approach similar to discounting - the correspondent or augmentation variant (Petty and Cacioppo 1981). Here receivers respond to the likelihood or prior probability that an ad or source would engage in two-sided communications. This is hypothesized to be low, and therefore receivers are more likely to make internal attributions to the ad based on the novelty of the approach. This is based on the augmentation principle that when one acts in a way that is unexpected or there are reasons for not acting in that particular way, the communication is more believable. Following an attribution theory approach, receivers are more likely to assume the individual is acting from his or her own beliefs rather than from situational pressures or factors.

Some studies have not used any overt theoretical base, instead building logical cases for differences in responses to two-sided versus one-sided communications (Sawyer 1973, Belch 1981, Etgar and Goodwin 1982). These approaches make indirect references to attribution theory or "inoculation" theory (see Bither, Dolich and Nell 1971), however none have a clearly expressed theoretical framework from which they are working.

In summary, the attributions that people are assumed to make to message sidedness are based on the potential number of alternative ex-

planations for the various claims given. If the communication's content is unexpected, or the source is viewed as acting in a unique style, then receivers are more likely to make internal attributions about the source. Two-sided communications are theorized to have fewer alternative explanations (such as wanting to persuade the receiver or being paid to deliver the communication) and as having lower prior probability. According to attribution theory, these factors make them more believable. Next follows a discussion of empirical findings of one-sided versus two-sided communications.

General Findings of Message Sidedness

General findings (Swinyard 1981, Smith and Hunt 1978, Etgar and Goodwin 1982) indicate that subjects respond with less counterarguing when responding to two-sided communications than one-sided. Two-sided messages have been rated more credible than one-sided, with higher ratings of truthfulness, intent to purchase, and confidence in the claims. All studies have found at least one and usually more measures indicating greater receptivity of two-sided communications. A detailed discussion of studies of sidedness is given in Appendix B. Summarizing that discussion, the following general propositions are offered about one-sided versus two-sided communications:

1. Two-sided communications are more likely to elicit internal attributions about the source or the communication's motivations.
2. Two-sided communications tend to elicit higher ratings of positive attributes such as believability and truthfulness.

The next area presents theoretical hypotheses relating to directiveness, message sidedness and attributional processes.

Theoretical Hypotheses about Directiveness, Attributional Processes and Communication Sidedness

This section presents theoretical hypotheses about the effects of directiveness in communications on attributional processes and on communication sidedness. As the purpose of the dissertation is an exploratory study of varying message structure and not a test of theory per se, attribution theory is used to generate hypotheses. The incorporation of message sidedness allows studying directiveness' potential impact on an informational content variable, allowing comparison of how a stylistic variable may interact with responses previously thought to be a function of informational content alone. Based on the preceding discussions, the following theoretical hypotheses are offered.

TH4: Directive communications will elicit greater ratings of external motivation than less directive communications.

Intuitively, the more direct a communication, the more likely it should be seen as an overt attempt at persuasion. Directiveness is the degree to which the ad draws conclusions and/or directs potential actions of the receiver. From an attributional standpoint, highly directive advertisements may yield more external attributions about the ad or source than one's that are not so direct. Receivers, when hearing claims such as "We're the best, you wouldn't find any better," could attribute the

reason for the message to a strong desire to persuade the receiver. This in turn opens up the alternative explanations as to why the ad or source has such a strong desire to persuade the receiver. Explanations such as personal gain for the source or outside pressures (e.g., competitive pressures) should become more plausible.

A less directive style, where the ad doesn't overtly attempt to draw conclusions for the receiver should be received differently. First, the perceived pressure to adopt the ad's position should be less as directiveness diminishes. By not forcing a conclusion directly on the receiver and instead encouraging the receiver to draw his or her own conclusions could lower negative responses to the ad's style and therefore increase receptivity. TH5 is related to TH4 as pressure or intent to persuade is hypothesized to be related to higher ratings of external motivation.

TH5: Directive communications will be perceived as having a greater intention to persuade than less directive communications.

The final hypothesis addresses the possible interaction between sidedness and directiveness.

TH6: One-sided, directive communications will be rated lower on measures of acceptance such as informational content acceptance, liking and behavioral intention than one-sided, suggestive communications.

It is plausible that by not studying stylistic aspects such as directiveness the attribution theory/informational content approach may have used unintentional hard sells. Some of the negative responses to one-sided communications may not have been a function of message sidedness

alone, but also the result of highly directive communications. Directiveness could have exacerbated responses to one-sided messages. As hypothesized, if a major aspect of one-sided messages' tendency to elicit negative responses is directiveness rather than sidedness per se, then reducing the degree of directiveness may alter previously found responses to sidedness.

In summary, directiveness is hypothesized to affect perceptions of external versus internal motivation for the communication, the receiver's acceptance of the communication and perceptions of one-sided versus communications. These hypotheses are offered as a basis for examining directiveness.

Summary

Directiveness has been defined as an example of relational communication that attempts to control or instruct the receiver in how to respond to a promotional communication. Its difference from informational content is that directiveness addresses the sender-receiver relationship while informational content addresses immediate subjects at hand such as product attributes. Using cognitive processing models and attribution theory as conceptual guides, varying directiveness should impact on message acceptance in different ways; crossing varying directiveness with message sidedness allows an examination of directiveness' impact on an informational content variable. These positions will be operationalized into experimental hypotheses and incorporated into an experimental design in Chapter III.

CHAPTER III: RESEARCH DESIGN

INTRODUCTION

This chapter presents the experimental design for examining the effects of two levels of directiveness on receiver responses to a persuasive communication. Three independent variables were manipulated: 1) directiveness; 2) message involvement; and, 3) message sidedness. Previous discussion has hypothesized their impact on communication reception. This chapter will present several areas. First, research objectives will be discussed. Second, experimental hypotheses derived from the theoretical hypotheses will be offered. Next, the design is discussed including independent and dependent variable operationalization, subject selection and manipulation checks. Finally, an overview of the statistical analysis is discussed.

Research Objectives

The main research objective was to provide a test of communication directiveness on receiver responses guided by the cognitive processing model and attribution theory. As has been stressed, theory is not being tested per se, but instead is being used as a structure in which to make predictions. Given that directiveness is a relatively new construct, incorporating directiveness into existing theory increases nomological

validity (Cronbach and Meehl 1955) by giving the new construct a frame of reference.

As directiveness has not been formally studied, this is exploratory research. In conducting exploratory research, a main concern is control over extraneous sources of variance that may mask underlying effects (Churchill 1979, Calder, Tybout and Phillips 1981) and therefore internal validity is a main concern. Key to realizing this goal are homogeneous subjects and control over the experimental setting (Calder, et. al. 1981), as the main goal is to identify whether or not an effect exists. While theory is employed, establishing empirical effects of new constructs is also key to subsequent construct validity and theory building (Cronbach and Meehl 1955, Carmines and Zeller 1979, Ray 1978).

In summary, the research objectives were to test for effects of directiveness in a controlled setting. Hypotheses were tested to establish an empirical basis of the effects of directiveness.

EXPERIMENTAL HYPOTHESES

The following experimental hypotheses are based on the six theoretical hypotheses given in Chapter II. First, hypotheses based on the cognitive response model are given, followed by hypotheses based on attribution theory. A summary table of experimental hypotheses is given in Appendix C.

Hypotheses Based on the Cognitive Processing Model

The first set of hypotheses is based on greater attending to stylistic variables in a low involvement/low relevance communication:

(TH1) Low relevance/low involvement communications will be more persuasive with a directive style than a suggestive style as measured by:

EH1.1: Reduced negative cognitive responses to the low involvement, directive communication.

EH1.2: Higher ratings of overall message acceptance and behavioral intention in the directive, low involvement condition.

The major measures of interest are cognitive responses; these are directly related to the cognitive processing model. The ratings of general acceptance are not directly tied into the cognitive model, but are designed to be another measure potentially tapping acceptance of the message style and acceptance of the informational content. This point also applies to the next two series of experimental hypotheses.

The next hypothesis predicts that the opposite of TH1 will occur in a high involvement/high relevance situation:

(TH2) High relevance/high involvement communications will be less persuasive with a directive style rather than a suggestive style as measured by:

EH2.1: Reduced negative cognitive responses to the low involvement, directive communication.

EH2.2: Higher ratings of overall message acceptance and behavioral intention in the directive, low involvement condition.

The last cognitive model-based hypothesis predicts a larger impact for stylistic variation in the low involvement or peripheral mode than in high involvement.

(TH3): The effect size will be larger for different levels of directiveness with low relevance/low involvement communications than with high relevance/high involvement communications as measured by differences in cognitive responding (EH3.1) and by ratings of overall message acceptance and behavioral intention (EH3.2).

Hypotheses Based on Attribution Theory

The following experimental hypotheses are based on the previous discussion of directiveness and attribution theory. The goal is to study the link between directiveness and attributions about motivations for the communication. The first hypothesis is based on ratings of the message's intent:

(TH4) EH4: Directive communications will elicit greater ratings of external motivation than less directive communications.

The next hypothesis tests the ability of directive communications to increase the perception of attempting to persuade the receiver. It tests the likelihood that attempt to control responses is also perceived as pressure to adopt the communication's position. If directiveness in general is perceived as a greater intent to persuade than more suggestive communications, then EH5 helps confirm the impact of directiveness as a stylistic variable. To the extent that EH5 is confirmed, responses to communications that were thought to be to informational content (e.g.,

sidedness) may also have been to directiveness. This possibility will be formally tested in EH6.

(TH5) EH5: Directive communications will elicit higher ratings of perceived intent to persuade than less directive communications.

The final experimental hypothesis directly tests the possibility that previously found responses to message sidedness were in part due to a perceived intent to persuade rather than sidedness.

(TH6) One-sided, directive messages will be less effective than suggestive, one-sided communications as measured by measures of general acceptance and behavioral intention.

Design

The hypotheses were tested in a 2 X 2 X 2 factorial design manipulating communication directiveness (two levels - direct and suggestive), communication topic involvement (two levels - high and low) and message sidedness participation. Each subject read one promotional communication from one of the 8 conditions and completed the dependent measures; the design is between subjects. There were 15 subjects per cell with a total N of 120. A pretest was administered to attempt to identify general subject position on the persuasive communication topic. The pretest consisted of 20 Likert items about areas such as attitudes towards grades, difficult versus easy courses, attitudes towards testing in general and related items. The subjects were administered the pretest 2 weeks before the experiment in order to minimize biasing responses to the experimental manipulations.

Independent Variables

The Communication Topic

Given the exploratory nature of the proposed study, two key issues have already been discussed: the need for homogeneous subjects, and a communication topic to which subjects can relate. Three more considerations for this study are a topic that can allow for high involvement/low involvement manipulations, one that can incorporate one-sided versus two-sided information and allow for pretesting subjects on existing attitudes and opinions. Petty and Cacioppo (1979) and Swasy and Munch (1985) have successfully used an experimental design using a communication advocating comprehensive exams for undergraduate business majors as the communication topic that allows for all these factors.

In order to maximize subjects' attending to the communication, a written communication was used. Written communications have been shown to encourage more overall cognitive responding than audio communications, and they have been shown to increase the importance of all types of cognitive responses rather than just counterarguments (Wright 1973). The use of a written communication also helps reduce potentially unwanted source by content interactions and paraverbal variables such as voice intonation and other non-verbal cues (Mehrabian 1972). The experimental instructions stated that students were participating in a test of mail promotional communications, a growing area in marketing. Subjects were instructed they were to assume the communication would have been addressed to them. A copy of experimental instructions are given in Appendix H.

Given that communication structure is the major variable of interest, a source with minimal identifiable characteristics was used to reduce possible source effects (e.g., "The Business Faculty Committee"). Each of the independent variables are discussed next.

Directiveness

This variable represents the degree of control attempted over how the receiver is to take the information. This manipulation was created by phrasing qualifiers, or those aspects of the communication that address how the receiver is to respond, in either highly directive or suggestive styles. The difference between the two is that the suggestive qualifiers do not directly instruct the receiver in how to respond - they either suggest possible responses or point out choices. Examples of the directive and suggestive style of communicating are given in Table 2.

A major question is the separation of directiveness qualifiers from the informational content. The directiveness aspects are statements apart from the content designed to address how the receiver is to take the information and the sender-receiver relationship. Highly directive statements controlling words such as "you will find" versus the less controlling "you may find."

As can be seen from the examples, the directive condition attempts to limit responses, while the suggestive style allows for more flexibility in responding. Also, the informational content in both is highly similar.

In order to pretest the validity of this manipulation, judges rated the stimulus presentations on the degree to which the communications at-

Table 2. Examples of Direct and Suggestive Communications

<u>Direct</u>	<u>Suggestive</u>
"The idea that Freshman purchase computers is long overdue."	"You may feel that the idea that Freshman purchase computers is long overdue."
"You should write better papers with word processing."	"You may find yourself writing better papers with word processing."
"You have no alternative but to accept the position that it is unfair to require students to purchase computers."	"You may have accepted the position that it is unfair to require students to purchase computers."
"Students will not learn certain"	"Some have advocated that certain skills unless forced."
"You will find yourself with a \$2000 toy you don't want to play with."	"What if you found yourself with a \$2000 toy that you didn't want to play with?"

tempt to control the responses and choices of the receiver. As directiveness is a relational construct (i.e., a communication can only be labeled as directive in comparison with another which is more or less directive) judges rated a suggestive compared to a directive communication. In order to prevent the sidedness dimension from interacting with directiveness judges only evaluated degree of directiveness within a sidedness condition (i.e., one-sided directive with one-sided suggestive).

Message Involvement

As has been previously mentioned, the involvement manipulation has been used in previous studies. It is rather ingenious as it allows the exact same information to be presented in the high involvement situation as in the low involvement situation. In the low involvement situation, subjects are instructed they are reading a proposal for a distant university to institute comprehensive exams for undergraduate business majors. In the high involvement situation they are instructed that the proposal is under consideration for their institution. This allows for presenting identical information while only changing the name of the institution.

Message Sidedness

The sidedness variable is the existence or non-existence of negative information about the issues in the communication. Of interest is

how exactly to present the negative attributes. This can be approached in two different manners. First, an inoculation or refutational approach (Sawyer 1973, Bither et. al. 1971) can be employed where negative information is presented and then refuted. These approaches are based on inoculation theory, where the strategy is to cause the receiver to resist (i. e. , counterargue) subsequent competitor advertising. However, this study is concerned with receptivity toward communications rather than subsequent loyalty and the refutational approach will not be employed. Smith and Hunt (1978) and state the negative claim without refutation, using a "however, we should tell you that . . ." style of approach; a similar approach was used in this study. The two-sided information was introduced with a "no plan is perfect" disclaimer that introduced some potential difficulties in the proposed comprehensive exams. Swinyard (1981) employed a similar approach by using the statement "What we don't do for you." In the one-sided condition just the positive claims were presented, with no mention of the negative claims.

