Predictive Correlates of Adoption Behavior in a Social Context: A Multiple Discriminant Analysis

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PREDICTIVE CORRELATES OF ADOPTION BEHAVIOR IN A SOCIAL CONTEXT: A MULTIPLE DISCRIMINANT ANALYSIS

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PREDICTIVE CORRELATES OF ADOPTION BEHAVIOR
IN A SOCIAL CONTEXT: A MULTIPLE DISCRIMINANT ANALYSIS

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This thesis is dedicated first to my parents, for their patience and the many times they provided encouragement. And secondly, I dedicate this thesis to the men of Sigma Nu Fraternity.
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PREDICTIVE CORRELATES OF ADOPTION BEHAVIOR
IN A SOCIAL CONTEXT: A MULTIPLE DISCRIMINANT ANALYSIS

Robert M. Brady August 1975 84 pages
Directed by: Carley Dodd, Randall Capps, Regis O'Connor
Department of Speech Western Kentucky University

Working from a communication theory paradigm and from previous literature, the purpose of this study was to empirically examine significant receiver correlates which predict adoption behavior of Sigma Nu Fraternity on three campuses. Drawing from past research, the present study utilized a unique combination of social and communication variables as predictors of fraternity membership. A step-wise multiple discriminant analysis using five factors derived from the thirteen independent variables yielded a highly significant three factor discriminant function (p < .001) which explained 46.65 percent of the common variance in adoption/non-adoption behavior of Sigma Nu. The significant factors were labeled peer group behavior, parental economic support, and social attitudes. Based on intuitive interpretation features of the data, the researcher suspects that adopters are more socially oriented, have a wider variety of friends, are less dependent on parental economic support, and exhibit higher scores on measures such as self-esteem, liberalism, conservatism, and the need for identification with groups.
CHAPTER I

INTRODUCTION, REVIEW OF LITERATURE AND RATIONALE

Introduction

For centuries man has been interested in those factors leading to positive persuasive outcomes. Numerous research projects in attitude change have been devoted to understanding the total process of persuasion, especially in terms of the characteristics of the communicator, the message, the channels and networks of communication, the receivers, and communication effects. Various strains of attitude change and persuasion research have dealt with each of these categories around which viable research questions revolve. Within the past three decades considerable research has focused on the receivers of persuasive communications.¹ One vein of receiver-oriented research views audience predispositions to discover those factors

which affect the adoption of persuasive messages. One can thereby frame these factors as mediating constructs which intervene between a persuasive message and subsequent persuasive effect evidenced by attitudinal or behavioral change.

The present study takes its locus from a receiver-oriented viewpoint. The purpose of this study is to test the relationship between selected attitudinal, personality, and demographic variables and behavioral adoption of a persuasive appeal. A central research question frames the basis for this inquiry: "What are the receiver variables relating to the adoption of a persuasive communication?"

A corollary to this question is a subsidiary question of practical and heuristic value: "How can these receiver variables be useful in predicting subsequent attitude change?"

Working from a comparative base of adopters and non-adopters, the author conducted a field investigation scrutinizing those variables which predict membership in a college social fraternity. The generated data provide a basis by which to explore relationships explaining the behavioral adoption of fraternity membership.

Review of Literature

Since individuals hold attitudes and perform behaviors, a law of mutability postulates that those attitudes and behaviors change. In part, that change can
be explained by persuasive information and in part by other receiver characteristics. Therefore, receiver characteristics act as a mediating influence upon a persuasive appeal, much like Doob's postulation of attitudes as a learned mediated response.² The diagram below illustrates the paradigm for this study:

persuasive appeal ----> receiver characteristics ----> adoption/nonadoption.

The present study traces selective receiver correlates explaining adoption behavior in the presence of a persuasive appeal.

Definitional Overview: Persuasion, Attitudinal and Behavioral Change

Since this study deals with the highly integrated concepts of persuasion and attitudinal/behavioral change, the first subsection of this review offers a brief definitional overview. The first part then reviews the concept of attitude as an integral factor in explaining attitude and behavior change as a persuasive effect.

The Concept of Attitude

Existing literature highlights a dirth of consistent information relevant to an explicit definition for the concept "attitude." Some writers have treated attitudes as a behavioral response syndrome or as entirely a mental

process. In a landmark work on attitudes, Allport cogently states:

An attitude is a mental and neutral state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related.3

Accordingly, Cronkhite contends that an attitude is "a cluster of evaluative or approach—avoidance behavior,"4 while Osgood and Tannenbaum remark that:

The meaning of a concept is its location in a space defined by some number of factors or dimensions, and attitude toward a concept is its projection onto one of these dimensions defined as 'evaluative'."5

Fishbein provides another perspective by noting that:

Attitude can be described as a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object."6

That no single concurring definition of attitude exists seems a warranted assumption. However, for the term to have any distinct meaning there must exist some commonality in the diverse viewpoints.

Rather than attempting to impose some overall definition of an attitude, let us briefly examine five


4Cronkhite, Persuasion, p. 12.


common characteristics which permeate current investigation. An attitude is (1) focused upon an object, (2) contains an evaluative dimension, (3) learned, (4) enduring, and (5) results in characteristic and consistent behavior. Let us focus briefly on each of these five distinctions.

First, Brown has indicated that "an attitude has always a focus; it may be a person, a group, a nation, a product, anything whatever really."7 Thus, a person's attitude is pointed toward a "social object".8 Second, Insko comments that the evaluative attribute is "the single defining dimension for attitude".9 This evaluative dimension is an affective relationship which exists between the individual and some social object measured on a favorable or unfavorable continuum.10 A third characteristic of attitudes is that they are learned. Allport, as previously noted, suggested that attitudes are "organized through experience."11 Supporting this position, Sherif

10Fishbein and Ajzen, Theory and Research, p. 6.
and Sherif argue for a social basis for attitudes:

When we talk about attitudes, we are talking about what a person has learned in the process of becoming a member of a family, a member of a group, and of society that makes him react to his social work in a consistent and characteristic way, instead of a transitory and haphazard way.¹²

Fourth, Kretch et al., have asserted that attitudes are "an enduring system."¹³ Attitudes are conceived as manifestations operating overtime rather than momentarily, thus enabling an individual to exhibit "a syndrome of response consistency with regard to social objects."¹⁴

Finally, overt action and observed behavior are consequents of an attitude. While the statement that attitudes predict behavior has attracted much recent controversy, a primary concern of attitude change research is the presumption that an individual's attitude and his exhibited behavior are related. McGuire has examined five distinct positions which have been espoused in experimental research.¹⁵ Since no direct measure of attitudes exists


¹³ Krech et al., Individual in Society, p. 177.


(except by inferences of overt behavior), this controversy is not surprising. In a review of this research, Wicker located only very few studies in which "at least one attitudinal measure and one overt behavioral measure toward the same object were obtained for each subject."\textsuperscript{16}

Despite repeated failures to consistently demonstrate a strong relationship between attitudes and behavior, the basic assumption of attitude change investigation (and of the present study) is that to some extent human behavior is determined by attitudes.\textsuperscript{17}

**The Concept of Persuasion**

As with attitude, the term persuasion has also been defined in numerous ways. For example, Cronkhite contends that persuasion refers to "the evaluative or approach-avoidance behavior of those who interpret the symbols."\textsuperscript{18}

Likewise, for Fotheringham:

> Persuasion is conceived as that body of effects in receivers, relevant and instrumental to source-desired goals, brought about by a process in which messages have been a major determinant of those effects.\textsuperscript{19}


\textsuperscript{18}Cronkhite, *Persuasion*, p. 15.