Subject Selection

Subjects were students majoring in business. They received academic credit for participating in the study. The use of students as subjects is appropriate for reasons relating to the desire for experimental control (Calder et. al. 1981). The stimulus presentation is "real" for them; it is feasible that a comprehensive exam could be developed and quickly implemented. Such a procedure would have substantial impact on most students' lives.

Measures of Pre-existing Attitudes

Although previous studies (Swasy and Munch 1985, Petty and Cacioppo 1979) have not controlled for prior opinions and attitudes about the issue of comprehensive exams, it is feasible that subjects' attitudes towards upgrading academic quality may vary. Therefore, an attitudinal questionnaire was administered to subjects two weeks prior to the main experiment under the guise of measuring student attitudes in general. Contained within this were general questions tapping agreement or disagreement with actions that enhance the quality of education by requiring more effort. Specific use of pre-existing attitudes will be discussed in the analysis section.

Dependent Measures

Two general types of dependent measures were employed: immediate responses ("cognitive responses") to the communication and Likert scale items representing general affective and cognitive responses to the communication. Each of these are discussed beneath.

Immediate Cognitive Responses

A main measure of persuasive communication has been subjects' immediate responses, usually termed cognitive mediating responses (Wright 1980.) Subjects were given adequate time to read (pretesting indicated 4 minutes was enough for even the slowest reader to finish reading) and

ponder the promotional communication. Then subjects were given three minutes to list their immediate thoughts while reading the message or after reading the message. Subjects were given traditional thought listing instructions stressing that any response is appropriate (Wright 1980, Petty et. al. 1981). After completing the thought listing subjects completed the Likert items.

Thought responses were content analyzed into source/ad derogations, source/ad bolstering, counterarguments and support arguments. This procedure is discussed in Chapter IV.

Measures of Overall Acceptance, Perceived Intent to Persuade and Behavioral Intention

The overall acceptance measures were designed to tap general responses to the communication. They were Likert items generated from previous studies (Goodwin and Etgar 1980, Smith and Hunt 1978) as well as items generated for this study. The items center on affective (e.g., liking, trustworthiness) and cognitive/informational content areas (argument quality). A listing of items is given in Appendix D.

The measures of perceived intent to persuade are designed to tap the degree that the communication is perceived as trying to persuade or pressure the receiver. The measures of behavioral intention attempts to tap the likelihood that the receiver would act on the information in a manner requested by the communication.

Measures of Internal/External Motivation for the Communication

These Likert items attempt to tap the likelihood that the receiver perceives the source's motivation as internally driven or externally driven. These measures asked about the likelihood that the source was acting from his or her own beliefs or values versus for other reasons such as outside pressure. Specific questions are given in Appendix D.

Designing the Dependent Measures

In the design of dependent measures, it is imperative that the measures reflect the underlying concept they are supposed to measure, commonly referred to as construct validity (Carmines and Zeller 1983.) The use of cognitive responses has been well documented (Petty et. al. 1981) and has been shown to relate to other measures of message acceptance (Wright 1980, Olson, Toy and Dover 1982).

In order to gain some index of the reliability of the Likert items, a pretest was conducted with subjects drawn from the same population as the experimental ones. Subjects were instructed that they had just read a persuasive communication with the characteristics being "true" and "accurate" - one that is believable and they are tending toward accepting the position offered. They then completed the Likert items as though they had actually read the communication. Two weeks later the same subjects were given the opposite instructions, i.e. that they have just read a communication that did not strike them as "true" but instead as an attempt to to persuade them to the communication's point of view; they then com-

pleted the Likert items. The results of scale development are given in Chapter IV.

The measures of general acceptance were designed from a face validity position to measure responses to informational content and affective areas such as liking and trustworthiness of the communication. If the summated scales proved reliable, they would be used as dependent measures; if not individual items would be used as in previous studies (Goodwin and Etgar 1980, Etgar and Goodwin 1982). As reported in Chapter IV the scales were reliable and the items summated into a single scale.

Manipulation Checks and Pretesting

Manipulation checks are given in Appendix D. Three items, each one checking for sidedness, directiveness and involvement were employed. After completing the Likert dependent measures three questions, each examining one of the experimental manipulations were asked. These enabled a test of the degree that subjects perceived the manipulations as intended.

Analysis

Initial Attitude as a Covariate

It is possible that initial attitude toward the subject matter may influence responding. In particular it could inflate error variances making detection of differences difficult. This is particularly relevant

given the exploratory nature of the study and the lack of prior estimates of effect size of directiveness. In situations such as this, partialing out variance in dependent measures due to an underlying variable can reduce error variance and make response distributions more normal (i.e., centrally dispersed around the mean rather than multi-modal) (Keppel 1973, Spector 1981). If inclusion of a covariate reduces overall variance, statistical power will be increased.

Covariate scores were correlated with dependent measures and for significant correlations ($\alpha < .05$) initial attitude were treated as a covariate. This is logical; if the covariate does not correlate with the dependent variable the two are independent.

Cognitive Responses

Cognitive responses (support arguments, counterarguments, source derogations, source bolstering) were summed for each classification and analyzed by the Analysis of Variance (ANOVA).

Scale Dependent Measures

Scale measures (intent to persuade, communication acceptance, behavioral intention and internal/external source motivation) were analyzed by ANOVA. Given the use of an alpha of 0.10 rather than the more conservative and traditional 0.05 as discussed below, a Multivariate Analysis of Variance (MANOVA) was conducted as an indicator of the likelihood that differences in individual measures were not the result of chance

enhanced by the use of multiple measures. This procedure helps protect experiment-wide alpha levels when individual ANOVAs are run on each of the Likert scales.

Alpha Level and Statistical Power

As this is exploratory research, and potential effect sizes and error variances were unknown, an alpha level of .10 rather than the traditional .05 was employed. While increasing the possibility of a Type I error, this also increases power to detect differences (Sawyer and Ball 1981). The inclusion of a covariate, an alpha of .10 rather than .05, the use of a potentially homogeneous subject population and the control of a potentially interactive variable (involvement) as an independent variable all could help increase power (Keppel 1973).

This ends Chapter III; the next two chapters discuss the completed results of the study and a discussion of the findings.

CHAPTER IV: RESULTS

INTRODUCTION

This chapter is divided into two main sections: first, aspects relating to testing dependent measures are reported - devising the stimulus letters, manipulation checks, reliability of dependent measures, consistency between dependent measures, power analysis and the results of the attitudinal questionnaire. Second, the results of the experimental hypotheses are presented.

Devising The Stimulus Letters

The main source of content information used in the letters was Petty and Cacioppo (1979). Only the arguments used in the "strong" condition were used to maximize the impact of the letter. The sidedness dimension was created by adding a paragraph after the positive information discussing possible drawbacks to the proposal and then refuting these points. Copies of the letters for the different experimental letters can be found in Appendix G.

The involvement dimension was created labeling the letters either from "Western Michigan University" (the low involvement condition) or "East Carolina University" (the high involvement condition) as has been previously discussed. Other than this change the letters were identical

across the high and low involvement conditions (excepting the other experimental manipulations.)

The Directive/Suggestive dimension was determined by formal and informal discussions about various wordings of persuasive communications with members from the subject population (college business majors.) The directive condition contained wording directing actions and beliefs, and did not imply a choice of either accepting or rejecting the communication. The suggestive condition attempted to reverse this style, and stressed that it was the student who was to decide on whether or not to support the issue.

The Directive/suggestive condition was pretested by having subjects rate one-sided, low involvement, directive and suggestive letters. Subjects were drawn from the same population that was to be used for the actual study. Subjects read a definition of directiveness, read both the letters and then rated each on a seven point scale of directiveness with a "1" being highly directive and a "7" being not directive. A copy of the directions and scale is given in Appendix H. The mean of the directive condition was 1.81 and the mean of the non-directive condition was 5.31. A T-test for differences between means was significant ($t = 8.37$, $df = 15$, $p < 0.001$.) Therefore the directive communication was perceived as attempting to be more controlling and limiting of a receiver's potential responses.

Manipulation Checks

Each of the independent variables was subjected to a manipulation check. After completing all dependent measures subjects responded to a question asking if the communication they read encouraged them to make up his or her own mind (question #22 in Appendix D). A T-test for means was significant ($t = 3.15$, $df = 118$, $p < 0.002$); the mean for the directive condition was 4.42; for the suggestive condition 3.48. The higher the response the less subjects agreed that the communication encouraged them to make up their own mind. These results indicate that subjects perceived the directive communication as encouraging the receiver to make up his or her own mind less than the suggestive communication.

The check for sidedness had subjects respond to a statement that the letter shared negative as well as positive information about the issue (question #23 in Appendix D). A T-test was significant ($t = 6.23$, $df = 118$, $p < 0.0001$) with the mean for the one-sided condition 5.47; for the two-sided condition the mean was 3.63. The higher the response the greater the disagreement with the statement. These results indicate that the subjects perceived the one-sided communication as not presenting negative information about the proposal while the two-sided communication was seen as presenting negative information about the proposal.

The third manipulation check tested for level of involvement. Subjects were asked about the likelihood of the "issue discussed" ever concerning them or someone they know (question #21 in Appendix D). A T-test for means was not significant ($t = 0.19$, $df = 118$, $p < 0.85$) with the mean for the high involvement condition 5.47; for the low involvement

question 5.42. The goal of the manipulation was to test the likelihood of subjects perceiving that the proposal could directly affect their lives. However, subjects apparently read the question as the "issue" not being the school but the comprehensive examinations; therefore they felt that it certainly was possible that a business school could find it feasible to implement comprehensive exams. The mean responses indicated that both groups disagreed with the idea that comprehensives could not happen to them. As will be discussed later, ample information from dependent measures indicates that subjects responded differentially to the involvement manipulation. However, it appears more likely that subjects were not manipulated into either a low or high involvement situation, but instead probably moderately involved versus highly involved.

Reliability of Dependent Measure Scales

Dependent measures based on Likert-item scales were both pretested and tested in the experiment for reliability. Cognitive measures were content analyzed by two groups of raters to ascertain reliabilities.

Reliabilities of Scale Derived Dependent Measures

In order to test the reliability of the proposed dependent measures subjects were drawn from the same general pool that the actual experimental subjects would be selected. They were informed they were participating in a "pretest of a marketing questionnaire." They were instructed to complete the dependent measures "as though you had just read

a letter advocating a certain position leaving you with certain impressions. First, you do not feel that the source of the letter was giving you his or her true beliefs; second, the letter was designed to persuade you the reader rather than inform you; and third you did not find the letter convincing nor motivating enough to alter your existing beliefs." Subjects were then instructed to fill out the questionnaire again, but this time with exactly the opposite impressions: "First, you do feel that the source of the letter was giving his or her own true beliefs; second, the letter was not designed to persuade you the reader rather than inform you; and third you did find the letter convincing and are motivated to alter your beliefs."

Cronbach's alphas were computed for the scales derived from the likert items in Appendix D. Along with the proposed scales of internal/external motivation for the letter ("IE"), perceived intent to persuade ("PER") and behavioral intention ("ACT"), the general acceptance ("ACCEPT") items were also analyzed to see if they could be collapsed into one scale rather than treated as individual items.

Reliabilities were also computed in the experiment; these also indicated that the scales were reliable. The results of these analyses are presented in Table 3.

Content Analyses of Cognitive Measures

The cognitive measures were content analyzed by two sets of raters with two members in each group. Raters read copies of the actual written responses and classified them as counterarguments (CAs), support argu-

Table 3. Reliabilities of Scale Dependent Measures

Scale	Pretest Alphas	Experimental Alphas
Internal/External Motivation	0.75	0.67
Perceived Intent to Persuade	0.63	0.83
Behavioral Intention	0.79	0.87
General Acceptance	0.76	0.84

Pretest N=16, Experimental N=120

ments (SAs), source derogations (SDs), source bolstering (SBs) and others. Subjects were given definitions of these as presented in Chapter III and received classroom training in sample classifications. By separating raters into two groups it was hoped that differences in classifications would be discussed (raters were instructed to go over each ratings with his or her partner and attempt to resolve differences). Agreement between groups on classifications was 72%. The author ruled on differences in classifications; those responses (about 4%) that were still questionable were classified as others.

Consistency of Cognitive Measures with Scale Measures

In order to check the consistency of dependent measures the scale measures were correlated with the cognitive responses. Previous research already mentioned (e.g., Wright 1973) has indicated logically consistent measures between attitudinal items and cognitive responses. The results are given in Table 4.

As can be seen, correlations between counterarguments, support arguments and scale measures are in line with previous findings - support arguments correlate positively with behavioral intention and general acceptance negatively with internal/external motivation and intent to persuade; the opposite pattern was found for counterarguments. The small correlations for source bolstering and source derogations are probably due to small number of responses coded for these categories. Indeed, the modal response was 0 for each of these categories.

Table 4. Correlations of Cognitive Measures with Scale Measures

	IE	PER	ACT	ACCEPT
Counter-arguments	0.24 (0.00)	0.12 (0.18)	-0.56 (0.00)	-0.30 (0.00)
Support arguments	-0.31 (0.00)	-0.24 (0.00)	0.60 (0.00)	0.53 (0.00)
Source bolstering	0.05 (0.55)	0.03 (0.77)	0.05 (0.60)	0.11 (0.22)
Source derogating	0.14 (0.13)	0.30 (0.00)	0.00 (0.96)	-0.29 (0.00)
Other	0.06 (0.49)	-0.04 (0.68)	0.21 (0.02)	0.15 (0.11)

IE = Internal/External Motivation, ACT = Behavioral Intention, ACCEPT = General Acceptance, PER = Intent to Persuade.
 Number in parentheses is probability correlation = 0. N=120

Power Analyses

A key aspect of any experimental research is adequate power to detect differences when differences in fact exist and thereby avoid a type II error (Cohen 1977). Power was estimated for small, medium and large effect sizes as given in Cohen (1977) prior to data collection. Small effect sizes account for approximately 1% of the total variance; medium effect sizes account for approximately 6% of the variance and large effect sizes account for approximately 14% of the population variance. Based on the actual experimental data, the effect sizes detectable for the given power levels are shown in Table 5. Each measure is a summated Likert scale; the range of possible means for each scale is given in Table 5. Power for detecting a medium effect size was 86%; therefore power was more than adequate for medium and large effect sizes. On a seven point Likert scale, a medium effect size would require an average difference of one-half a scale point on the IE summated scale, three-quarters of a point on the PER summated scale, one point on the ACT scale and three-quarters of point on the ACCEPT summated scale. These were deemed acceptable for exploratory research.

The Attitudinal Pretest

The attitudinal pretest consisted of 20 items relating to general attitudes towards areas that could be relevant to information contained in the stimulus letters as well as personal information about study habits and grades. A five-point likert scale was used for each item. A copy

Table 5. Power Analysis

Scale	Effect Size			Range of Possible Means
	Small	Medium	Large	
Internal/External Motivation	1.58	4.02	6.51	7 - 49
Intent to Persuade	1.24	3.15	5.09	4 - 28
Behavioral Intention	1.27	3.22	5.21	3 - 21
General Acceptance	1.89	4.80	7.77	6 - 42
Power	30%	86%	>99%	

Power levels for different effect sizes. $n' = 57$, $\alpha = 0.10$. Numbers given are minimum differences for that level of power. As all variables are at two levels power is the same for main effects and interactions (Cohen 1977).

of the attitude scale is given in Appendix F. In order to mask the purpose of the questionnaire subjects first completed Rotter's Locus of Control Scale (29 items). Three dummy items were also incorporated to further mask the purpose of the questionnaire, and the questionnaire also asked for basic demographic information (sex, grades, class.)

As can be seen from reading the items, general areas questioned included the role of a college education, the relative difficulty of the business major, willingness to do extra work, test apprehension and personal opinion of academic performance. Intuitively it seemed plausible that students might respond to the content information by apprehension over a comprehensive exam because of test anxiety, previously poor academic performance that might cause them to fail the exam, a desire to "get away with as little as possible," or a philosophical difference in the purpose of a college degree or the idea of the exam regardless of whether or not they felt they could pass.

Attitudinal Pretest Results

As discussed in Chapter III the attitudinal pretest was included to devise measures of potential covariates of beliefs or attitudes toward the content of the letter that might mask responses to communication style. In order to derive potential scales the attitudinal items were factor analyzed with a varimax rotation.

The first three rotated factors made intuitive sense, but the fourth contained items that appeared somewhat contradictory. This is typical in exploratory factor analysis (Hair et. al., 1979, Harmon 1976)

and the first three factors were retained as covariates. However, the factor solution accounted for only 26% of the total variance, with the rest of the variation unique to the individual variables; the three factors used as covariates accounted for 19% of the total variance and 76% of the explained variance. The items for each factor, their loadings and communalities are given in Appendix F.

The naming of the factors is subjective and is meant to only give each one a label, and not to imply an actual underlying trait. Following traditional procedure (Hair et. al. 1976) items were chosen based on the relative magnitude of their loadings - as the highest loadings were in the 0.60 to 0.70 range with relatively few over 0.30, 0.30 was used as the minimum cutoff for loadings. Cronbach's alphas were computed for each of the factors and are reported in Appendix F. While reliabilities greater than 0.60 have traditionally been recommended (Nunnally 1976) for scale construction, the two that were beneath 0.60 were only a few hundredths off. Therefore the scales were used as covariates. However, given the low amount of total variance explained results dependent on the covariates will be interpreted with caution.

Tests of Covariates' Impact

In order to assess the impact of the covariates two procedures were employed. First, covariates were correlated with dependent measures as a preliminary measure of association. Second, the impact of covariates correlating significantly with dependent measures were subjected to a multivariate analysis of covariance (MANCOVA) (Hair et al. 1983, Huitema

1980). This analysis assesses the impact of the covariates on all the dependent measures simultaneously and thereby provides some protection of experiment-wise alpha. As this study is using an alpha of 0.10 for planned comparisons control for Type I error is critical.

Correlations between covariates and dependent measures are given in Table 6. EASYWAY shows significant correlations with ACT, SA and CA. Two aspects of these results deserve comment. First, EASYWAY is significantly and logically related to the dependent measures - subjects who are attempting to minimize their work level shouldn't be expected to endorse comprehensive exams. It is possible to speculate that subjects might express approval of an idea but not be willing to turn that approval into action; this might indicate a subtle form of disapproval of the proposal that ACCEPT alone might not tap. With the previous cautions about the use of the covariates already expressed, EASYWAY was chosen as a covariate for analyzing the experimental hypotheses when the dependent measures counterarguments, support arguments and behavioral intention are used.

This ends discussion of variables affecting the analysis of the experimental hypotheses (e.g., the covariates) and factors potentially affecting conclusions drawn from the statistical results (e.g., power, manipulation effectiveness, scale measure reliability). The results of statistical tests of the experimental hypotheses follows.

Table 6. Correlations between Covariates and Dependent Measures

Covariates	IE	PER	ACT	ACCEPT	CA	SA
"Don't worry"	0.02 (0.79)	-0.01 (0.87)	-0.16 (0.09)	-0.17 (0.06)	-0.04 (0.68)	-0.13 (0.14)
"Easyway out"	0.09 (0.34)	-0.04 (0.66)	-0.41 (0.00)	-0.12 (0.18)	0.21 (0.02)	-0.26 (0.00)
"Good student"	0.12 (0.21)	0.13 (0.15)	0.12 (0.18)	0.06 (0.55)	0.01 (0.93)	-0.03 (0.73)

Numbers in parentheses indicate p values.

IE = Internal/External Motivation, PER = Intent to Persuade,
 ACT = Behavioral Intention, CA = Counterarguments,
 SA = Support Arguments. N=120.

Experimental Results

This section reports on tests of the experimental hypotheses. As previously reported, the number of responses classified as source derogations and source bolstering were so small they were excluded from analyses.

Alpha Level

As has been discussed, this study incorporates an alpha level of 0.10 for rejecting hypotheses rather than the more conservative 0.05. As this is exploratory research, this level has been chosen to increase statistical power; a type II error is viewed as more detrimental to a new research area than a type I error. However, as this study has multiple dependent measures, the likelihood of some measures being significant by chance increases in part as a function of the number of measures; using an alpha of 0.10 compounds this problem. Because of this, it was decided to first test the general hypothesis that all the measures considered together were not significantly different before testing individual measures. This procedure in part protects experiment-wide alpha by keeping it at the same level as the individual comparisons and thus provides some protection against a type I error (Hair et al. 1983, Huitema 1980).

The Multivariate Analysis of Variance (MANOVA) and the Multivariate Analysis of Covariance (MANCOVA) were both used to assess the significance levels of all measures considered together. Both of

these tests are analogous to the univariate analysis of variance (ANOVA) and the analysis of covariance (ANOCOVA); but rather than testing the hypothesis that differences may or may not be present on one measure, it tests the hypothesis that differences may or may not be present on all measures considered simultaneously.

As the experimental hypotheses are concerned with the Directiveness by Involvement interaction and the Directiveness by Sidedness interaction, these are the only two effects of interest. The MANOCOVA was run with the "easyway out" attitudinal covariate, the MANOVA was run on just the dependent measures. In neither case was the Directiveness by Sidedness interaction significant; nor did it approach significance. The Directiveness by Involvement interaction was significant in the MANOCOVA ($p = 0.04$) and approached significance in the MANOVA ($p = 0.13$). The full results are given in Table 7.

A concern is the three-way interaction in the MANOVA. Univariate analyses of all dependent measures indicates no significant interactions at the three-way level. In cases like this the significance is usually being caused by a linear combination of dependent measures rather than any individual measure, and lower order interactions may be tested. The individual univariate ANOVAs are given in Table 8.

Given the similarity of the multivariate findings, it was concluded that univariate analyses of each of the dependent measures could be conducted without substantially jeopardizing overall alpha. The covariate easyway also was used only with those dependent measures with which it correlated significantly (behavioral intention, counterarguments and support arguments). In the final analysis the covariate only impacted

Table 7. MANOCOVA with EASYWAY and MANOVA results of all Dependent Measures

Effect	MANOCOVA			MANOVA		
	Wilks Lambda	Approximate F	P	Wilks Lambda	Approximate F	P
DIRSUG INVOLVE by ONETWO	0.909	1.769	0.113	0.906	1.857	0.095
DIRSUG by INVOLVE	0.913	2.275	0.042	0.886	1.699	0.128
DIRSUG by ONETWO	0.943	1.073	0.384	0.945	1.033	0.408
INVOLVE by ONETWO	0.954	0.852	0.533	0.950	0.923	0.482
DIGSUG	0.795	4.566	0.000	0.795	4.600	0.000
INVOLVE	0.983	0.307	0.932	0.980	0.365	0.900
ONETWO	0.959	0.753	0.609	0.937	1.206	0.309

DIRSUG = Directiveness, INVOLVE = Involvement, ONETWO = Sidedness. N=120

Table 8. Univariate ANOVAs for 3-way Interaction

Variable	F Value	Probability F
IE	1.492	0.224
PER	0.669	0.415
ACCEPT	0.169	0.682
ACT	0.909	0.405
CA	1.091	0.298
SA	0.909	0.343

(df = 1,112; N=120)

IE = Internal/External Motivation, PER = Intent to Persuade, ACCEPT = General Acceptance, ACT = Behavioral Intention, CA = Counterarguments, SA = Support Arguments

on one analysis, making a marginally insignificant result marginally significant. Therefore the impact of the covariates were in fact minimal and did not significantly alter the results of the study. However, analyses were run both with and without the covariate.

Tests of Hypotheses EH1.1 and EH2.2

Hypotheses EH1.1 and EH2.2 predicted an interaction between the involvement condition and the directiveness condition. This interaction was hypothesized to be characterized by less counterarguing and/or increased support arguing low involvement, directive condition when compared to the low involvement suggestive communication (EH1.1) and higher ratings of acceptance (ACCEPT) and behavioral intention (ACT) (EH1.2). Using ANOCOVA with EASYWAY as the covariate and ANOVA with no covariates the results were mixed - CA was insignificant, ACT was significant in both cases and SA became significant in ANOCOVA. These results are given in Table 9.

The test for EH1.1 indicates no significant differences in CAs; the means for each cell are low involvement, directive style 1.93 and 1.53 for the suggestive style. A small effect size (see Table 5 for effect sizes) would have been a difference of 0.47 in the means for which there was only 30% power. The difference between the actual means (0.40) is less than required for a small effect size. However, the ANOCOVA indicates that SAs are significant when variance due to EASYWAY is extracted. Given this, a LSD procedure (Keppel 1973) was conducted on the means adjusted for the effects of Easyway; in the low involvement condition the

Table 9. Results of ANOCOVA and ANOVA for Directiveness by Involvement Interaction

Variable	df	F	p	F	p
Counterarguments	1	0.021	0.886	0.003	0.956
Support Arguments	1	2.944	0.089	2.400	0.124
Behavioral Intention	1	9.716	0.000	6.698	0.011
General Acceptance	1			4.337	0.040
Model df		111		112	

ANOCOVA incorporates Easyway as covariate for all measures except General Acceptance which did not correlate significantly with Easyway. Complete Table can be found in Appendix I. N=120.

means were not significantly different (difference = 0.31, critical difference = 0.39 for $\alpha=0.10$, $df=111$). The adjusted mean for the directive condition is 1.70; the adjusted mean for the suggestive condition is 1.38. It should be noted that this finding does not alter the direction of the results before incorporation of Easyway; it merely results the Mean Square Error to a point (20.07 to 16.45 or 18%) where a barely insignificant finding becomes barely significant. A comparison of adjusted means (from the ANOCOVA) and the un-adjusted means for ACT is given in Table 10.

Therefore, tests for differences between means were conducted on the adjusted means using the Mean Square Error from the ANOCOVA. The results of this test on the above means are given in Figure 4. As can be seen, the results support EH1.2 on the ACT measure.

EH1.2 also predicted greater message acceptance (ACCEPT) in the low involvement condition for directive messages rather than suggestive ones. While the involvement X directiveness interaction is significant, it is not driven by differences in the low involvement condition; the mean for the low involvement, directive condition is 26.47, the mean for the suggestive condition 26.43. Therefore, the general hypothesis that a directive style is more effective in a low involvement condition was supported only by the ACT measure.

Tests of Hypotheses EH2.1 and EH2.2

Hypotheses EH2.1 and EH2.2 tested the other part of the involvement by directiveness interaction - that in the high involvement condition a

Table 10. Comparison of Adjusted and Unadjusted Means for ACT

Condition	Un-adjusted Means	Adjusted Means
Directive, High Involvement	12.20	12.18
Directive, Low Involvement	14.23	14.70
Suggestive, High Involvement	15.10	14.75
Suggestive, Low Involvement	12.90	12.81

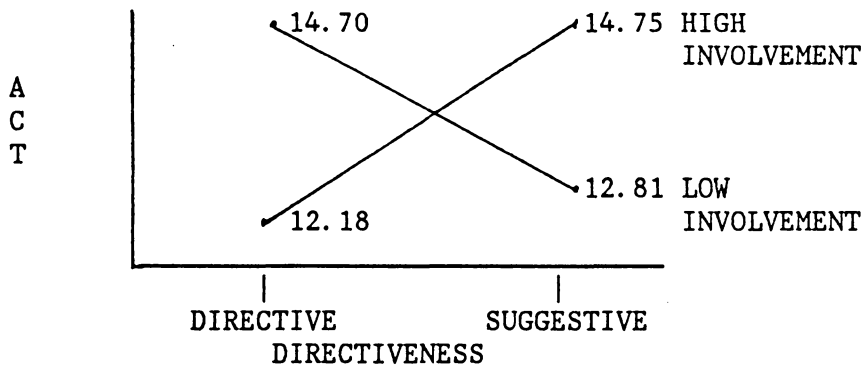


Figure 1. Interaction of Involvement and Directiveness: Tested by Fisher's protected LSD test. Differences greater than 1.73 are significant at the 0.10 level, $df = 111$; higher scores indicate greater willingness to act.

directive style would be less effective than a suggestive style as measured by CAs, SAs (EH2.1) and ACCEPT and ACT (EH2.2). As has been already stated, the involvement by directiveness effect for CAs was not significant. In the high involvement condition the mean for CAs in the directive condition is 2.10 and 1.67 in the suggestive condition. As with EH1.1, this finding is also in the predicted direction but not significant. Using the adjusted means for SA, a LSD test for the suggestive condition produced significantly greater support arguing, with the direct condition adjusted mean of 1.36 and a suggestive mean of 1.96 ($p < 0.10$, $df=111$).

The ACT and ACCEPT results also support the general hypothesis that the suggestive condition is more effective with high involvement communications. As is shown in Figure 1, the interaction between directiveness and involvement is significant, and this significant interaction is caused by the differences between the directive, high involvement behavioral intention mean and the suggestive, high involvement mean. The results of the ACCEPT test for means are given in Figure 2; a complete ANOVA table is given in Appendix I.