Bettinghaus observes that a persuasive communication must involve a "conscious attempt by one individual to change the behavior of another individual or group of individuals through the transmission of some message."\(^{20}\) Minnick regards persuasion as:

*Discourse, written, or oral, in which the author controls all appropriate communication variables in an attempt to determine the response of the receiver toward a particular choice of belief or conduct.*\(^{21}\)

Finally, Andersen defines persuasion:

*As a process of interpersonal communication in which the communicator seeks through the use of symbolic agencies to affect the cognitions of the receiver and thus effect a voluntary change in attitude and/or action desired by the communicator.*\(^{22}\)

One subset of communication research termed "diffusion of innovations," has dealt with the phenomenon of persuasion from somewhat a different perspective. By definition, research in diffusion asks what factors influence the adoption or rejection of innovations.\(^{23}\) Of additional interest to diffusion researchers is determining those factors in the adoption process that predict

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innovativeness. Consistent with diffusion research questions, the present study centers on the behavioral adoption or non-adoption of fraternities.

Several properties can be observed from the above definitions, although no one attempt employs all of them. First, the process of social influence or persuasion involves an attempt by one individual to direct the attitudes and/or behaviors of others toward a predetermined goal. Secondly, persuasion employs the transmission of some type of communication stimuli, usually a message. Third, the effects produced are central to the process.

Integration: Attitudes and Persuasion

The relationship between attitude change as a persuasive outcome and persuasion as a process is predicated upon the assumption that the message is central to the process. More specifically, each person possesses a psychological space (a response syndrome) which determines his affective relationships with social objects. This attitude macrocosm can be altered by many agents: the person's cognitions, his overt behavior, or by the introduction of information designed to change his response syndrome. Overall, the persuasion process inherently incorporates attitudinal and behavioral change as its objectives.

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Innovativeness is defined as "the degree to which an individual is relatively earlier in adopting new ideas than the other members in his social system." Rogers and Shoemaker, Communication of, p. 27.
Correlates of Receiver Adoption

Research in attitude change effectiveness has typically examined five inherent and interrelated communication variables: the source, message, channel, situation, and the receiver. Obviously, the effectiveness of a persuasive communication is influenced by several factors: the perceived credibility of the source, the selection of communication channels, the characteristics and predispositions of the audience, and the structure and content of the message.

When a source directs a persuasive message to a target population, several different reactions will generally occur: (1) overt rejection, (2) no visible result (apathy), (3) overt acceptance or endorsement, and (4) instrumental effects (general agreement or favorable attitudes toward the speaker and/or his message often leading to overt acceptance in subsequent communications). However, existing in most communicative situations are potentially substantial individual variations in affective response. This section examines those factors that predispose persons to maximum reception of information and subsequent adoption in terms of five variables. These factors stem from a categorization of prior research in receiver-oriented studies: (1) selectivity, (2) personality, (3) source perception, (4) demographic and socioeconomic, and (5) frame of reference. The research cited in these
categories is selective rather than exhaustive by the nature of this study.

**Selectivity**

As indicated above, attitude change is not a simple direct response but the residual outcome of a series of behavioral steps. Essentially, these cognitive steps are reception of, attention to, comprehension of, and yielding to the message.  

Selective exposure to information is a widely accepted principle in communication and hinges upon the conceptual notions of reception, attention, comprehension, and retention of information. This phenomenon is operative in any study of dynamic, "real life" communication effects. Individuals are rarely forced to expose themselves to a persuasive stimulus, but normally have direct choice in the admittance of sources and types of influence. This response set thus poses an interesting question. Does a person's opinion about an issue determine the degree of willing exposure to information about that object? In other words, does there exist a constant fashion by which

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a person selectively exposes himself to information?

Selective exposure is generally defined as "any systematic bias in audience composition." In these terms, the nature of selective exposure offers no explanations for the reasons why individuals are biased. The point is that they are systematically biased toward the communication and the communicator. A second proposition maintained by selective exposure research is a "preference for supportive, rather than nonsupportive, information." In other words, people have a tendency to admit communications that are consistent with their existing attitudes and beliefs. Therefore, people are believed to actively seek out information that supports their opinions and to actively avoid that information which is contrary. One possible explanation for this phenomenon exists within the conceptual framework of dissonance theory. To reduce a dissonant situation, the theory predicts that an individual seeks information which supports his position and avoids discrepant information. A study by Ehrlich et al., investigated this phenomenon by selecting people who had recently purchased new cars and


27 Ibid., p. 198.

those people who had bought new cars in the past three years. The contention that individuals seek out consonant information was supported by this investigation. However, the results did not substantiate the prediction that people would avoid discrepant information.²⁹

Several more recent investigations³⁰ have failed to clearly delineate whether selective exposure is an important operating factor in reception of information. However, at least two empirical conclusions seem to permeate the existing literature on selective exposure: (1) selectivity is probably a mechanism operating over a long term rather than at any given moment and (2) people do not necessarily avoid discrepant information entirely. Rather, people carefully scrutinize nonsupportive (or discrepant) information.³¹


Personality Variables

The second broad category of receiver characteristics which affect reception of information deals with personality factors. A number of early investigations focused on individual differences as a response set to persuasive communications. These studies indicate that there may exist a common operant factor of susceptibility to persuasion, or "persuasibility". According to Hovland and Janis, the term persuasibility refers "to those attitudes or personality factors leading to low or high resistance to a variety of persuasive communications on many diverse topics." Therefore, persuasibility is a characteristic of being susceptible to persuasion regardless of the message or source. This section deals with the receiver dimensions of personality traits and their effects on persuasion. When viewing personality structures dynamically, an underlying premise is that "persuasibility on one issue is positively related to persuasibility by other messages on other issues."


Authoritarianism

For years, extensive research has dealt with a personality factor termed "authoritarianism", as measured by Adorno's "F-scale".\textsuperscript{35} Bettinghaus cogently describes the authoritarian (personality) as:

...highly reliant on the moral authorities of his own reference groups, tends to adhere rigidly to middleclass values, is preoccupied with the relative power and status of people around him and with his own power and status.\textsuperscript{36}

In terms of persuasibility, Harvey and Beverly found results which indicated that individuals who score high on the F-scale were more likely to conform.\textsuperscript{37}

An examination of persons who are highly authoritarian seems to also indicate that their reactions to elements other than the message content will be the important factor. For example, Millon and Simpkins reported that individuals scoring highly on the F-scale were more likely to be persuaded by the source of the message, rather than the ideas within the message. This was especially true of


\textsuperscript{36}Bettinghaus, Persuasive Communication, p. 69.

sources perceived to be prestigious. In summarizing research findings on authoritarianism, Wright and Harvey characterize an authoritarian individual as consistently relying heavily on authority figures.

Dogmatism

The concept of authoritarianism overlaps with a second personality variable, dogmatism. According to Rokeach, the dogmatic individual possesses a closed belief system (closed-mindedness) while the open-minded individual tends to compare various belief concepts before making a decision. Thus, the dogmatic person is generally unable to view and reflect on discrepant information in an objective manner.

In terms of persuasion, the dogmatic personality provides some interesting implications. For example, Norris using the 40 item Rokeach scale, found that closed-minded persons were more influenced by a persuasive communication from a favorable source than were the open-minded subjects (source credibility was not experimentally


39 Wright and Harvey, "Attitude Change as a Function," pp. 177-81.

manipulated). However, this result was significant for only one of four experimental messages. In a somewhat more inclusive study, Powell indicates that open-minded persons were better able to distinguish between and evaluate independently the content and source of a persuasive message than were closed-minded individuals (both content and source were experimentally manipulated). In other terms, the closed-minded subjects were comparatively unable to distinguish between the message and source and to evaluate each on its own merits. While some qualifications are necessary, the general conclusion is that the dogmatic person seems to be the most easily persuaded and most susceptible to persuasive communications, especially when the message is attributed to a source perceived as prestigious.