Tests of Hypotheses EH3.1 and EH3.2

These findings confirm the general hypothesis that the suggestive condition is more effective than the directive condition in a high involvement situation. The next series of hypotheses test the general hypothesis that effect sizes would be larger in the low involvement condition than in the high involvement condition. Effect sizes are given

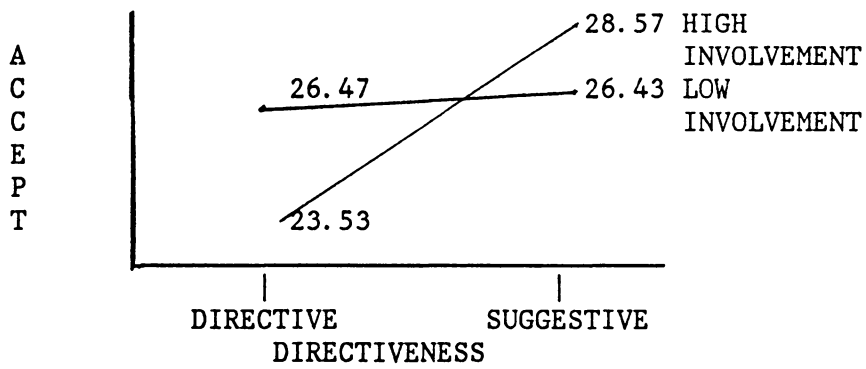


Figure 2. Interaction of Involvement and Directiveness: Differences greater than 2.83 are significant at the 0.10 level; higher scores indicate greater acceptance.

by Cohen's (1977) "d", which is the standardized difference between means and therefore is a "pure" statistic that can be compared with ds from other units of measurement. As is demonstrated in Table 11, the opposite of the predictions is true. Standardized differences between low involvement condition means are less than high involvement means in all conditions. Therefore EH3.1 and EH3.2 are not supported.

Tests of Hypotheses EH4, EH5 and EH6

These two hypotheses tested the effects of directiveness on ratings of external versus internal motivation (EH4) and perceived intent to persuade (EH5). Directive communications were hypothesized to elicit greater ratings of external motivation of the source (EH4) and higher ratings of perceived intent to persuade (EH5). The IE measure failed to show any main effects ($F = 0.699$, $p = 0.405$, $df 1, 112$) with the Directive mean equaling 31.28 and the Suggestive mean 32.15. (See Appendix I for a complete ANOVA table). One first order interaction was significant for IE (Directiveness X Sidedness, $F = 3.241$, $p = 0.075$, $df 1, 112$), however the MANOVA for this effect did not approach significance (Approximate $F = 1.033$, $p = 0.408$) and no further analyses are justified.

The directive condition produced a main effect for intent to persuade ($F = 18.96$, $df 1, 112$, $p < 0.000$) with the mean of the directive condition 23.22 and the suggestive condition 19.93. This finding is also not subject to any qualifications as no higher order interactions were significant or approached significance (see Appendix I for a complete ANOVA Table).

Table 11. Effect Sizes in High and Low Involvement Conditions

Variable	Low Involvement d	High Involvement d
ACCEPT	0.01	0.74
ACT	0.29	0.64
CA	0.24	0.26
SA	0.13	0.43

These findings indicate that directive communications do not elicit any greater external attributions despite being seen as having a greater intent to persuade. The final hypothesis tested the effects of stylistic manipulations upon informational content. One-sided, directive messages were hypothesized to be less effective than suggestive, one-sided messages as measured by ACCEPT and ACT. Neither of the first-order interactions approached significance for these variables (ACT: $F = 0.093$, $p = 0.760$, $df 1, 112$; ACCEPT: $F = 0.147$, $p = 0.702$, $df 1, 112$). The means are given in Table 12. This ends the results of tests of the Experimental Hypotheses. The next Chapter discusses these results.

Table 12. Cell Means for ACCEPT, ACT in One-sided, Directiveness Conditions

Condition	ACCEPT Means	ACT Means
Directive, One- Sided	24.50	13.80
Suggestive, One- Sided	26.53	14.33

CHAPTER V: DISCUSSION

Introduction

This chapter discusses the results of empirical tests of the theoretical hypotheses. Specific areas will be issues related to all hypotheses such as the success of independent manipulations and statistical power are discussed first. Second, a discussion is given of each of the theoretical hypotheses. Third, implications for future research and a summary are given.

Independent Manipulations

A basic question relevant to any interpretation of experimental findings is the success or failure of experimental manipulations. In this study three variables were manipulated: the degree of directiveness of the experimental communications, the sidedness of information given in the experimental communications and the degree of involvement that each communication was expected to elicit. If there is not adequate evidence that manipulations are perceived by the subjects then it is meaningless to discuss results of differences supposedly caused by those manipulations.

As reported in Chapter IV, manipulation checks for directiveness and sidedness were significant; subjects reported significant differences for directiveness in both pretest and experimental conditions. The ma-

nipulation check for sidedness was also successful. The check for involvement seems to have been interpreted differently by subjects than intended, however as has been reported the involvement manipulation resulted in significant differences on several measures in experimental conditions and usually in theoretically appropriate directions. This, along with the fact that this manipulation has been used successfully in other studies indicates that subjects must have perceived a difference in the school names, and that this difference was in the desired direction. However, the manipulation check indicated that the average subject took seriously the possibility that the exams might be initiated. Therefore, it may be that subjects in the low involvement condition were in fact moderately to highly involved with the topic. If the involvement manipulation was in fact weaker than intended, then the findings that some of the hypotheses were supported may be understated when compared to a more powerful manipulation.

Statistical Power

Along with successful manipulation of independent variables, a related area that affects all findings is the degree of statistical power or the likelihood of detecting differences that are in fact present. Sample size was to some degree logistically constrained, and using Cohen's (1977) broad guidelines, power for detecting a small effect was 30%. While power was more than adequate for medium and large effect sizes, it admittedly was low for small effect sizes.

As has been reported, differences in some of the cognitive response measures were close to a small effect size. In this case the low power to detect a small effect size could have feasibly caused a Type II error. The means of the two cognitive measures that had enough responses to analyze were just slightly more than their standard deviations; the measures had a high standard deviation reflecting the large variation in individual cognitive responses. The correlations between cognitive responses and the attitudinal measures are logically consistent with previous findings (e.g., Wright 1973). Given this latter finding that non-significant measures correlated in the predicted direction with significant measures lends some support to the hypothesis that with increased statistical power these non-significant measures may have become significant. Improvement of measures and increased power would indicate whether this relationship would be supported.

One alternative to a between subjects only design could be to examine cognitive responses in both a between subject and within subject design by showing subjects more than one promotional communication. Responses to the first communication could be treated as a between subject variable; responses of each subject to all communications could be treated as a within subject variable. This will be discussed further with implications for future research.

Summarizing the above discussion, power was low only for detecting small effect sizes; however, what a small effect size would actually be for this research could only be determined by ultimately running the study to gain actual estimates of the variances. Power may have been low for the cognitive responses; however, the magnitude of the variance of these

responses suggests consideration of within subject design along with between subject design in future studies. Overall, power was more than adequate for detecting medium and large effect sizes.

The Covariates

The covariates were incorporated potentially to increase statistical power. Only one factor ("easyway out") emerged as significantly related to the dependent measures, and it did not have any major impact on the findings. One possible explanation for the absence of covariate impact is that the questions in the attitudinal pretest were general, usually asking about grades in general or attitudes toward college. However, the promotional communication read by the subjects was highly specific, relating to comprehensive examinations at either their school or another school. In hindsight, it is possible that the covariates were too global in their orientation; more specific questions about attitudes related to the issue might have produced more powerful covariates.

Discussion of the Theoretical Hypotheses

This study's main purpose was to test the directiveness or attempted relational control of a persuasive communication as a potentially viable variable in marketing research. As has been previously discussed, theory was used heuristic device rather than to be tested. In other words, the goal of this study was not to falsify theory, but to use theory as a guide to derive testable experimental hypotheses. Therefore in

discussing each of the theoretical hypotheses, the goal of the discussion will be to highlight the success or failure of isolating an empirical effect with theory acting as a structure for creating questions.

An overview of the findings indicates that varying directiveness in a promotional communication impacts on the communications effectiveness. Furthermore, the results indicate that this was not just a result of a well-written (i. e. , the suggestive) versus an offensively written (i. e. , the directive) communication; other than perceived intent to persuade directiveness produced no main effects that were not negated by higher order interactions. Of particular importance seems to be the level of subject involvement with the communication: when a subject is highly involved with a communication's topic, the suggestive style that encourages the receiver to make up his or her own mind was more effective than the directive style. However, this effect was not found with low involvement subjects: they responded either similarly to directive and suggestive communications or were more positive towards the directive communication. These and other results are discussed in greater detail in the following sections.

Theoretical Hypotheses TH1, TH2 and TH3

These three hypotheses all concern using the cognitive response model's central versus peripheral processing of a communication (Petty and Cacioppo 1981). In essence these hypotheses predicted a qualitative interaction between involvement and directiveness, with a suggestive style more effective in a high involvement communication and a directive

style more effective in a low involvement communication. To the extent that style can be seen as a peripheral cue, responding in the low involvement condition should be more sensitive to stylistic differences. The high involvement relationship was supported by the empirical findings on both scale measures and on one of the cognitive measures (SAs). These findings strongly support the contention that a suggestive style is more effective when receivers are highly involved. However, the low involvement reversal was supported only on the ACT measure with EASYWAY as a covariate; and with all measures, stylistic variations had greater impact in high involvement conditions. Two theoretical approaches may be used to understand these findings.

First, the ELM model postulated that by suggesting to receivers that they make up their own minds in the high involvement condition, this would enhance processing by increasing involvement with the communication. This would in turn cause more cognitive processing which would result in more acceptance of the communication. The directive condition was predicted to be less effective because it did not encourage more elaboration. This same theory also predicts that in a low involvement condition communication variables that help minimize processing effort (i. e. , directiveness, where decisions are made for the receiver) should enhance processing. That the results in part support this overall theoretical position is a significant finding. However, the finding that the expected reversal in the low involvement condition was supported only by one dependent measure and that smaller rather than larger effect sizes were obtained for the low involvement condition indicates that either peripheral processing may not be sensitive to stylistic manipulations in

the same way it is sensitive to source manipulations, or that other processes may be acting along with the cognitive aspects.

It is possible that when subjects are more involved and exposed to a directive communication, they have an affective response rather than an increase in cognitive processing. After all, the central theme of the ELM model is that in high involvement situations receivers process the quality of the arguments with secondary aspects of the communication not having much impact on processing. However, it is also possible that greater involvement might increase the affective areas of responding and the desire to form one's own opinion (or at least the belief of holding one's own opinion). Threats to this position caused by the directive communication could then be seen as arousing some form of reactance (Brehm and Brehm 1982, Brehm 1966, Wicklund 1974, Wicklund and Clee 1980). This reactance would manifest itself by more negative responding to the directive communication than to the suggestive communication.

In this case subjects are not responding to the content (i.e., argument quality) but instead are responding to the style. In the high involvement condition, where subjects were acting under the assumption that this could happen at their school, they responded more negatively to the directive communication. In the low involvement situation there would be no threat to freedom; in this case a reactance explanation would have predicted no differences in responding, and this is what occurred. As has been mentioned before, the absence of a main effect for directiveness not qualified by higher order interactions rules out the possibility that the directive communication was just poorly written or offensive to the readers.

An alternative but related explanation to the above is the previously discussed possibility that subjects in the low involvement condition were in fact moderately involved. Were this the case, then there was no test of the hypothesis that style would be more important in a low involvement situation. This alternative also invites the explanation that had a low involvement communication been tested, the study's "low involvement" condition would have represented a mid-point between high and low conditions. The finding of no differences in the low involvement conditions lends support to this position.

In summary, cognitive processing theory proved helpful as a theoretical basis to study directiveness and involvement. It led to successful predictions in the high involvement condition that a suggestive style would be more effective, and had partial success in predicting a reversal of this finding in the low involvement condition. The prediction that style would have more impact in the low involvement situation was not supported; this finding raised the possibility that directiveness may have elicited reactance in the high involvement condition. It is also possible that the low involvement manipulation was only successful to the extent lowering involvement from high to a more moderate level; in this case the results are consistent with cognitive processing theory. The next set of hypotheses used attribution theory (Kelly 1973) as a structure with which to make predictions about directiveness and communication effectiveness.

Theoretical Hypotheses EH4 and EH5

These hypotheses used attribution theory to formulate hypotheses about directive and suggestive communications. Directive communications were hypothesized to be seen as having a greater intent to persuade and therefore receivers would be more likely to attribute the motivations of the source to external causes rather than to internal causes. While the directive communication was seen as definitely attempting to persuade the receiver more than the suggestive, no differences were found in external versus internal attributions as measured by the scale internal/external motivation scale (IE). This result did not seem to be a result of a small effect size for which there was inadequate power; the difference between means was about half of what a small effect size would have required. Even if the finding had been statistically significant, the small effect would have made the finding trivial. The pretest of the measure indicated that the items were related (alpha of 0.75) and the reliability of the measure in the study was 0.67.

The IE measure showed logical consistency with other measures by their correlations; IE was positively correlated to intent to persuade ($r = 0.33$) and negatively related to ACT and ACCEPT ($r_s = -0.21$ and -0.28 respectively). These relationships indicate that greater external attributions of the source's motivations is associated with greater perception of intent to persuade and lower acceptance and willingness to act. That the suggestive and directive IE means were almost identical (suggestive = 32.15 and directive = 31.28, potential range 7 - 49) seems to indicate that subjects did not perceive the directive communication any

more externally motivated than the internal one (indeed, the means are in the opposite direction).

There are different ways this finding may be interpreted. It is possible that subjects' perception of the source ("The Business Faculty Committee") was that it was viewed as credible and not one likely to be acting because of external reasons; faculty may be seen as authoritative and speaking in a directive style may not seem out of context. In other words, in this case just that a source is putting pressure on a receiver to adopt a certain position is not an adequate precursor to elicit differing attributions about the source's motives. However, in this study the directiveness manipulation eliciting the perceived increase in pressure led to differences in communication effectiveness on several measures. Therefore, to the extent that the IE measure taps external versus internal motivation of the source, the increased effectiveness of the suggestive communication was not associated with decreased rating of external motivation. In this respect attribution theory was not a particularly fruitful framework for studying directiveness.

Theoretical Hypothesis TH6

The hypothesis predicting an interaction between sidedness and directiveness, where a suggestive communication was hypothesized to moderate negative responding to a one-sided message, was not supported. Differences between means indicate that even had the findings been statistically significant effect sizes would have been small for general

acceptance (ACCEPT) and trivial for the behavioral intention measure (ACT).

However, it should be noted that in general, the previously discussed findings of the superiority of two-sided communications (e.g., Belch 1981) were not replicated. Indeed, no main effects or interactions involving sidedness were significant. Therefore the supposition that one-sided messages are less effective than two-sided messages was false for this study. (The reader is reminded that the sidedness manipulation was successful). It is possible that in communications where sidedness produces reliable differences the directiveness manipulation would have shown the predicted effect. It is also possible that the sidedness effect is situation specific to certain types of promotional communications (e.g., traditional advertisements) but not others (e.g., ones used in this study).

Traditional positions (e.g., Hovland, Lumsdaine and Sheffield 1949) have been that two-sided communications will be more effective when the audience does not agree with the initial position and will be exposed to a counter positional communication in the future. It is possible that as the topic was new to the subjects they had not formed any attitudinal position toward the communication topic or similar areas. It is also possible that were responses to subsequent persuasive communications measured, a difference in prior exposure to one-sided versus two-sided communications would make a difference.

Summary

The results of this study indicate that the cognitive processing model and the ELM variant were the most productive for devising successful hypotheses for examining the effects of directiveness on receiver responses. Such findings are symbiotic: the theory receives support and directiveness (and the larger construct style) gains nomological validity by its incorporation into a theoretical framework. However, interesting differences between the ELM theoretical perspective on central versus peripheral processing and actual findings occurred. The ability of style to have greater impact in a high involvement condition than (in a potentially) low involvement condition indicates that receivers are not necessarily more likely to concentrate only on information content in high involvement situations. Also, the generalization that in low involvement situations responding to stylistic differences will be analogous to responding to source differences was not supported. As has been discussed, it is possible that subjects in the low involvement condition were in fact moderately involved. However, the directive communication was partially more effective in the low involvement condition which supports the hypothesis that the directive style may reduce processing effort in less involved subjects.

Hypotheses based on attribution theory were unable to predict experimental outcomes. While the purpose of this research was not to falsify theory, the results indicate that the cognitive processing model proved more fruitful both in generating different hypotheses and predicting outcomes. As has been discussed, these may be due to a variety

of factors other than a failure of attribution theory. Perhaps attribution theory's best role in future research would be as a tool to examine cognitive responses as in Smith and Hunt (1978). This ends discussion of the results and opens the next and final area - implications for future research.

Implications for Future Research

The key finding of this study is the involvement by directiveness interaction. By replicating this aspect of the study one would be able to ascertain more clearly the reliability and strength of the finding. It is particularly interesting in that it was predicted by the ELM theory. In replication, a few key issues should be resolved. First, as the sidedness dimension did not produce, nor suggest any major effects it is not particularly relevant to follow; it does not compliment the ELM theory and is not key to enhancing understanding of directiveness. Second, the problem of relatively high variance of the cognitive response measures merits special attention.

To continue to use between subjects designs enables differing communications to be used with different subjects, thus avoiding the possibility that subjects make comparisons between communications and identify the purpose of the experiment. When each subject reads only one communication he or she obviously does not have the immediate external reference of another communication. In this case the only alternative is to increase sample size in order to increase statistical power given the high standard deviations of the cognitive responses. As has been

discussed, an alternative solution is to use both a within and between subject design. By treating subjects' responses to the first communication in a series as a between subject variable and responses to subsequent communications as a within subject variable the potential sensitization effects of multiple communication exposures could be examined. The lack of power in cognitive response research has been criticized elsewhere (Sawyer and Ball 1981), however their recommendation was to increase sample size rather than to change to a within subject design.

Conclusions from this discussion are that cognitive responses have much variation between subjects; this makes detecting differences difficult due to large error variances. Efforts that reduce variance such as testing the effectiveness of within subject designs merit attention.

Generalizability of the Findings

As this was a single exploratory study it is impossible to generalize beyond the immediate findings. However, the significance of the findings encourages replicating the directiveness by involvement interaction in different settings. The use of the letter format is intriguing for a direct mail appeal as this would allow maintaining a similar format to the current study.

As with any marketing study, a logical question is the potential impact of the findings on applied areas of the discipline. While acknowledging the above caveat about generalizing from a single study, a few issues have relevance. First, this study involved what should be a credible source (the "Business Faculty Committee") arguing a position

(comprehensive exams) that is closer to issues in "social marketing" such as health or personal issues rather than more traditional product purchases. From this standpoint it is feasible to speculate that when the target market is highly involved, for example, communications about stopping certain self-destructive behaviors such as smoking or drug abuse to users, then a suggestive style may be more effective. However, when communicating to target markets that are not currently involved, a directive style may be more effective in building initial beliefs.

Extending the Experimental Manipulations

This study used only two levels of directiveness. A logical next step would be to vary directiveness to see if the responses to a full dimension of directive versus suggestive communications would produce a linear or curvilinear function. A related study may be to vary directive versus suggestive communications by area of the communication, e.g., presenting content information in a highly directive manner while making requests for action in a suggestive style. This could lead to isolating higher level interactions typical of Ray's (1978) micro-theoretical approach of communication effectiveness. His approach specifies that promotional communications are never subject to broad, covering laws, but instead are a function of continuously higher level interactions. This ends the discussion of implications for future research.

Summary

This dissertation tested the idea that how one says something may be as important as what one says. By defining communication style as the relational aspects of a communication that address the sender-receiver relationship, a new construct "directiveness" was defined, operationalized and tested. Existing theory accepted by the marketing academic communication was used heuristically to develop testable hypotheses. The results of these theory tests were that the ELM variant of the cognitive processing approach produced successful hypotheses while attribution theory was not successful. In essence, a communication that encouraged a highly-involved receiver to make up his or her own mind was more successful than a directive communication; with a lower-involved receiver communication style either made no difference or there was a slight tendency for a directive communication to be more effective.

An attempt to test the hypothesis that previous findings of two-sided communications being more effective than one-sided communications was a function of style rather than informational content was unsuccessful. However, as receivers did not find one form of sidedness more or less effective than the other, no definitive conclusions could be drawn.

This dissertation has contributed to marketing theory and research by exploring the new ground of communication style, and by enhancing and elaborating on existing theory. Given the strength of the findings the area of communication style as operationalized by directiveness is very fruitful for future exploration.

APPENDIX A. PHILOSOPHICAL ASPECTS OF DIRECTIVENESS AND RELATIONAL
COMMUNICATION

Directiveness in a communication can be seen as an example of a larger class of communication phenomena known as the Pragmatics or Behavioral approach to communication (Watzlawick et. al. 1967, Bateson 1972, Norton 1983, Penman 1980.) The pragmatic or behavioral aspects of communications are those aspects that instruct, direct or control the responses of the receiver to a communication. As many of these typically address the sender-receiver relationship (i.e., "here's how you are to take this communication...") they are also referred to as the "relational" aspect of communication. The relational aspects of a communication are those parts that address the control of the sender-receiver relationship. They have been defined as the information that gives meaning to the literal content of a communication, and in this sense are about the communication and have been labelled "metacommunication" (Watzlawick et. al. 1967.)

In order to fully appreciate the the relational view of communication two aspects need discussion. First, the relationship between how a communication is to be taken (i.e., "this is a joke," "this is serious," "this is an order") versus what is to be taken (i.e., the literal content) has been theorized to be one of Logical Types (Whitehead and Russell 1927, Bateson 1972.) This means that metacommunication is of a higher level of abstraction than literal meaning. Second, having made the above dis-

tinctions a comparison between relational aspects and other communication variables (conclusion drawing, intensity) can perhaps be made more clear and understandable.

Relational Communication

Relational aspects of a communication frame a communication - they provide information as how the sender intends the message to be taken. As such, relational aspects can dominate the literal meaning by changing how that meaning is to be taken. Non-verbal communication is substantially relational (Mehrabian 1972, Bonoma and Felder 1977) and subtle changes in non-verbal communication such as a mock smile or raised eyebrows can radically alter the literal content of a message. Note that the literal content remains unchanged: the same words are spoken. What changes is how the receiver is instructed to respond, or how the message is to be taken. For example, in one case the receiver may be cued "this is an important truth; believe it," while in another the receiver may be cued "this is a joke; do not believe it." As has been implied by the dissertation, style can be seen in a highly similar manner - all the aspects related to how product information is conveyed rather than what is conveyed.

The Role of Logical Typing

The Doctrine of Logical Types (Whitehead and Russell 1927) has been used to provide a format for separating metacommunicative aspects from informational content in communications. The theory of Logical Types proposes certain requirements for organizing groups or events into classes, and making statements about members of a class versus statements about the class itself. It begins by defining a class of events, where membership is based on some similarity or shared attribute of all the members. This is usually referred to as the "rule" of membership and represents how events are to be organized. For example, information about product attributes can be seen as forming a class of informational content. The number of claims made or attributes discussed (i.e., information load) could be used to classify communications. Each member has a specific attribute by which it can be identified; each member of a class has that attribute.

A basic rule of classification is the language and system used to discuss the objects in the class cannot simultaneously be used to discuss the class itself. Simply put, to talk about the class as an entity requires implicit or explicit reference to other classes, and the language that describes other classes is relational, while the language that describes a classes members usually describes an attribute (i.e., a property one can have or not have). While the language is somewhat difficult, Whitehead and Russell (p. 37) state:

More generally, given any set of objects such that, if we suppose th e set to have a total, it will contain members which presuppose

this total , then such a set cannot have a total. . . Any set that has no total can have no significant statement made about all its members. . . whatever involves all of a collection must not be one of the collection.

In other words, the rule or organizing principle of one level cannot be used at a higher level without incurring confusion and potential paradoxes.

Each time a classification is formed, it simultaneously has two distinct positions: first, it is defined by the rule for its members, i.e., the rules of membership to be in the class; and second, it defines a metaclass in that the class itself can be distinguished from other classes. It is this latter classification that often becomes obscured. It usually begins when one unknowingly moves from describing what the members of a class are (i.e., discussing the attributes of its members) to talking about the class in general. In the first case discussion centers around one member versus another within the classification, using "object" language (Watzlawick et. al. 1967.) For instance, a communication can be described in terms of the amount of product information given, whether it names competitors or gives negative as well as positive information. However, when one talks about the class itself, rather than its members, the frame of reference is enlarged to the class' relationship with other classes. Rather than "object" language, the language becomes relational in that it always implies a comparison:

Let us try to approach the subject in a reasonably methodical fashion. About seventy years ago Bertrand Russell insisted on a strict separation between statements about things and statements about relations. "This apple is red" is a statement about the properties of this apple. But "This apple is bigger than that one" is a statement about the relationship between these two apples. It does not make sense if applied to one or the other apple sepa-

rately, for the proposition "bigger" than is not located in one of them, but in their relation to each other. (Italics in original, Watzlawick 1983, p. 74)

Others have also commented similarly:

Following on some aspects of classical ontology and epistemology, of which it is only a variant, the Cartesian 'revolution' made the crucial absolutist and analytical error (for us) of unjustifiably conferring a privileged ontological status on entities ('substance') as opposed to relationships ('attributes', 'accidents'.) In spite of (. . .), the truth that entities do not create relationships so much as RELATIONSHIPS CREATE ENTITIES, was (and still is) generally obscured. Moreover, the privileged ontological status of entities in the system encouraged the reification of whatever relationships it did recognize. Gravitation, energy, matter, people, and so forth, became THINGS. (Capitals in original, Wilden p. 215)

In short, to talk about "fixed" properties of a communication requires a different descriptive system than to talk about relational properties of a communication.

A simple analogy can be drawn with the relationship between a sport and sports in general. One can compare and contrast football and soccer in terms of what goals are and how they're scored, the number of players used and the various positions that players occupy. At this level the discussion centers on how one sport is different from another sport while staying within the class of sports. However, when one discusses sports in general, the comparison is no longer between football and soccer, but now between sports and non-sports classes. Logical typing requires that these levels not be mixed, i. e., the classification system that allows football to be different from soccer cannot be the same classification system that allows sports to be different from politics (other than metaphorically.)

While this basic assertion may seem obvious, Bateson (1972) has asserted that the behavioral sciences have ignored logical typing and have often confused member versus class relationships. For example, one can easily discuss how to wash clothes, or what the strokes are in swimming. However, when mixes levels with statements such as the "washing of washing" or the "swimming of swimming" the phrases are meaningless and demonstrate the results of mixing member and class. However, phrases such as "how an individual knows that he knows" (Kelly 1973) used in explaining the generation of attributions go unchallenged. From a logical typing perspective the knowing of knowing is identical to the swimming of swimming or the washing of washing - statements that appear logical but are meaningless.

In persuasive communication logical levels can be created for informational content versus metacommunicative aspects (Watzlawick et. al. 1967, Watzlawick et. al. 1974, Bateson 1972, Penman 1980, Norton 1983.) Specifically, informational content can be defined as lower level than metacommunicative aspects. Informational content aspects are attributes of specific communications, while the relational aspects relate to the sender-receiver relationship and other classes of communications. For example, a communication may be described as presenting 5 product attributes. Most would agree that this is a property of that communication. To describe the 5 product attributes as "a lot" of attributes is relational: it can exist only with a referent of other amounts of attributes in other communications (compares between classes), or refers to the ef-

fects of the communication or how a receiver responds to the communication (addresses the sender-receiver relationship.

Similarly, to describe a communication as directive or suggestive, which are relational terms, implies a comparison - i.e., directive as compared to . . . or suggestive as compared to The same contrast would occur if instead of referring to the the amount of information in attribute terms (i.e., 5 attributes) one were to use relational terms (i.e., a "large" amount of information.) In the latter case the appropriate frame of reference would be comparison between communication's degree of information rather than absolute amounts of information; and would be "meta" or about the amount of information. The system for establishing more or less information would be different than the one for establishing the amount of information in any one communication, as dictated by logical typing.

Inadvertent mixing of levels occurs when responses to metacommunicative aspects are treated as though they were responses to the informational content. In advertising terms, style is confused with product attributes when interpreting responses to advertising, where consumers are not responding to claims in the ad per se, but rather how the claims are made. If this is happening, then changing informational content should not substantially change receiver responses. However, changing stylistic aspects while keeping informational content unchanged should alter responding by receivers if indeed they are responding to something about the communication rather than the informational content of the communication.

Informational content can be defined as made up of sub-classes of differing approaches to informational content such as informational amount, comparativeness and sidedness. At the first level there would be rules for assigning communications to sidedness, comparativeness and informational amount classes. All of these share in common some discernable difference in informational content, and these differences allow them to be members (e.g., to be defined) of their respective sub-classes. They also share a basic similarity in that they are members of the class of informational content manipulations and can be defined as members of the class of informational content manipulations. Figure 3 diagrams these relationships:

A simple way of describing hierarchical classifications is that any statement about a communication may be described in a "what" and a "how" statement, with the what statement referring to the informational content and the how statement referring to the stylistic element. For instance, an ad may state that a product has x attribute (the what statement.) The way in which the ad states the product has x attribute is the how statement. Note that one can change the how statement independently of the what statement - one can say the same thing seriously or humorously, suggestively or directly, with little affect or with substantial affect. However, the how aspect is meaningful only in the context of the sender-receiver relationship.

Examples of Object versus Relational or "Meta" Classes

OBJECT	RELATIONAL/METACLASS
Numerical operations	Calculus
Football	Sports
Velocity	Acceleration
Learning a task	Slope of the Learning curve
Message content	How message is to be taken
Weight	Judgment about that weight (light, heavy)
Verbal command	Relationship between sender and receiver
Statistical Finding	Relative level of signifi- cance

Figure 3. Examples of Hierarchical Classifications

Summary

The relational aspects of a communication are distinct from the informational content aspects if one adopts the Theory of Logical Types. Informational content is an attribute property of the communication, while directiveness relates to the sender receiver relationship as conveyed by the communication. Keeping the two separate requires a different descriptive language system for each one, and requires that one not be discussed in the terms of the other. For example, a one-side communication is not potentially directive because it presents only one side of an issue, as this is its informational content. It is potentially directive for reasons relating to the sender-receiver relationship. Therefore, if one-sided communications are also directive, this is not a property of sidedness and should be able to be modified.