Self-esteem

Another personality variable applicable to the persuasive process is self-esteem. Essentially, self-esteem is the way in which the individual views himself. One

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generalization emerging from self-esteem research reveals that people with high self-esteem are comparatively more difficult to persuade than people with low self-esteem. Furthermore, research implies that low self-esteem individuals consult with others before making a decision. In fact, Janis found three factors (feelings of social inadequacy, inhibition of aggression, and depressive tendencies) related to low self-esteem which is highly related to persuasibility.\textsuperscript{44} Cohen discovered that subjects having low self-esteem are more easily persuaded by a source they perceive as having high self-esteem.\textsuperscript{45} Leventhal and Perloe found that individuals with high self-esteem are more susceptible to positively toned communications (defined as optimistic and buoyant) while low self-esteem subjects are more swayed by messages cast in a negative (pessimistic) tone.\textsuperscript{46} While neither the Cohen study or the Leventhal and Perloe study contradict the assumption of self-esteem and persuasibility, both indicate that the relationship is quite complex and interaction

\textsuperscript{44} Irving L. Janis, "Personality Correlates of Susceptibility to Persuasion," \textit{Journal of Personality} 22 (June 1954): 504-18.


effects of source and message must be taken into account. 47

Source Credibility: Receiver Perception

The third subset of audience predispositional factors centers on a receiver's evaluation of a communication source, often termed "source credibility." As Cronkhite notes, source credibility or "Ethos" is the term rhetoricians have used as a linguistic wastebasket for any discernible source characteristic for better (or worse) than two thousand years. 48

Other terms often included in this research tradition are "opinion leadership," "charisma," "prestige," "reputation," "status," "authority," and "competence." While source credibility is typically not included in audience related literature, the concept itself stems from what Sherif, Sherif, and Nebergall note as the receivers' perceptions and judgments of a source. 49 Thus, for the purposes of this research, the term source credibility refers to the receivers' perception or evaluation of a persuasive communication.

Several elements seem to form a configuration of what is usually termed source credibility. Aristotle believed

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48 Cronkhite, Persuasion, p. 173.

that there were three: the intelligence of the speaker, his character, and his good will toward the audience.\(^{50}\)

In the classic empirical work on source credibility, Hovland et al., commented on two factors, expertness and trustworthiness:

An individual's tendency to accept a conclusion advocated by a given communicator will depend in part upon how well informed and intelligent he believes the communicator to be. However, a recipient may believe that a communicator is capable of transmitting valid statements, but still be inclined to reject the communication if he suspects the communicator is motivated to make nonvalid assertions. It seems necessary, therefore, to make a distinction between 1) the extent to which a communicator is perceived to be a source of valid assertions (his 'expertness') and 2) the degree of confidence in the communicator's intent to communicate the assertions he considers most valid (his 'trustworthiness').\(^{51}\)

Since the work of Hovland and the Yale School, numerous studies have attempted to identify and assess the persons' concept of source credibility. For instance, Berlo, Lemert, and Mertz factor analyzed audience response to sources using a set of thirty-five bi-polar adjectives. They discovered three major factors: "safety," "qualification," and "dynamism." There was also a fourth, weaker factor termed "sociability."\(^{52}\) McCroskey, Tuppen, and

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Dziadosz, to name but a few, identified a host of other factors operating in source credibility including "evaluative," "charisma," "expertise," "coorientation," "attractiveness," and "precision." Overall, a number of dimensions form a composite understanding of source credibility.

In addition to understanding the definitional base of source credibility, studies demonstrate the relation of source credibility to persuasive outcomes. For instance, the bulk of research prior to 1963 primarily concentrated on demonstrating and refining research results indicating that high credible sources yield maximum persuasive outcomes. An early study by Kelman and Hovland, for example, demonstrated the positive persuasive effect of high credibility compared with low credibility. However, in a three week post-test, the researchers observed a "boomerang effect," since over time, the subjects failed to distinguish between the high and low credible sources.


and instead remembered only the messages.  

Thus, low source credibility plays a still uncertain role in persuasion. In another study, Zimbardo used a persuasive message advocating the eating of a highly undesirable food, namely fried grasshopper. In one condition the message was presented by a communicator "who adopted a friendly, positive role" and in the second situation the same communicator adopted "an unfriendly, negative role." After hearing the message, the subjects in each condition were asked to volunteer to eat fried grasshopper. Although there was no significant difference in the number from each group that volunteered, the group hearing the low credible source displayed significantly more positive attitudes to eating of the food. Thus, as with other receiver oriented variables, source credibility may interact with elements such as dissonance. Consequently, source credibility should not be viewed as a static phenomenon.

A second element operating in the area of perceived source characteristics is communicator-communicatee similarity. As much of the empirical evidence in this area indicates, sources perceived as similar to receivers will

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have a greater persuasive influence than will those sources seen as dissimilar. For example, Triandis et al., found that individuals preferred members of similar socioeconomic status and of the same sex as friends.\textsuperscript{57} Likewise, supporting this same general conclusion, Rogers and Shoemaker suggest that "homophily," the condition of being similar in certain attributes is almost always more effective than "heterophily," where individuals are perceived as different. This homophily-heterophily phenomenon seems to apply to a large number of factors such as attitudes or beliefs, socioeconomic status, and education.\textsuperscript{58} However, in summarizing this research of similarity factors, Simons et al., indicate varying intervening relationships with source credibility producing a differential effect on message acceptance. Furthermore, their summary revealed two additional results in terms of attitude change: (1) similarities perceived as irrelevant (usually topic bound) have little persuasive impact, and (2) sources possessing both similarities and dissimilarities are probably the most influential.\textsuperscript{59}


\textsuperscript{58}Rogers and Shoemaker, \textit{Communication of Innovations}, pp. 14-16.

Socioeconomic and Demographic Variables

The fourth subset of receiver antecedent variables that affect persuasion are typically categorized as socioeconomic and demographic factors. Included in this cursory review are the variables of sex, age, intelligence, and socioeconomic status.

Sex

A number of experimental studies have suggested that men and women react differently to persuasive messages. In most cases, women have been found to be more susceptible to persuasion than were men. However, some qualifications to this rule emerge from existing empirical investigations. For instance, Cronkhite found that women were less persuaded than men by a "logically" structured speech, but there was no difference with an "emotional" speech.

Knower argues that women are not as easily persuaded when the source of a message is also a woman. On the other hand, as Murphy et al. contend, differences which

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60 Bettinghaus, Persuasive Communication, pp. 81-82.


appear in persuasibility due to sex differences must be "the result, not of biological but of cultural factors." Accordingly, Cronkhite argues that men are culturally taught to be more aggressive than are women, a fact which in turn reflects the supposition that aggressive individuals are usually less susceptible to persuasion.

Age

A receiver variable receiving little empirical attention but extensive folklore consideration is that of age. At least two previous studies affirmed that age and persuasibility are inversely related. As Bettinghaus argues, as an individual's age increases so does the development of his frames of reference. Since these associations and experiences are well developed at a later age, new information will probably have little impact in changing those belief structures.

A tangential area in studying age difference concerns

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Cronkhite, Persuasion, p. 137.