APPENDIX B. SPECIFIC STUDIES OF MESSAGE SIDENESS

Sawyer (1973) examined responses to print ads giving either positive only ("supportive") information, two-sided information and repetition of ads. The study also blocked for product preference as products used (aspirin, soap, pens, Renault auto, diet drink mix) were all currently on the market as opposed to a new product presentation. Dependent variables of interest were attitudinal responses, purchase intention and brand usage, and an unaided recall test. Net effects found indicated that the refutational appeal was most effective for users of competing brands, while a supportive ad was found to be most effective with users of both brands. Sawyer's design is only marginally appropriate for studying sidedness as he showed subjects 47 ads, with filler ads and ads for competitive products included along with the experimental ads. The major relevance of this study to the topic at hand is that sidedness does influence responding, however there are other cues (repetition, experience with product brand) that may preclude any broad generalizations.

Settle and Golden (1974) examined sidedness exclusively by presenting subjects with a booklet of advertisements, and measuring responses after each ad. Dependent measures were ratings of each claim's importance and of how confident the subject was in the advertiser's claims (i. e., that the claim was true.) The author's hypothesized that positive claims in two-sided ads would receive higher confidence ratings than the same claims in one-sided ads, and that a measure of overall perceived value would be higher for the product in the two-sided ad. The first

hypothesis was supported, namely that ratings of positive claims in two-sided ads were seen more positively than the same ads in one-sided ads. The second hypothesis was not supported as the results indicate that both one-sided and two-sided were seen about the same. The author's conclude that had the relative number of positive versus negative claims been varied, overall ratings of the two-sided presentation could be greater than one-sided presentations.

Smith and Hunt (1978) used a two product presentation to test sidedness with a written advertisement. As with Settle and Golden (1974) the two-sided condition claimed superiority on 3 major claims and inferiority on two minor claims. The products were a T.V. and an exterior housepaint. These also are products that hopefully would be purchased because of product attributes rather than habitual purchase. As fictitious brands were used, this latter occurrence is rather unlikely. The authors tested the effectiveness of the varied versus non-varied claims, particularly examining if two-sided claims had a lower prior probability, if subjects would be more likely to attribute an "internal" motivation to the source of the two-sided claims and if two-sided claims would be seen as more truthful. The first two are directly from the previously discussed attribution theory literature. All three hypotheses were supported by the data, and give support to the position that with certain product types (e.g., attributes important, no prior brand preference) consumers are more receptive to a two-sided message.

Belch (1981) expanded the one-sided/two-sided informational content manipulation to include comparative/non-comparative brand information. He also manipulated ad repetition, testing to see if subjects might

need more exposure to two-sided communications because of their novelty. The study used toothpaste as the product example, positioning a new brand ("Shield") against the popular Crest. The hypotheses related to message sidedness were an interaction between sidedness and comparative conditions, where a two-sided, comparative message be seen more favorably than a one-sided comparative message. This can be seen as an example of the potentially beneficial effects of a two-sided message. Dependent measures of interest were immediate cognitive responses to the Shield commercial and attitudinal measures. The message sidedness manipulation did not elicit most of the hypothesized differences. Within the non-comparative condition, one-sided communications were not seen differently than two-sided communications. Furthermore, the two-sided message did not moderate effects of the comparative/non-comparative dimension.

While these findings do not support the position that two-sided communications are more easily received, the findings of Smith and Hunt (1978) and Swinyard (1981) do support this contention. A few aspects of the Belch (1981) study deserve comment. The product, toothpaste, may be purchased more by brand loyalty than a conscious evaluation of product attributes. Second, the medium was television, and it could be that television is too passive a medium for active attention for ads from watchers. Finally, and perhaps most important, only one claim out of three was given as inferior. This could mute the effectiveness of the two-sided communication in several ways.

First, if the attributes on which superiority is not claimed cannot be successfully counterargued (i.e., either to be shown as really not important or a "sacrifice" for another more important attribute such as

auto engine power versus gas mileage), then the beneficial effects of sidedness should be lost. Second, how the sidedness manipulation is carried out can be as important as whether or not it is included at all. Hass and Linder (1972) report the order of pro versus against arguments in a two-sided persuasion study (not using advertising) determined the the degree of persuasiveness of the overall communication. While Hass and Linder's (1972) results are not directly applicable to Belch's (1981), they indicate that the presentation of sidedness alone is not adequate to obtain an effect, but that it may have to be done in certain ways. A third and final possibility is that with established brands, any advertisement for a new competitor may have a certain time period necessary for impact (e.g., a "sleeper" effect). Therefore, Belch's (1981) failure to obtain a sidedness effect is not viewed as a major contradiction to other sidedness findings (e.g., Smith and Hunt 1978, Swinyard 1981, Etgar and Goodwin 1982).

Swinyard (1981) used a different approach than the others discussed. Rather than a traditional product, he used a supermarket as the "product", varying message sidedness and a comparative/non-comparative dimension. The one-sided condition gave 5 positive attributes; the two-sided gave the same positive and 4 negative ("what we don't do for you"). The relevant hypotheses of the study were a basic test of sidedness and a test of interaction between sidedness and the comparative/non-comparative dimension. In the latter case Swinyard (1981) hypothesized that the moderating of a two-sided claim would cause more positive responses to a comparative ad than a comparative, one-sided ad. Along with attitudinal measures the study examined cognitive responses content ana-

lyzed for counterarguments. A behavioral measure of coupon redemption was also employed. The hypothesis that one-sided claims would elicit more counterarguing approached significance ($p < 0.10$) and the hypothesis that two-sided claims would be seen as more truthful was significant ($p < .05$). Sidedness did not affect coupon redemption. Therefore this study provides similar results to Smith and Hunt 's (1978) finding that two-sided messages are more believable.

A final study (Etgar and Goodwin 1982) tested sidedness, product category (social versus functional) and amount of information given about the product. Both one and two-sided communications contained references to other named brands, however other brands were not directly named in the negative attribute comparison. The products used in the ads were fictitious, new products. Dependent measures were 11-point likert scales testing affective, belief and conative (behavioral purchase intention) factors. Results again supported the hypothesis that two-sided communications are more effective: the two-sided ads were seen as enhancing knowledge more than the one-sided, the brand was seen as having higher quality, and subjects reported a greater intent to purchase. These findings also are similar to those given previously.

Of the studies examining various aspects of sidedness, only one (Belch 1981) failed to find results indicating two-sided communications were superior to one-sided messages in some measures of believability or negative responses (e.g., counterarguing). While no clear trend emerges for product type, two of the studies employed products whose attributes should be important in considering and comparing attributes (a television, choice of a supermarket) versus goods purchased more by habit for

convenience, while a toothpaste ad (Belch 1981) did not elicit any effects for sidedness.

APPENDIX C. EXPERIMENTAL HYPOTHESES

1. (TH1) Low relevance/low involvement communications will be more persuasive with a directive style than a suggestive style as measured by:
 - EH1.1: Reduced negative cognitive responses to the low involvement, directive communication.
 - EH1.2: Higher ratings of overall message acceptance and behavioral intention in the directive, low involvement condition.
2. (TH2) High relevance/high involvement communications will be less persuasive with a directive style rather than a suggestive style as measured by:
 - EH2.1: Reduced negative cognitive responses to the low involvement, directive communication.
 - EH2.2: Higher ratings of overall message acceptance and behavioral intention in the directive, low involvement condition.
3. (TH3): The effect size will be larger for different levels of directiveness with low relevance/low involvement communications than with high relevance/high involvement communications as measured by:
 - EH3.1: Differences in cognitive responding.
 - EH3.2: Ratings of overall message acceptance and behavioral intention.
4. (TH4) EH4: Directive communications will elicit greater ratings of external motivation than less directive communications.
5. (TH5) EH5: Directive communications will elicit higher ratings of perceived intent to persuade than less directive communications.
6. (TH6) EH6: One-sided, directive communications will be rated lower on measures of acceptance such as informational content acceptance, liking and behavioral intention.

APPENDIX D. SCALE DEPENDENT MEASURES

Directions:

The following are statements that could be made about the letter you read. Please read each statement carefully and circle the degree of agreement or disagreement you feel or think of the statement with your own thinking or feelings about letter.

ITEMS FOR INTERNAL/EXTERNAL MOTIVATION

1. The authors of the letter may be withholding information about the topic.
2. The authors are acting from their personal beliefs rather than outside pressures.
3. The authors of the letter sincerely believes their his statements.
4. The authors of the letter might have been instructed to write a letter like this by their superiors.
5. The letter may have been written for reasons other than I was told.
6. The letter may be copying some other school doing the same thing.
7. I would be surprised if I learned there were other reasons for the letter other than those given.

ITEMS FOR PERCEIVED INTENT TO PERSUADE

8. The letter is trying to persuade the reader.
9. The authors is not attempting to control the impressions of the reader.
10. The letter is attempting to put pressure on the reader to believe the letter's position.
11. The authors is trying to force conclusions on the reader.

ITEMS FOR BEHAVIORAL INTENTION

12. I would be willing to recommend supporting the issue presented to a friend.
13. If I could, I would be willing to support the issue in the message myself.

14. I probably would not be willing to consider the points presented further.

GENERAL ACCEPTANCE ITEMS

15. The letter is truthful in its claims.
16. I liked the style of the letter.
17. The message is biased in its presentation of information.
18. The letter was interesting to read.
19. The arguments given were convincing.
20. I didn't buy some of the arguments that were given.
21. The reasons given for supporting the issue weren't too logical.

ITEMS FOR MANIPULATION CHECKS

22. The likelihood of the issue discussed ever concerning me is unlikely.
23. The communication encourages the reader to make up his or her own mind.
24. The letter was willing to give negative as well as positive information about the topic.

EXPERIMENTAL LIKERT ITEMS

DIRECTIONS

Please read each of the following statements carefully about the letter you read, and indicate your personal feelings of agreement or disagreement with each statement by both circling the number that best describes your agreement or disagreement with each statement and by darkening the appropriate circle on your answer sheet.

1. The authors of the letter may be withholding information about the topic.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

2. The authors of the letter sincerely believe their statements.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

3. The authors of the letter was probably instructed to write a letter like this by their superiors.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

4. The letter may have been written for reasons other than I was told.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

5. The letter may be copying another group doing the same thing.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

6. I would be surprised if I learned there were other reasons for the letter other than those given.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

7. The letter is trying to persuade the reader.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

8. The letter is attempting to put pressure on the reader to believe the letter's position.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

9. I would recommend the action requested in the letter to a friend.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

10. If I could, I would be willing to support the issue presented in the letter.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

11. The letter is truthful in its claims.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

12. The arguments given were convincing.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

13. The authors are not attempting to control the impressions of the reader.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

14. The authors are acting from their personal beliefs rather than outside pressures.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

15. I liked the style of the letter.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

16. I would be willing to consider the points presented further.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

17. The authors are trying to force conclusions on the reader.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

18. The letter is biased in its presentation of information.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

19. I didn't buy some of the arguments that were given.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

20. The reasons given for supporting the issue weren't too logical.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

21. The likelihood of the issue discussed ever concerning me or someone I know is unlikely.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

22. The communication encourages the reader to make up his or her own mind.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

23. The letter was willing to give negative as well as positive information about the topic.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

24. Student input will probably influence the decision on whether or not to implement the proposal.

Strongly agree	Moderately agree	Mildly agree	Neutral	Mildly disagree	Moderately disagree	Strongly disagree
1	2	3	4	5	6	7

APPENDIX E. ATTITUDINAL PRETEST

INTRODUCTION

You are participating in a study that has two distinct parts. First, we are examining current attitudes and beliefs of students relating to different aspects of college life. Hopefully this will give us a little better idea about students in general. The second part is a study of responses to different types of promotional communications. Today you will complete the first part; the second part is scheduled for the week of June 16 - June 20.

Before beginning the attitude and belief questionnaire, please code in your name and ID number on the answer sheet and darken the appropriate circles. Your name and ID number is being used only to keep track of who participates from each class and will be deleted from the final analysis of the study. Be sure to include the code for the class written on the black board. In order to insure accurate record keeping, also please write your name, ID number and class code in the space beneath:

NAME _____ ID ____-____-____ CLASS _____

DIRECTIONS - PART I

This a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered A or B. Please select the one statement of each pair (and only one) which more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Your answer, either A or B to each question on this part of the questionnaire, is to be reported on the Answer Sheet next to the question number by darkening the bubble or circle as you would on a multiple-choice test. **ALSO PLEASE CIRCLE THE APPROPRIATE LETTER ON THE TEST QUESTION.** Therefore you will answer each question twice: once on the question booklet and once on the answer sheet.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice. For each numbered question darken either the A or B circle, whichever you choose as the statement most true. Also circle the letter next to the statement on the test questionnaire.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

Remember

Select the alternative which you personally believe to be more true.

I MORE STRONGLY BELIEVE THAT:

1. A. Children get into trouble because their parents punish them too much.
B. The trouble with most children nowadays is that their parents are too easy with them.
2. A. Many of the unhappy things in people's lives are partly due to bad luck.
B. People's misfortunes result from the mistakes they make.
3. A. One of the major reasons why we have wars is because people don't take enough interest in politics.
B. There will always be wars, no matter how hard people try to prevent them.
4. A. In the long run people get the respect they deserve in this world.
B. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. A. The idea that teachers are unfair to students is nonsense.
B. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. A. Without the right breaks one cannot be an effective leader.
B. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. A. No matter how hard you try some people just don't like you.
B. People who can't get others to like them don't understand how to get along with others.
8. A. Heredity plays the major role in determining one's personality.
B. It is one's experience's in life which determine what they're like.
9. A. I have often found that what is going to happen will happen.

- B. Trusting to fate has never turned out as well as for me as making a decision to take a definite course of action.
10. A. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
- B. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. A. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
- B. Getting a good job depends mainly on being in the right place at the right time.
12. A. The average citizen can have an influence in government decisions.
- B. This world is run by the few people in power, and there is not much the little guy can do about it.
13. A. When I make plans, I am almost certain that I can make them work.
- B. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. A. There are certain people who are just no good.
- B. There is some good in everybody.
15. A. In my case getting what I want has little or nothing to do with luck.
- B. Many times we might just as well decide what to do by flipping a coin.
16. A. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
- B. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
17. A. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
- B. By taking an active part in political and social affairs the people can control world events.
18. A. Most people can't realize the extent to which their lives are controlled by accidental happenings.
- B. There really is no such thing as "luck."