Bettinghaus, Persuasive Communication, pp. 82-84.
the attitudes of parents and their children. The data from this area indicate that children and their parents exhibit similar attitudes. In most cases however, children do not hold those attitudes as tenaciously as their parents.\textsuperscript{67}

Intelligence

The third area of receiver predispositions included in this section is intelligence. The relationship between intelligence and persuasibility remains empirically nebulous. Several investigations contradict each other. For example, Wegrocki found that more intelligent subjects were less persuadible.\textsuperscript{68} However, Janis and Field employed their standardized measure of general persuasibility but found no indication of any relationship with receiver intelligence.\textsuperscript{69} Likewise, Pence and Scheidel found no significant interaction between critical thinking (as an


\textsuperscript{69}Irving L. Janis and Peter B. Field, "A Behavioral Assessment of Persuasibility," in Hovland and Janis, Personality and Persuasibility, pp. 29-54.
intelligence measure) and persuasion.\textsuperscript{70} Thus, as Cronkhite cogently concludes, "there appears to be no evidence for any relationship between intelligence and general persuasibility.\textsuperscript{71}

Socioeconomic Status

Two other receiver oriented variables deserve mention at this point: social class and income. Although these variables are generally treated as separate entities in research studies, they tend to be highly intercorrelated. For example, a person's education often determines his occupation which, in turn, reflects his income and thereby his social status.

In terms of persuasion, these variables lead to some interesting speculations. Lipset and Linz found that people in the lower class were highly receptive to information purporting to facilitate movement into a higher class.\textsuperscript{72}

A massive study in San Francisco by Tryon found significant

\begin{flushright}
\textsuperscript{71}Cronkhite, Persuasion, p. 138.
\end{flushright}
correlations between social attitudes and demographic clustering of the individuals along economic lines.  

In a farm practice adoption study, Copp found a moderate correlation (.59) between economic status and the adoption of new farm practices. Accordingly, Rogers and Shoemaker contend that social status or wealth is consistently a good predictor of early innovativeness.

Attitudinal Frame of Reference

A previous section of this chapter has demonstrated the integral relationship of attitude to persuasive outcomes. In other words, attitudes, with their concomitant behavioral connection, are one result of persuasive communication. However, by their nature attitudes can also be considered in an intervening process whereby attitudes mediate a person's response to a message. Much of what could be said about definitions of attitudes and their factor structures as an outcome of communication has


75 Rogers and Shoemaker, Communication of Innovations, p. 186.

already been surveyed in an earlier section of this chapter. In the present section, however, we argue that attitudes act selectively upon communication messages. Thus, one can explain behavior in terms of two phenomena: (1) information modifying existing attitude structures and (2) attitude structures, in turn, influencing behavior. In identifying the intermediary effect of attitude structure upon communication, therefore, this section briefly surveys relevant literature.

Bettinghaus notes, that a person's frame of reference acts as a "psychological filter" through which he views experiences. These reference frames or belief systems, are learned and developed throughout life. Thus, at the adult level these systems are rarely changed drastically by new experiences or information.\textsuperscript{77} Furthermore, Fishbein argues that "a person's attitude toward an object may be viewed as determined by his salient set of beliefs about the object."\textsuperscript{78} Accordingly, some beliefs remain relatively stable: those toward the "church, democracy, and capitalism or beliefs about national and racial groups."\textsuperscript{79} In terms of persuasion, these frames of reference play a very important role. When a persuasive message elicits negative beliefs or experiences from a person, then

\textsuperscript{77}Bettinghaus, \textit{Persuasive Communication}, pp. 30-32.
\textsuperscript{78}Fishbein and Ajzen, \textit{Theory and Research}, p. 218.
\textsuperscript{79}Ibid, p. 219.
these negative elements will probably outweigh the positive elements in the person's belief structure which are being suppressed.  

Rationale

Having explored several correlates of receiver adoption, let us briefly review findings from relevant literature which focuses upon the adoption of the fraternity concept. Numerous descriptive studies have sought to determine those characteristics which consistently differentiate fraternity members from nonmembers. For example, Dollar has investigated the area of family background as an indicator of fraternity selection. Fraternity members were found to come from higher economic backgrounds than do independents. In summarizing much of the empirical research in this area, Logino and Kart validate this position and quoting a study by Bohrnstedt, conclude that "father's income has consistently been a better predictor of fraternity membership than father's education."  


A second general characteristic usually associated with fraternity membership is sociability. One assumption posits that fraternities recruit the members most capable of supporting the demands and goals of the group. Levine and Sussman found data that clearly support the position that fraternity members score higher on measures of sociability and campus involvement. Additionally, according to various personality tests, fraternity members have been found to be more self-assertive and self-confident than their independent counterparts. Somewhat supporting this position, Hountras and Pederson compared freshmen and senior nonaffiliates with freshmen and senior fraternity affiliates on Bills Index of Adjustment and Values. Their results indicated that senior fraternity affiliates consistently demonstrated higher self-concepts, greater self-acceptance, and more goal orientation than the other three comparison groups.

Another series of studies have attempted to assess the fraternity impact on student political and economic attitudes. On the whole, greeks have been found to be more

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Fraternity members typically "score lower on measures of social and religious liberalism and higher on measures of authoritarianism, ethnocentrism, and prejudice."\footnote{Logino and Kart, "The College Fraternity," p. 122.}

One inherent problem in most studies on fraternity membership selection concerns the nature of the comparative base. Typically, researchers have compared independents, rather than rushees, with fraternity members.\footnote{This problem arises due to self-selection. Not all students rush fraternities nor is there any guarantee that the individual will be given an opportunity to pledge (selective recruitment).}

At least one previous study has attempted to rectify this limitation by comparing fraternity pledges, rushees, and independents on various student characteristics. Elton and Smart, in a study at the University of Kentucky, explored the relationship of 17 variables measuring personality traits, college goals, high school achievement and academic aptitude as predictors of the three student comparison groups.\footnote{While this study does attempt to utilize a number of variables to predict fraternity membership, it seems that these variables were chosen more for their accessibility than for their potential predictive power.} Using...
multiple discriminant analysis, the authors found that only one predictor variable, Social Spontaneity, (item on ACT questionnaire), differentiated (predicted) pledges from rushees and independents. However, the addition of family income to the variance explained by Social Spontaneity scores added "to the statistical discrimination between rushees and pledges, but not to independents." 90

As the above review indicates, very few studies have attempted to empirically predict fraternity membership. Rather, the overwhelming emphasis of previous investigations is simply comparing independents with fraternity members on either socioeconomic or personality dimensions. That difficulty highlights a rationale for the present study: namely, that from a communication perspective, there is a noticeable lack of in-depth research into those receiver factors which influence the fraternity adoption process.

Therefore, we are brought to the research question which opened this chapter: What receiver variables are significant correlates predicting behavioral adoption of a social fraternity? Working from a communication theory paradigm and from previous literature, the purpose of the present study is to empirically examine significant receiver correlates which predict adoption behavior of "Sigma Nu Fraternity" on three campuses. Drawing from the

literature, this study utilized a unique combination of 13 social and communication variables as predictors in adoption of fraternity membership. Furthermore, unlike most previous research, the present study utilizes a true comparative base of adopters and non-adopters.

Summary

The purpose of this chapter has been to survey aspects of communication theory relating to receiver-oriented research. Communication research focusing toward a receiver-oriented aspects of the communication process centers around five general areas as they affect persuasive outcomes: the selectivity process, personality variables, source perception (source credibility), socioeconomic and demographic variables, and frame of reference. The purpose of this study is to examine empirically those variables that predict adoption of Sigma Nu Fraternity. Overall, the rationale points out that prior research into student adoption of fraternities lacks (1) a communication theory point of view for research by not examining the message and its persuasive outcomes and causes for those outcomes, and (2) a systematic concentration on variables other than personality and socioeconomic variables. In short, this chapter simply reviews literature relevant to a receiver-oriented communication research project represented by the purposes of this study.
CHAPTER II

METHODOLOGY AND DATA ANALYSIS

The purpose of this chapter is to delineate the procedures for the study and the method of data analysis. Also, the chapter reviews the variables analyzed. First, the chapter notes procedures and subjects employed in the study. The second section in the chapter delineates and operationalizes the thirteen independent variables used to predict adoption and non-adoption. The third section explains the statistical techniques applied to the research.¹

Procedures and Subjects

The sample for this research came from three campuses: Western Kentucky University, Murray State University, and Kentucky Wesleyan College. Total individual subjects numbered 54, being distributed among the adopter and non-adopter categories. All data were collected in May and June, 1975 via a five page questionnaire.²

¹All data operations and statistical analyses cited in this study were performed by appropriate computer techniques.

²The Appendix contains a copy of the questionnaire.
Adopters

Total individual adopters numbered 24. Adopters were behaviorally defined as "those males who had pledged Sigma Nu Fraternity on one of the three respective campuses from August 1974 to May 1975." The researcher had primary access to, and was familiar with, each of the fraternity chapters. A cover letter addressed to the participants explained the nature and scope of the study. The president of each fraternity chapter distributed the questionnaires and verbally explained the purpose of the study. The respondents were directed to return the completed questionnaire in an enclosed envelope to the chapter president.

Non-adopters

The number of non-adopters in the study was 30. The researcher operationally defined non-adopters as "those males who had rushed Sigma Nu Fraternity and received an invitation to pledge but who chose not to associate with that fraternity or any other social fraternity since August, 1974." To arrive at an accurate list of the individuals in this category, respective fraternity files were examined. Each non-adopter was extensively discussed.

3One further qualification to this definition was that the subject must have been enrolled in school during the Spring semester, 1975.

4See n. 3 above.
with the chapter president and additional members when necessary to determine if an individual met the criteria for inclusion. Following their selection, each non-adopter received an initial letter explaining the scope and nature of the study and of the questionnaire to follow shortly in the mail. The respondents were requested to return the completed questionnaire to the researcher in an enclosed stamped envelope.

**Predictor Variables**

Thirteen variables were selected to explain and predict adoption and non-adoption. Each of the variables were selected on the basis of (1) their utility in past research and (2) probable function (intuitive) as to their predictive capabilities. The predictor variables are listed below with their operational definitions and reliability coefficients when applicable.  

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All multiple item scales used to operationalize the predictor variables were tested for reliability prior to the statistical analyses by employing Cronbach's Reliability Coefficient (Alpha; range = 0 to 1). This coefficient is basically a summary measure of the weighted averages of all inter-item correlations. Thus, the numerical coefficient indicates the degree of homogeneity of the multiple items composing a predictor scale. Since the strength of the inter-item correlation determines the scales' homogeneity, all scale items which contributed negatively to the Alpha coefficient were deleted. For a further discussion of the Alpha Reliability Coefficient see Lee J. Cronbach, "Test 'Reliability': Its Meaning and Determination," *Psychometrika* 12 (March 1947): 1-16; Lee J. Cronbach, "Coefficient Alpha and the Internal Structure of Tests," *Psychometrika* 16 (September 1951): 297-334; and Leonard S. Feldt, "A Test of the Hypothesis that Cronbach's Alpha or Kuder-Richardson Coefficient Twenty is the Same for Two Tests," *Psychometrika* 34 (September 1969): 363-73.
designed to elicit interval level data.

*Liberalism/Conservatism* was measured by a scale developed by Kerlinger. The instrument consists of 26 Likert-type items dealing with such attitudinal concepts as religion, education, private enterprise and international relations. Robinson indicates split half reliabilities of .78 for the complete scale. No validity data are reported. Employing Robinson's suggestion, the dimensions of Liberalism and Conservatism were separated as two distinct factors for data analysis. In this study, Cronbach's Alpha was employed as a test for reliability of the final instrument. The final 10 item Liberalism scale (LIBERAL) yielded a reliability coefficient of .58089. The final 12 item Conservatism scale (CONSERV) produced a coefficient of .61028.7

*Self-esteem* was measured by a 10 item Likert-type scale developed by Rosenberg. The items were designed to measure the areas of individual self-worth or self-acceptance. Robinson reports test-retest reliability of .85, and degrees of validity are reported by observers6

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7 The reliability coefficient of the composite scale was Alpha = .40444. Thus, we have empirical justification for employing these scales as two independent measures.
ratings. In this research, the final 9 item self-esteem scale (SESTEEM) produced an Alpha of .75741.

**Group Identification** was measured by employing the third factor of Perloe's Social Values Questionnaire. The 17 item Likert-type instrument taps the dimensions of involvement and identification with groups as valuable and necessary for individual development. Robinson reports that no reliability data are available for this scale but indicates inter-observer validity correlations from .87 to .90. In this study, the final 14 item group identification scale (GROUPID) produced an Alpha of .75422.

**Group Participation** was measured by the behavioral question "How many groups or organizations on campus do you belong to?" The resulting interval level scale (NOORGN) depicts behavioral group participation.

**Peer Group Association** was measured by the question "Approximately what percentage of your friends are members of a social fraternity?" The scale's (NOFRNDS) potential scores ranged from zero to one hundred percent.

**Peer Group Perception** was measured by the question "In your opinion, how do most of your friends feel about Sigma Nu as a social fraternity on your campus?" The scale (ATTFRND) values ranged from 1 = very strongly dislike to

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9 Ibid., pp. 576-85.
7 = very strongly like.

**Economic Status I** was measured by the question
"What is your personal annual (gross) income exclusive of any parental support?" The values for this interval scale (ECONI) indicate the amount in dollars.

**Economic Status II** was measured by the question
"What is your parents combined annual income?" The resulting interval level scale (ECONII) indicates the amount in dollars.

**Economic Status III** was measured by the question
"How much financial assistance do you receive each semester while in college from your parents, apart from tuition?" Likewise, this interval level scale (ECONIII) represents the amount in dollars.

**Parental Perception of Fraternities** was measured by the question "What if you were seeing life from your parents' eyes? Try to pretend by role playing how your parents see things. In other words, try to respond with their reaction as you feel they would to the following: The Concept of Greek Fraternities." The respondents were directed to check a series of 12 bi-polar adjective pairs determined by previous research to load highly on four dimensions of source credibility.\(^{10}\) The theoretical dimensions used to

operationalize the perception concept were (1) evaluative (e.g. good-bad), (2) dynamism (e.g. potent-punny), (3) interpersonal attractiveness (e.g. sociable-unsociable), and (4) objectivity-trustworthiness (e.g. disreputable-reputable). Three bi-polar adjective pairs comprised the measurement of each dimension. All selected items had factor loadings of .60 or greater in previous research. In this examination, the reliability coefficient for the 12 item parental perception scale (PARENT) was .90886.

**Perception of the Fraternity Concept** was measured by the same set of 12 bi-polar adjectives employed in the "Parental Perception" scale. The respondents were requested to rate the following: "The Concept of Greek Fraternities." The reliability coefficient for the 12 item scale (FRAT) in this study was .87854.

**Perception of Sigma Nu Fraternity** was also measured by the same set of bi-polar adjectives employed in the two previous scales. For this study, the reliability coefficient for the 12 item scale (SIGMANU) was .92069.