19. A. One should always be willing to admit his mistakes.
B. It is usually best to cover up one's mistakes.
20. A. It is hard to know whether or not a person really likes you.
B. How many friends you have depends upon how nice a person you are.
21. A. In the long run the bad things that happen to us are balanced by the good ones.
B. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. A. With enough effort we can wipe out political corruption.
B. It is difficult for people to have much control over the things politicians do in office.
23. A. Sometimes I can't understand how teachers arrive at the grades they give.
B. There is a direct connection between how hard I study and the grades I get.
24. A. A good leader expects people to decide for themselves what they should do.
B. A good leader makes it clear to everybody what their jobs are.
25. A. Many times I feel that I have little influence over the things that happen to me.
B. It is impossible for me to believe that chance or luck plays an important part in my life.
26. A. People are lonely because they don't try to be friendly.
B. There's not much use in trying too hard to please people, if they like you, they like you.
27. A. There is too much emphasis on athletics in high school.
B. Team sports are an excellent way to build character.
28. A. What happens to be is my own doing.
B. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. A. Most of the time I can't understand why politicians behave the way they do.

B. In the long run the people are responsible for bad government on a national as well as on a local level.

DIRECTIONS - PART II

This part of the questionnaire asks your opinion on a wide variety of issues affecting students. You will be given statements about different issues and will indicate your level of agreement or disagreement with each statement by darkening the appropriate circle on your answer sheet and circling the appropriate letter on the test question. Therefore you will be answering each question twice - once on the answer sheet and once on the questionnaire. Please note that there are five levels of agreement/disagreement. These are:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

Note that the letters are the same as on the answer sheet. Please read each statement carefully and try to consider each item independently - try not to let your response on one item influence others.

30. Many of the courses in the business school are too easy.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

31. Good grades substantially increase the chances of getting a good job.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

32. The better business schools are much harder academically.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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A B C D E

33. Potential employers look very closely at a student's grades and overall academic performance.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

34. I believe that the military draft should be started again.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

35. My school does enough to help graduates find jobs.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

36. Social activities at college are as important as formal coursework.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

37. The reputation of a college is critical in a graduate finding a job.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

38. The federal government should make more low income housing available.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

39. College students are more mature now than they were 20 years ago.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

40. I would support requiring more work to complete a degree in business such as requiring a year of calculus if I thought it might improve the School of Business.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

41. A college education should prepare one for a career.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

42. If I applied myself and studied a little more my grades would probably greatly increase.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

43. A lot of business students don't seem to study very much and still get decent grades.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

44. I resent it when students try to get an easy teacher for a course if a better but harder teacher is available.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

45. I probably worry about grades more than most students.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

46. I think overall my academic performance is pretty good.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

47. I would sooner write a paper than take an exam or test.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

48. I usually do not do as well as my classmates on tests.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

49. I would choose a teacher for course who is a good teacher even if he or she is a harder grader than other teachers for the same course.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

50. University faculty and administrators don't always know what's best for students in the long run.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
A	B	C	D	E

APPENDIX F. ATTITUDINAL PRETEST SCALES

Loading	Item	Communality
Factor 1 - "Good student"		
0.45	If I applied myself and studied a little more my grades would probably greatly increase.	0.22
-0.31	I probably worry about grades more than most students.	0.20
-0.61	I think my overall academic performance is pretty good.	0.44
0.35	I usually do not do as well as my classmates on tests.	0.36
0.69	Grades (Increasing value means higher overall grade point average.)	0.54
Variance accounted for: 26% Cronbach's Alpha = 0.62		
Factor 2 - "Don't Worry"		
0.64	Good grades substantially increase the chances of getting a good job.	0.47
0.58	Potential employers look very closely at a student's grades and overall academic performance.	0.47
0.41	I would support requiring more work to complete a degree in business such as requiring a year of calculus if I thought it might improve the School of Business.	0.40
-0.37	I usually do not do as well as my classmates on tests.	0.36
Variance accounted for: 26% Chronbach's alpha = 0.58		
Factor 3 - "Easy Way Out"		
0.44	I would support requiring more work to complete a degree in business such as requiring a year of calculus if I thought it might improve the School of Business.	0.40

0.62	I resent it when students try to get an easy teacher for a course if a better but harder teacher is available.	0.39
-0.31	I usually do not do as well as my classmates on tests.	0.36
0.62	I would choose a teacher for a course who is a good teacher even if he or she is a harder grader than other teachers for the same course.	0.40

Variance accounted for: 25%

Cronbach's Alpha = 0.58

In the Attitudinal Pretest Scales negative loadings indicate agreement with the item, positive loadings indicate disagreement with the item. The variance accounted for is the percent of explained (e.g., common to the factor solution), not total variance.

APPENDIX G. STIMULUS LETTERS

Suggestive Condition Letter

East Carolina University (High Involvement Condition)
Western Michigan University (Low Involvement Condition)
School of Business

AN OPEN LETTER TO CURRENT AND POTENTIAL BUSINESS MAJORS:

A PROPOSAL FOR YOU TO CONSIDER

Dear Business Student:

Your future and current training is our number-one concern here at East Carolina University's School of Business. This letter discusses a possible change in requirements for the business degree for you to consider. We are seriously considering requiring passing a comprehensive examination before graduation for all business majors. The exam would cover all basic areas of business as well as your individual area of concentration. Graduation would be contingent upon passing the exam, and students failing the exam would be required to retake the exam, and graduation would be delayed until a passing score was obtained.

The decision on whether or not to implement this will be substantially based on your input and support. Without reasonable support from you, the student, the proposal would be difficult to implement and maintain. As such a proposal could be enacted very quickly, it is feasible that it could affect current students at the university if it is adopted. You may want to discuss this with your fellow students, and knowledge of information supporting the proposal should be helpful in developing an opinion.

Our main reason for advocating this proposal is it will enhance the reputation of the business school with potential employers and other universities. It is a common practice among prestigious universities where it has been shown to maintain academic excellence, increase the quality of teaching and to stop declining scores on standardized tests. These schools also have higher starting salaries for graduates, and those going on to graduate education should find that graduate or professional schools show preference to students from these programs. Finally, the National Association of Business Schools gives its highest rating to schools with comprehensive exams. We feel that these are very strong reasons for instituting the proposal, however whether or not you support it will obviously be based on your own interpretation of the facts.

THE FOLLOWING PARAGRAPH WAS INSERTED HERE FOR THE TWO-SIDED CONDITION

No plan is perfect - this one also has some potential difficulties or drawbacks. Devising a test that is fair for all when students may have

had different teachers for the same course will be difficult. However, it may help reduce differences in how some courses are taught. It is also feasible that some students' graduation may be delayed, and this may adversely affect their job recruiting. This may have to be the price of improving the school's reputation.

END OF THE TWO-SIDED INSERT

The degree to which you become involved with or support this proposal is a matter of personal choice. We hope that you become involved with this issue through discussions with fellow students and if asked your opinion, you'll be able to give your own position on whether or not to institute the comprehensive exams.

Sincerely yours,

The Faculty Business Committee

Directive Letter

East Carolina University (High Involvement Condition)
Western Michigan University (Low Involvement Condition)
School of Business

AN OPEN LETTER TO CURRENT AND POTENTIAL BUSINESS MAJORS:

A PROPOSAL YOU SHOULD CONSIDER

Dear Business Student:

Your future and current training is our number-one concern here at East Carolina University's School of Business. This letter discusses a possible change in requirements for the business degree that you should support. We are seriously considering requiring passing a comprehensive examination before graduation for all business majors. The exam would cover all basic areas of business as well as your individual area of concentration. Graduation would be contingent upon passing the exam, and students failing the exam would be required to retake the exam, and graduation would be delayed until a passing score was obtained.

The decision on whether or not to implement this will be substantially based on your input and support. Without reasonable support from you, the student, the proposal would be difficult to implement and maintain. As such a proposal could be enacted very quickly, it is feasible that it could affect current students at the university if it is adopted. While you should discuss this with your fellow students, the facts clearly support the position that this is a good idea for students and for the school.

The main reason you should support this proposal are that it will enhance the reputation of the business school with potential employers and other universities. It is a common practice among prestigious universities where it has been shown to maintain academic excellence, increase the quality of teaching and to stop declining scores on standardized tests. These schools also have higher starting salaries for graduates, and those going on to graduate education should find that graduate or professional schools show preference to students from these programs. Finally, the National Association of Business Schools gives its highest rating to schools with comprehensive exams. We feel, and you should agree, that these are very strong reasons for instituting the proposal. Indeed, they really leave no other real alternative than to support the exams.

THE FOLLOWING PARAGRAPH WAS INSERTED HERE FOR THE TWO-SIDED CONDITION

No plan is perfect - this one also has some potential difficulties or drawbacks. Devising a test that is fair for all when students may have had different teachers for the same course will be difficult. However, it may help reduce differences in how some courses are taught. It is also feasible that some students' graduation may be delayed, and this may adversely affect their job recruiting. This may have to be the price of improving the school's reputation.

END OF THE TWO-SIDED INSERT

By believing the reasons for adopting comprehensive exams and supporting the implementation of this proposal you are demonstrating pride in yourself and your school. Demonstrate your support by talking about the proposal's merits with your fellow students, and when your opinion is asked for, give it clearly by saying "I support comprehensive exams."

Sincerely yours,

The Faculty Business Committee

APPENDIX H. EXPERIMENTAL INSTRUCTIONS

Instructions for Pretest of Letter Directiveness

INSTRUCTIONS

You are participating in exploratory research to study different communication styles using a factor called "directiveness." This is the degree that a communication attempts to draw conclusions for the reader or receiver about he or she should do, feel or believe in response to the communication. Highly directive communications try to tell the reader exactly what he or she should do, feel or believe in an inflexible and specific manner. Non-directive communications encourage the reader to draw his or her own conclusions about the communication's information.

You are being given two communications to read carefully, and then you are to judge the relative degrees of directiveness of the two communications. Please read each communication carefully, and on the last page rate each of the communications on the scales. The issue discussed in the letters is only being used as an example of the different styles and is irrelevant in determining the degree of directiveness. Just try to concentrate on how directive you perceive each letter as being as defined above. If you have any questions please ask the experimenter.

Instructions for Reading Stimulus Letters

DO NOT TURN TO ANY OTHER PAGES UNTIL INSTRUCTED TO DO SO BY THE EXPER-
IMENTER

Directions

You are participating in the second part of an experiment studying different types of promotional communications. As you may be aware, the use of direct mail is the most rapidly growing area of advertising and persuasive communications. This experiment is in part a test of letters as a method of delivering a persuasive communication. Upon instructions from the experimenter you will read a letter advocating a position on an issue that could be under consideration and that might affect you or someone similar to you. It is important to realize that this letter could be mailed to you or someone like you. When instructed to turn to the next page by the experimenter please read the letter carefully. You will be given enough time to read the letter thoroughly.

Please write your name, ID number and summer school class number your are attending in the space beneath.

NAME _____ ID _____

SUMMER SCHOOL CLASS NUMBER FROM LIST ON BOARD _____

DO NOT TURN TO THE NEXT PAGE UNTIL INSTRUCTED TO DO SO BY THE EXPERIMENTER

Instructions for written cognitive responses

Directions:

Please write in the space beneath any thoughts you may have had while reading the letter or thoughts you may have now in which you agree with something the letter says or disagree with something it says, or feel uncertain about something it says, or reason out the implication of something it says, or thoughts it triggers about your own values or experiences, or about your own past experience, or about things other people have told you, or any thoughts about the approach taken in the letter.

Please write each thought in a separate box and do not worry about spelling or grammar. Don't worry if you don't use all the boxes - a large number have been intentionally included. You will have about three minutes for this task. Please stop writing when instructed by the experimenter.

(Boxes for writing responses)

PLEASE DO NOT TURN TO THE NEXT PAGE UNTIL INSTRUCTED BY THE EXPERIMENTER

APPENDIX I. STATISTICAL TABLES

Note: All following Statistical Tables are based on an N=120.

Table 13. Interaction of EASYWAY with Experimental Conditions

Source	SS	DF	MS	F	P
Within +					
Residual	1809.079	108	16.751		
Constant	3181.227	1	3181.227	189.926	0.000
Easyway	389.502	1	389.502	23.253	0.000
Dir sug	4.546	1	4.546	0.271	0.603
Involve	9.062	1	9.062	0.541	0.464
Onetwo	21.948	1	21.948	0.255	0.255
Easyway by					
Dir sug	10.191	1	10.91	0.608	0.437
Easyway by					
Involve	13.678	1	13.678	0.817	0.368
Easyway by					
Onetwo	26.416	1	26.416	1.577	0.212
Easyway by					
Involve by					
Dir sug	137.907	1	137.907	8.233	0.005
Easyway by					
Involve by					
Onetwo	15.380	1	15.380	0.918	0.340
Easyway by					
Dir sug by					
Onetwo	6.632	1	6.632	0.396	0.531
Easyway by					
Dir sug by					
Involve by					
Onetwo	2.987	1	2.987	0.178	0.674

Table 14. ANOCOVA of IE with EASYWAY

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
COVARIATES	39.016	1	39.016	1.210	0.274
EASYWAY	39.016	1	39.016	1.210	0.274
MAIN EFFECTS	27.019	3	9.006	0.279	0.840
DIRSUG	26.092	1	26.092	0.809	0.370
INVOLVE	0.647	1	0.647	0.020	0.888
ONETWO	0.257	1	0.257	0.008	0.929
2-WAY INTERACTIONS	120.878	3	40.293	1.249	0.296
DIRSUG INVOLVE	1.984	1	1.984	0.062	0.805
DIRSUG ONETWO	96.963	1	96.963	3.006	0.086
INVOLVE ONETWO	21.501	1	21.501	0.667	0.416
3-WAY INTERACTIONS	42.863	1	42.863	1.329	0.251
DIRSUG INVOLVE ONETWO	42.863	1	42.863	1.329	0.251
EXPLAINED	229.777	8	28.722	0.890	0.527
RESIDUAL	3580.590	111	32.258		
TOTAL	3810.367	119	32.020		

Table 15. ANOCOVA of ACT with EASYWAY

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
COVARIATES	421.385	1	421.385	25.611	0.000
EASYWAY	421.385	1	421.385	25.611	0.000
MAIN EFFECTS	14.715	3	4.905	0.298	0.827
DIRSUG	9.776	1	9.776	0.594	0.442
INVOLVE	4.545	1	4.545	0.276	0.600
ONETWO	0.269	1	0.269	0.016	0.899
2-WAY INTERACTIONS	176.523	3	58.841	3.576	0.016
DIRSUG INVOLVE	159.858	1	159.858	9.716	0.002
DIRSUG ONETWO	6.677	1	6.677	0.406	0.525
INVOLVE ONETWO	10.560	1	10.560	0.642	0.425
3-WAY INTERACTIONS	5.647	1	5.647	0.343	0.559
DIRSUG INVOLVE ONETWO	5.647	1	5.647	0.343	0.559
EXPLAINED	618.270	8	77.284	4.697	0.000
RESIDUAL	1826.322	111	16.453		
TOTAL	2444.592	119	20.543		