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Criterion Variable

The dichotomous criterion variable was membership or non-membership in Sigma Nu Fraternity. Adopters were operationally defined as those males who had pledged Sigma Nu Fraternity on three campuses from August 1974 to May 1975. Non-adopters were behaviorally defined as those males who had rushed Sigma Nu Fraternity and received an invitation to pledge but who chose not to associate with that fraternity or any other fraternity since August, 1974.

Statistical Analysis

The choice of the data analysis procedure for this investigation stems from the research questions. A step-wise multiple discriminant analysis was used to probe the research questions that were formulated. The discriminate analysis method is a procedure which attempts to maximally differentiate between dichotomous criterion groups (or variables) by employing a set of predictor (independent) variables.12 The criterion for termination of the step-wise procedure was automatically determined when the Chi-square value for the overall discriminate model was not significant or when the multivariate F-ratio of the next

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variable which would enter the model was not significant.\textsuperscript{13} The \textit{.05} level of significance was required for the statistical tests.

The primary goal of multiple discriminant analysis is to create a linear function equation that will differentiate adopters from non-adopters.\textsuperscript{14} This statistic produces three important pieces of information useful in facilitating adequate explanation: (1) standardized discriminant function coefficients, (2) Wilks' Lambda Test, and (3) canonical correlation coefficient(s).

\textbf{Linear Discriminant Function}

The discriminant function prediction equation can be expressed as: \( z = w_1x_1 + w_nx_n \). Where, \( x_1 \ldots x_n \) depict a series of independent variables. The symbols \( w_1 \ldots w_n \) represent the discriminant function coefficients (or weights) to be applied to the independent variables and the symbol \( (z) \) represents the person's point score.\textsuperscript{15} The discriminant coefficients are selected to maximize accurate classification in predicting adopters and non-adopters. The sign (\(+/-\)) of each coefficient simply reflects a positive or negative contribution to the discriminant

\textsuperscript{13}Nie et al., \textit{Statistical Package}, p. 447.


\textsuperscript{15}Ibid.
function.\textsuperscript{16}

Wilks' Lambda Test

This is a test for the equality of group centroids. In other words, the Lambda value determines whether the various predictor variables can, as a set, differentiate between the criterion variables. Lambda is then transformed into a Chi-square test to determine significance.\textsuperscript{17}

Canonical Correlation

A complex correlational procedure called canonical, is basically the correlation of two or more predictor variables with two or more criterion variables. The canonical correlation squared may be interpreted as the proportion of variance in the discriminant function explained by the groups.\textsuperscript{18}

Summary

This chapter explained the predictor variables and the criterion variable used in this study as well as procedures and the method of data analysis. To answer the research question, this study employs a multiple

\textsuperscript{16}Nie et al., \textit{Statistical Package}, pp. 443-447.
\textsuperscript{17}Ibid., p. 447.
\textsuperscript{18}Ibid.
discriminant analysis technique which attempts to maximally discriminate between adopters and non-adopters employing the 13 independent variables.
CHAPTER III

RESULTS

The purpose of this chapter is to report the results of the study. To facilitate reporting, relevant data are presented under various subheadings. This chapter first examines and delineates the comparative effects of the 13 predictor variables with the criterion variable. The second section reports the statistical outcome of the 13 independent variables incorporated in the multiple discriminant analysis. Then, stemming from the second section's results, the third division presents the results of the ultimate discriminant analysis employing five factors derived from the 13 predictor variables. However, discussion of the results is primarily reserved for the following chapter.

13 Predictor Variables

The sample consisted of 24 adopters and 30 non-adopters. Table 1 presents the means and standard deviations (SD) of each predictor variable for the adopters and non-adopters. Univariate F-ratios\(^1\) and standard t-tests

\(^1\)The univariate F-test is simply the multidimensional analog of the standard t-test for sample means. This F-ratio is the appropriate means of determining significant
<table>
<thead>
<tr>
<th>PREDICTOR VARIABLE</th>
<th>ADOPTER (N=24)</th>
<th>NONADOPTER (N=30)</th>
<th>SAMPLE (N=54)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN</td>
<td>SD</td>
<td>MEAN</td>
</tr>
<tr>
<td>CONSERV</td>
<td>48.45</td>
<td>13.35</td>
<td>43.96</td>
</tr>
<tr>
<td>LIBERAL</td>
<td>40.70</td>
<td>9.00</td>
<td>37.73</td>
</tr>
<tr>
<td>SESTEEM</td>
<td>42.58</td>
<td>7.07</td>
<td>40.26</td>
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<tr>
<td>GROUPID</td>
<td>57.83</td>
<td>13.57</td>
<td>53.80</td>
</tr>
<tr>
<td>FRAT</td>
<td>41.79</td>
<td>22.42</td>
<td>43.06</td>
</tr>
<tr>
<td>SIGMANU</td>
<td>32.70</td>
<td>25.26</td>
<td>40.83</td>
</tr>
<tr>
<td>PARENT</td>
<td>52.12</td>
<td>24.40</td>
<td>46.96</td>
</tr>
<tr>
<td>ECONI</td>
<td>1934.41</td>
<td>2380.92</td>
<td>1739.03</td>
</tr>
<tr>
<td>ECONII</td>
<td>29231.18</td>
<td>30231.44</td>
<td>20435.60</td>
</tr>
<tr>
<td>ECONIII</td>
<td>348.75</td>
<td>418.22</td>
<td>534.50</td>
</tr>
<tr>
<td>NOFRNDS</td>
<td>42.95</td>
<td>26.60</td>
<td>22.70</td>
</tr>
<tr>
<td>ATTFRND</td>
<td>5.00</td>
<td>1.18</td>
<td>3.70</td>
</tr>
<tr>
<td>NOORGN</td>
<td>2.71</td>
<td>1.65</td>
<td>0.70</td>
</tr>
</tbody>
</table>
were applied to the data categories to locate any between-group differences. These results are located in Table 2. However, in the following discussion, only the univariate F-ratios will be cited. The statistical analysis revealed three significant variables (p < .001) which independently contrast adoption/nonadoption behavior. NOORG (F = 31.33, df = 1/52), ATTFRND (F = 15.77, df = 1/52), and NOFRNDS (F = 11.39, df = 1/52) singly differentiated subjects who adopted Sigma Nu Fraternity from those who did not adopt. Means for all statistically significant predictor variables were higher for the adopter group than for the nonadopter group.

However, it should be strongly emphasized at this point that the statistical significance of these results mean very little in terms of true prediction. The F-ratio (or t-statistic) is only a test for independence of a univariate model and does not approximate the nature of the multivariate model discussed in Chapter II. Obviously, the multivariate model is significantly more predictive since it accounts for interaction and weighted effects of differences given the multivariate nature of the two groups. For a further discussion of this concept, see Schuyler W. Huck, William H. Cormier, William G. Bounds, Reading Statistics and Research (New York: Harper & Row, 1974), pp. 148-96; Ronald E. Frank, William F. Massy, and Donald G. Morrison, "Bias in Multiple Discriminant Analysis," Journal of Marketing Research 2 (August 1975): 250-58; and Donald G. Morrison. "On the Interpretation of Discriminant Analysis," Journal of Marketing Research 6 (May 1969): 156-63.
<table>
<thead>
<tr>
<th>PREDICTOR VARIABLE</th>
<th>t-value</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSERV</td>
<td>1.66</td>
<td>2.76</td>
</tr>
<tr>
<td>LIBERAL</td>
<td>1.51</td>
<td>2.26</td>
</tr>
<tr>
<td>SESTEEM</td>
<td>1.34</td>
<td>1.80</td>
</tr>
<tr>
<td>GROUPID</td>
<td>1.47</td>
<td>2.15</td>
</tr>
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<td>FRAT</td>
<td>0.27</td>
<td>0.07</td>
</tr>
<tr>
<td>SIGMANU</td>
<td>1.61</td>
<td>2.59</td>
</tr>
<tr>
<td>PARENT</td>
<td>0.87</td>
<td>0.75</td>
</tr>
<tr>
<td>ECONI</td>
<td>0.40</td>
<td>0.15</td>
</tr>
<tr>
<td>ECONII</td>
<td>1.52</td>
<td>2.31</td>
</tr>
<tr>
<td>ECONIII</td>
<td>1.24</td>
<td>1.53</td>
</tr>
<tr>
<td>NOFRNDS</td>
<td>3.38*</td>
<td>11.39*</td>
</tr>
<tr>
<td>ATTFRND</td>
<td>3.97*</td>
<td>15.77*</td>
</tr>
<tr>
<td>NOORGN</td>
<td>5.60*</td>
<td>31.33*</td>
</tr>
</tbody>
</table>

*<p <.001  
N = 54
a combination of independent variables.2

**Discriminant Analysis One**

This section presents the results of the 13 predictor variables incorporated in the multiple discriminant analysis. The stepwise (based on relative importance) discriminant procedure produced a significant ($p < .001$) six-variable discriminant model ($X^2 = 44.26$, df = 6). These results are located in Table 3. The six significant predictors included in the model were NOORGN ($F = 31.33$, df = 1/52) along with ECONII ($F = 23.24$, df = 2/51), ATTFRND ($F = 18.78$, df = 3/50), SIGMANU ($F = 15.51$, df = 4/49), CONSERV ($F = 13.31$, df = 5/48), and ECONIII ($F = 11.49$, df = 6/47). These F-ratios represent the hierarchical power of the variables entered in the model. The following discriminant function equation emerged:

$$Z = -0.00978 \text{ (CONSERV)} + 0.01867 \text{ (SIGMANU)} - 0.02493 \text{ (ECONII)} + 0.00652 \text{ (ECONIII)} - 0.00969 \text{ (ATTFRND)} - 0.02338 \text{ (NOORGN)}.$$ 

Based upon this discriminant function, the canonical correlation (.771) when squared explained 59.4 percent of the common variance. Furthermore, utilizing the discriminant function equation, 20 out of 24 fraternity members were correctly placed into the adopter group and 27 out of 30 independents were correctly classified into the non-adopter group. Thus, 87 percent of the subjects were

---

TABLE 3

STEPWISE MULTIPLE DISCRIMINANT ANALYSIS
BASED ON 13 PREDICTOR VARIABLES

<table>
<thead>
<tr>
<th>STEP NUMBER</th>
<th>VARIABLE ENTERED</th>
<th>WILKS' LAMBDA</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NOORGN</td>
<td>0.62402</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>2</td>
<td>ECONII</td>
<td>0.52321</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>3</td>
<td>ATTFRND</td>
<td>0.47023</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>4</td>
<td>SIGMANU</td>
<td>0.44120</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>5</td>
<td>CONSERV</td>
<td>0.41901</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>6</td>
<td>ECONIII</td>
<td>0.40521</td>
<td>p &lt; .001</td>
</tr>
</tbody>
</table>

DISCRIMINANT CANONICAL VARIANCE WILKS' CHI-SQUARE SIGNIFICANCE

<table>
<thead>
<tr>
<th>DISCRIMINANT FUNCTION</th>
<th>CANONICAL CORRELATION</th>
<th>VARIANCE EXPLAINED R²</th>
<th>WILKS' LAMBDA</th>
<th>CHI-SQUARE</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.771</td>
<td>59.44% R²</td>
<td>0.40520</td>
<td>44.264</td>
<td>p &lt; .001</td>
</tr>
</tbody>
</table>

DISCRIMINANT EQUATION

\[ Z = -0.00978 \text{ (CONSERV)} + 0.01867 \text{ (SIGMANU)} - 0.02493 \text{ (ECONII)} + 0.00652 \text{ (ECONIII)} - 0.00969 \text{ (ATTFRND)} - 0.02338 \text{ (NOORGN)}. \]

DISCRIMINANT EQUATION CORRECTLY CLASSIFIES 87.04% OF ADOPTERS AND NONADOPTERS
correctly classified by the formula.

One primary assumption of the multivariate model which must be met before accepting the statistical outcome concerns the intercollaterality of the independent variables employed in the prediction. In other words, the power of the discriminant function is dependent on the premise that the predictor variables are not highly intercorrelated. To empirically test for this assumption, a Pearson $r$ intercorrelational matrix was computed (Table 4). The correlation matrix revealed substantial overlap (dependence) among the predictor variables ($r \geq .50$). In order to correct this phenomenon, the data were first submitted to principle components factor analysis with varimax rotation. This procedure eliminates the problem of intercorrelation among the predictor variables and provides data for the subsequent discriminant analysis.

Discriminant Analysis Two

The varimax rotation factor analysis produced the five-factor solution reported in Table 5. This solution accounted for 76.3 percent of the total variance. FACTOR 1 was labeled "social attitudes" and included high loadings on the variables of CONSERV, LIBERAL, SESTEEM, and GROUPID.

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4This complex procedure was performed by computer techniques. See Nie et al., Statistical Package, pp. 468-509.
### Table 4

**Pearson r Intercorrelation Matrix for All Predictor Variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CONSERV</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. LIBERAL</td>
<td>0.693*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. SESTEEM</td>
<td>0.538*</td>
<td>0.505*</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>4. GROUPID</td>
<td>0.662*</td>
<td>0.632*</td>
<td>0.448*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. FRAT</td>
<td>0.272**</td>
<td>0.332**</td>
<td>0.188</td>
<td>0.180</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. SIGMANU</td>
<td>0.292**</td>
<td>0.329**</td>
<td>0.226**</td>
<td>0.254**</td>
<td>0.850*</td>
<td>1.000</td>
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<tr>
<td>7. PARENT</td>
<td>0.182</td>
<td>0.140</td>
<td>0.051</td>
<td>0.132</td>
<td>0.346**</td>
<td>0.377**</td>
<td>1.000</td>
</tr>
<tr>
<td>8. ECONI</td>
<td>-0.046</td>
<td>-0.052</td>
<td>0.131</td>
<td>-0.259**</td>
<td>-0.023</td>
<td>-0.004</td>
<td>0.014</td>
</tr>
<tr>
<td>9. ECONII</td>
<td>0.106</td>
<td>0.117</td>
<td>0.183</td>
<td>0.104</td>
<td>0.582*</td>
<td>0.584*</td>
<td>0.264**</td>
</tr>
<tr>
<td>10. ECONIII</td>
<td>0.019</td>
<td>-0.024</td>
<td>-0.011</td>
<td>0.119</td>
<td>-0.096</td>
<td>-0.078</td>
<td>-0.365**</td>
</tr>
<tr>
<td>11. NOFRNDS</td>
<td>0.333**</td>
<td>0.315*</td>
<td>0.411*</td>
<td>0.443*</td>
<td>0.003</td>
<td>0.022</td>
<td>0.175</td>
</tr>
<tr>
<td>12. ATTFRND</td>
<td>0.160</td>
<td>0.216</td>
<td>0.267**</td>
<td>0.056</td>
<td>-0.109</td>
<td>-0.223</td>
<td>0.164</td>
</tr>
<tr>
<td>13. NOORGN</td>
<td>0.149</td>
<td>0.189</td>
<td>0.161</td>
<td>0.242**</td>
<td>-0.175</td>
<td>-0.370*</td>
<td>-0.092</td>
</tr>
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* p < .001  ** p < .05  N = 54
### TABLE 4-Continued