Table 16. ANOCOVA of ACCEPT with EASYWAY

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
COVARIATES	45.030	1	45.030	1.023	0.314
EASYWAY	45.030	1	45.030	1.023	0.314
MAIN EFFECTS	279.971	3	93.324	2.120	0.102
DIRSUG	173.913	1	173.913	3.951	0.049
INVOLVE	10.559	1	10.559	0.240	0.625
ONETWO	93.308	1	93.308	2.120	0.148
2-WAY INTERACTIONS	214.565	3	71.522	1.625	0.188
DIRSUG INVOLVE	205.210	1	205.210	4.662	0.033
DIRSUG ONETWO	9.524	1	9.524	0.216	0.643
INVOLVE ONETWO	0.059	1	0.059	0.001	0.971
3-WAY INTERACTIONS	11.211	1	11.211	0.255	0.615
DIRSUG INVOLVE ONETWO	11.211	1	11.211	0.255	0.615
EXPLAINED	550.777	8	68.847	1.564	0.144
RESIDUAL	4885.723	111	44.016		
TOTAL	5436.500	119	45.685		

Table 17. ANOCOVA of PER with EASYWAY

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
COVARIATES	0.207	1	0.207	0.012	0.913
EASYWAY	0.207	1	0.207	0.012	0.913
MAIN EFFECTS	348.091	3	116.030	6.741	0.000
DIRSUG	322.871	1	322.871	18.757	0.000
INVOLVE	1.303	1	1.303	0.076	0.784
ONETWO	21.706	1	21.706	1.261	0.264
2-WAY INTERACTIONS	62.955	3	20.985	1.219	0.306
DIRSUG INVOLVE	13.992	1	13.992	0.813	0.369
DIRSUG ONETWO	19.911	1	19.911	1.157	0.284
INVOLVE ONETWO	28.895	1	28.895	1.679	0.198
3-WAY INTERACTIONS	11.434	1	11.434	0.664	0.417
DIRSUG INVOLVE ONETWO	11.434	1	11.434	0.664	0.417
EXPLAINED	422.687	8	52.836	3.070	0.004
RESIDUAL	1910.638	111	17.213		
TOTAL	2333.325	119	19.608		

Table 18. ANOCOVA of SAs with EASYWAY

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
COVARIATES	14.661	1	14.661	6.542	0.012
EASYWAY	14.661	1	14.661	6.542	0.012
MAIN EFFECTS	1.588	3	0.529	0.236	0.871
DIRSUG	1.133	1	1.133	0.506	0.479
INVOLVE	0.376	1	0.376	0.168	0.683
ONETWO	0.071	1	0.071	0.032	0.859
2-WAY INTERACTIONS	8.331	3	2.777	1.239	0.299
DIRSUG INVOLVE	6.597	1	6.597	2.944	0.089
DIRSUG ONETWO	0.349	1	0.349	0.156	0.694
INVOLVE ONETWO	1.423	1	1.423	0.635	0.427
3-WAY INTERACTIONS	1.460	1	1.460	0.651	0.421
DIRSUG INVOLVE ONETWO	1.460	1	1.460	0.651	0.421
EXPLAINED	26.040	8	3.255	1.452	0.183
RESIDUAL	248.760	111	2.241		
TOTAL	274.800	119	2.309		

Table 19. ANOCOVA of CAs with EASYWAY

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
COVARIATES	9.634	1	9.634	3.563	0.062
EASYWAY	9.634	1	9.634	3.563	0.062
MAIN EFFECTS	8.016	3	2.672	0.988	0.401
DIRSUG	4.494	1	4.494	1.662	0.200
INVOLVE	1.365	1	1.365	0.505	0.479
ONETWO	2.097	1	2.097	0.775	0.380
2-WAY INTERACTIONS	9.102	3	3.034	1.122	0.343
DIRSUG INVOLVE	0.056	1	0.056	0.021	0.886
DIRSUG ONETWO	1.914	1	1.914	0.708	0.402
INVOLVE ONETWO	7.103	1	7.103	2.627	0.108
3-WAY INTERACTIONS	3.708	1	3.708	1.371	0.244
DIRSUG INVOLVE ONETWO	3.708	1	3.708	1.371	0.244
EXPLAINED	30.459	8	3.807	1.408	0.201
RESIDUAL	300.133	111	2.704		
TOTAL	330.592	119	2.778		

Table 20. ANOVA of IE

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	26.067	3	8.689	0.269	0.847
DIRSUG	22.533	1	22.533	0.699	0.405
INVOLVE	2.700	1	2.700	0.084	0.773
ONETWO	0.833	1	0.833	0.026	0.873
2-WAY INTERACTIONS	123.367	3	41.122	1.275	0.287
DIRSUG INVOLVE	1.200	1	1.200	0.037	0.847
DIRSUG ONETWO	104.533	1	104.533	3.241	0.075
INVOLVE ONETWO	17.633	1	17.633	0.547	0.461
3-WAY INTERACTIONS	48.133	1	48.133	1.492	0.224
DIRSUG INVOLVE ONETWO	48.133	1	48.133	1.492	0.224
EXPLAINED	197.567	7	28.224	0.875	0.529
RESIDUAL	3612.800	112	32.257		
TOTAL	3810.367	119	32.020		

Table 21. ANOVA of ACT

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	43.825	3	14.608	0.728	0.537
DIRSUG	18.408	1	18.408	0.917	0.340
INVOLVE	0.208	1	0.208	0.010	0.919
ONETWO	25.208	1	25.208	1.256	0.265
2-WAY INTERACTIONS	139.292	3	46.431	2.314	0.080
DIRSUG INVOLVE	134.408	1	134.408	6.698	0.011
DIRSUG ONETWO	1.875	1	1.875	0.093	0.760
INVOLVE ONETWO	3.008	1	3.008	0.150	0.699
3-WAY INTERACTIONS	14.008	1	14.008	0.698	0.405
DIRSUG INVOLVE ONETWO	14.008	1	14.008	0.698	0.405
EXPLAINED	197.125	7	28.161	1.403	0.211
RESIDUAL	2247.467	112	20.067		
TOTAL	2444.592	119	20.543		

Table 22. ANOVA of ACCEPT

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	256.833	3	85.611	1.928	0.129
DIRSUG	187.500	1	187.500	4.223	0.042
INVOLVE	4.800	1	4.800	0.108	0.743
ONETWO	64.533	1	64.533	1.454	0.230
2-WAY INTERACTIONS	199.900	3	66.633	1.501	0.218
DIRSUG INVOLVE	192.533	1	192.533	4.337	0.040
DIRSUG ONETWO	6.533	1	6.533	0.147	0.702
INVOLVE ONETWO	0.833	1	0.833	0.019	0.891
3-WAY INTERACTIONS	7.500	1	7.500	0.169	0.682
DIRSUG INVOLVE ONETWO	7.500	1	7.500	0.169	0.682
EXPLAINED	464.233	7	66.319	1.494	0.177
RESIDUAL	4972.267	112	44.395		
TOTAL	5436.500	119	45.685		

Table 23. ANOVA of PER

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	348.225	3	116.075	6.804	0.000
DIRSUG	323.408	1	323.408	18.958	0.000
INVOLVE	1.408	1	1.408	0.083	0.774
ONETWO	23.408	1	23.408	1.372	0.244
2-WAY INTERACTIONS	63.025	3	21.008	1.231	0.302
DIRSUG INVOLVE	14.008	1	14.008	0.821	0.367
DIRSUG ONETWO	20.008	1	20.008	1.173	0.281
INVOLVE ONETWO	29.008	1	29.008	1.700	0.195
3-WAY INTERACTIONS	11.408	1	11.408	0.669	0.415
DIRSUG INVOLVE ONETWO	11.408	1	11.408	0.669	0.415
EXPLAINED	422.658	7	60.380	3.539	0.002
RESIDUAL	1910.667	112	17.060		
TOTAL	2333.325	119	19.608		

Table 24. ANOVA of SAs

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	3.133	3	1.044	0.445	0.721
DIRSUG	1.633	1	1.633	0.696	0.406
INVOLVE	1.200	1	1.200	0.511	0.476
ONETWO	0.300	1	0.300	0.128	0.721
2-WAY INTERACTIONS	6.600	3	2.200	0.937	0.425
DIRSUG INVOLVE	5.633	1	5.633	2.400	0.124
DIRSUG ONETWO	0.133	1	0.133	0.057	0.812
INVOLVE ONETWO	0.833	1	0.833	0.355	0.553
3-WAY INTERACTIONS	2.133	1	2.133	0.909	0.343
DIRSUG INVOLVE ONETWO	2.133	1	2.133	0.909	0.343
EXPLAINED	11.867	7	1.695	0.722	0.653
RESIDUAL	262.933	112	2.348		
TOTAL	274.800	119	2.309		

Table 25. ANOVA of CAs

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF OF F
MAIN EFFECTS	10.292	3	3.431	1.244	0.297
DIRSUG	5.208	1	5.208	1.889	0.172
INVOLVE	0.675	1	0.675	0.245	0.622
ONETWO	4.408	1	4.408	1.599	0.209
2-WAY INTERACTIONS	8.492	3	2.831	1.027	0.384
DIRSUG INVOLVE	0.008	1	0.008	0.003	0.956
DIRSUG ONETWO	2.408	1	2.408	0.873	0.352
INVOLVE ONETWO	6.075	1	6.075	2.203	0.141
3-WAY INTERACTIONS	3.008	1	3.008	1.091	0.298
DIRSUG INVOLVE ONETWO	3.008	1	3.008	1.091	0.298
EXPLAINED	21.792	7	3.113	1.129	0.350
RESIDUAL	308.800	112	2.757		
TOTAL	330.592	119	2.778		

Table 26. Means and Standard Deviations of Dependent Measures

VARIABLE	N	MEAN	STD DEV
IE	120	31.7166667	5.65861184
PER	120	21.5750000	4.42806652
ACT	120	13.6083333	4.53241515
ACCEPT	120	26.2500000	6.75905866
CA	120	1.8083333	1.66675770
SA	120	1.6000000	1.51961959
SB	120	0.0833333	0.37981272
SD	120	0.2083333	0.64685189
OTHER	120	0.8583333	1.30478005

Table 27. Cell Means for Interaction of Involvement and Directiveness.

		Directiveness			
		Directive		Suggestive	
High Involvement	SD	=	0.33	SD	= 0.00
	SB	=	0.03	SB	= 0.07
	CA	=	2.10	CA	= 1.67
	SA	=	1.37	SA	= 2.03
	OTHER	=	0.80	OTHER	= 0.90
	IE	=	31.23	IE	= 31.90
	PER	=	23.67	PER	= 19.70
	ACT	=	12.20	ACT	= 15.10
	ACCEPT	=	23.53	ACCEPT	= 28.57
Low Involvement	SD	=	0.37	SD	= 0.13
	SB	=	0.13	SB	= 0.10
	CA	=	1.93	CA	= 1.53
	SA	=	1.60	SA	= 1.40
	OTHER	=	0.53	OTHER	= 1.20
	IE	=	31.33	IE	= 32.40
	PER	=	22.77	PER	= 20.17
	ACT	=	14.23	ACT	= 12.90
	ACCEPT	=	28.57	ACCEPT	= 26.43

Table 28. Cell Means for Interaction of Sidedness and Directiveness.

		Directiveness			
		Directive		Suggestive	
One-Sided	SD	=	0.40	SD	= 0.03
	SB	=	0.13	SB	= 0.03
	CA	=	1.97	CA	= 1.27
	SA	=	1.57	SA	= 1.73
	OTHER	=	0.77	OTHER	= 1.20
	IE	=	32.13	IE	= 31.13
	PER	=	24.07	PER	= 19.97
	ACT	=	13.80	ACT	= 14.33
	ACCEPT	=	24.50	ACCEPT	= 26.53
Two-Sided	SD	=	0.30	SD	= 0.10
	SB	=	0.03	SB	= 0.13
	CA	=	2.07	CA	= 1.93
	SA	=	1.40	SA	= 1.70
	OTHER	=	0.56	OTHER	= 0.90
	IE	=	30.43	IE	= 33.17
	PER	=	22.37	PER	= 19.90
	ACT	=	12.63	ACT	= 13.67
	ACCEPT	=	25.50	ACCEPT	= 28.47

Table 29. Cell Means for Interaction of Sidedness and Involvement.

		Involvement			
		High		Low	
One-Sided	SD	=	0.20	SD	= 0.23
	SB	=	0.03	SB	= 0.13
	CA	=	1.47	CA	= 1.77
	SA	=	1.83	SA	= 1.47
	OTHER	=	1.00	OTHER	= 0.97
	IE	=	31.10	IE	= 32.17
	PER	=	21.63	PER	= 22.40
	ACT	=	14.27	ACT	= 13.87
	ACCEPT	=	25.23	ACCEPT	= 25.80
Two-Sided	SD	=	0.13	SD	= 0.27
	SB	=	0.07	SB	= 0.10
	CA	=	2.30	CA	= 1.70
	SA	=	1.57	SA	= 1.53
	OTHER	=	0.70	OTHER	= 0.77
	IE	=	32.03	IE	= 31.57
	PER	=	21.73	PER	= 20.53
	ACT	=	13.03	ACT	= 13.27
	ACCEPT	=	26.87	ACCEPT	= 27.10

Table 30. Cell Means for the 3-way Interaction

		HIGH INVOLVEMENT	
		ONE-SIDED	TWO-SIDED
S U G	SD	= 0.00	SD = 0.00
	SB	= 0.00	SB = 0.13
	CA	= 1.27	CA = 2.07
	SA	= 2.27	SA = 1.80
	OTHER	= 0.87	OTHER = 0.93
	IE	= 29.87	IE = 33.93
	PER	= 18.93	PER = 20.47
	ACT	= 15.93	ACT = 14.27
	ACCEPT	= 27.27	ACCEPT = 29.87
D I R	SD	= 0.40	SD = 0.23
	SB	= 0.07	SB = 0.00
	CA	= 1.67	CA = 2.53
	SA	= 1.40	SA = 1.22
	OTHER	= 1.13	OTHER = 0.47
	IE	= 32.33	IE = 30.13
	PER	= 24.33	PER = 23.00
	ACT	= 12.60	ACT = 11.80
	ACCEPT	= 23.20	ACCEPT = 23.87
		LOW INVOLVEMENT	
		ONE-SIDED	TWO-SIDED
D I R	SD	= 0.07	SD = 0.20
	SB	= 0.07	SB = 0.13
	CA	= 1.27	CA = 1.80
	SA	= 1.20	SA = 1.60
	OTHER	= 1.54	OTHER = 0.87
	IE	= 32.40	IE = 32.40
	PER	= 21.00	PER = 19.33
	ACT	= 12.73	ACT = 13.07
	ACCEPT	= 25.80	ACCEPT = 27.07
S U G	SD	= 0.40	SD = 0.33
	SB	= 0.20	SB = 0.07
	CA	= 2.27	CA = 1.60
	SA	= 1.73	SA = 1.47
	OTHER	= 0.40	OTHER = 0.67
	IE	= 31.93	IE = 30.73
	PER	= 23.80	PER = 21.73
	ACT	= 15.00	ACT = 13.47
	ACCEPT	= 25.80	ACCEPT = 27.13

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