PEARSON \( r \) INTERCORRELATION MATRIX FOR ALL PREDICTOR VARIABLES

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<thead>
<tr>
<th></th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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<td>3.</td>
<td>SESTEEM</td>
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<td>GROUPID</td>
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<td>5.</td>
<td>FRAT</td>
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<tr>
<td>6.</td>
<td>SIGMANU</td>
<td></td>
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</tr>
<tr>
<td>7.</td>
<td>PARENT</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8.</td>
<td>ECONI</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>ECONII</td>
<td>.101</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>ECONIII</td>
<td>-.313**</td>
<td>.033</td>
<td>1.000</td>
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</tr>
<tr>
<td>11.</td>
<td>NOFRNDS</td>
<td>.175</td>
<td>.126</td>
<td>.047</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>ATTFRND</td>
<td>.033</td>
<td>.013</td>
<td>-.064</td>
<td>.409*</td>
<td>1.000</td>
</tr>
<tr>
<td>13.</td>
<td>NOORGN</td>
<td>-.072</td>
<td>-.183</td>
<td>-.173</td>
<td>.380**</td>
<td>.400*</td>
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</table>

\* \( p \leq .001 \)  \* \( p \leq .05 \)  \( N = 54 \)
<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
<th>FACTOR 3</th>
<th>FACTOR 4</th>
<th>FACTOR 5</th>
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<tbody>
<tr>
<td>CONSERV</td>
<td>0.824</td>
<td>0.122</td>
<td>-0.029</td>
<td>0.095</td>
<td>-0.013</td>
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<tr>
<td>LIBERAL</td>
<td>0.778</td>
<td>0.611</td>
<td>-0.063</td>
<td>0.130</td>
<td>-0.039</td>
</tr>
<tr>
<td>SESTEEM</td>
<td>0.585</td>
<td>0.142</td>
<td>0.043</td>
<td>0.258</td>
<td>0.197</td>
</tr>
<tr>
<td>GROUPID</td>
<td>0.778</td>
<td>0.085</td>
<td>0.064</td>
<td>0.153</td>
<td>-0.224</td>
</tr>
<tr>
<td>FRAT</td>
<td>0.220</td>
<td>0.811</td>
<td>-0.097</td>
<td>-0.146</td>
<td>-0.049</td>
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<tr>
<td>SIGMANU</td>
<td>0.287</td>
<td>0.894</td>
<td>-0.062</td>
<td>-0.305</td>
<td>0.001</td>
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<tr>
<td>PARENT</td>
<td>0.069</td>
<td>0.430</td>
<td>-0.333</td>
<td>0.150</td>
<td>-0.043</td>
</tr>
<tr>
<td>ECONI</td>
<td>-0.062</td>
<td>0.027</td>
<td>-0.142</td>
<td>0.046</td>
<td>0.883</td>
</tr>
<tr>
<td>ECONII</td>
<td>0.038</td>
<td>0.694</td>
<td>0.092</td>
<td>0.063</td>
<td>0.103</td>
</tr>
<tr>
<td>ECONIII</td>
<td>0.047</td>
<td>0.047</td>
<td>0.975</td>
<td>-0.056</td>
<td>-0.180</td>
</tr>
<tr>
<td>NOFRNDS</td>
<td>0.367</td>
<td>0.085</td>
<td>0.084</td>
<td>0.617</td>
<td>0.166</td>
</tr>
<tr>
<td>ATTFRND</td>
<td>0.090</td>
<td>-0.034</td>
<td>-0.058</td>
<td>0.669</td>
<td>0.021</td>
</tr>
<tr>
<td>NOORGN</td>
<td>0.189</td>
<td>-0.286</td>
<td>-0.157</td>
<td>0.536</td>
<td>-0.105</td>
</tr>
</tbody>
</table>

VARIANCE EXPLAINED

28.4%  19.3%  12.5%  8.3%  7.8%
The social attitudes factor accounted for 28.4 percent of the variance after rotation. FACTOR 2 was labeled as "economic perception" and contained high loadings on FRAT, SIGMANU, and ECONIII. The factor accounted for 19.3 percent of the total variance after rotation. FACTOR 3 was labeled "parental support" and accounted for 12.5 percent of the variance after rotation. ECONIII was the only high loading variable on this factor. FACTOR 4 was labeled "peer group behavior" representing high loadings on NOFRNDS, ATTFRND, and NOORGN. The factor accounted for 8.3 percent of the variance after rotation. FACTOR 5 was labeled "income" and loaded highly on only ECONI. The income factor accounted for 7.8 percent of the variance after rotation.

Results of the factor analysis served as the data input for the second multiple discriminant analysis. The stepwise procedure yielded a significant (p < .001) three factor discriminant model ($X^2 = 31.76, df = 2$). Table 6 presents summary results of the discriminant model. The three significant factor predictors comprising the model were FACTOR 4 ($F = 40.95, df = 1/52$), FACTOR 3 ($F = 21.30, df = 2/51$), and FACTOR 1 ($F = 14.59, df = 3/50$). The following discriminant function equation emerged:

$$Z = 0.15750 \text{ (FACTOR 1)} - 0.17882 \text{ (FACTOR 3)} + 0.93891 \text{ (FACTOR 4)}.$$ 

A canonical correlation (resulting from the discriminant function) of .683 when squared explained 46.65 percent of
TABLE 6
STEPWISE MULTIPLE DISCRIMINANT ANALYSIS
BASED ON 5 PREDICTIVE FACTORS

<table>
<thead>
<tr>
<th>STEP NUMBER</th>
<th>VARIABLE ENTERED</th>
<th>WILKS' LAMBDA</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FACTOR 4</td>
<td>0.55946</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>2</td>
<td>FACTOR 3</td>
<td>0.54490</td>
<td>p &lt; .001</td>
</tr>
<tr>
<td>3</td>
<td>FACTOR 1</td>
<td>0.53321</td>
<td>p &lt; .001</td>
</tr>
</tbody>
</table>

DISCRIMINANT CANONICAL VARIANCE WILKS' CHI-SQUARE SIGNIFICANCE

<table>
<thead>
<tr>
<th>DISCRIMINANT FUNCTION</th>
<th>CANONICAL CORRELATION</th>
<th>VARIANCE EXPLAINED</th>
<th>WILKS' LAMBDA</th>
<th>CHI-SQUARE</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.683</td>
<td>R² 46.65%</td>
<td>0.53320</td>
<td>31.756</td>
<td>p &lt; .001</td>
</tr>
</tbody>
</table>

DISCRIMINANT EQUATION

\[ Z = 0.15750 \text{ (FACTOR 1)} - 0.17882 \text{ (FACTOR 3)} + 0.93891 \text{ (FACTOR 4)}. \]

DISCRIMINANT EQUATION CORRECTLY CLASSIFIES 83.33% OF ADOPTERS AND NONADOPTERS
the common variance. Additionally, the discriminant equation correctly classified 25 out of 30 independents into the non-adopter category and 20 out of 24 fraternity members were correctly placed into the adopter category. Thus, 83.3 percent of the subjects were correctly classified by the factor-based discriminant equation.

**Summary**

The purpose of this chapter was to present the results of the study. Only three out of thirteen independent variables singly differentiated adopters from non-adopters. Interestingly, these variables (NOORGN, ATTFRND, and NOFRNDS) were all behavioral measures of social association. A stepwise multiple discriminant analysis using 5 factors derived from the 13 independent variables yielded a highly significant 3 factor discriminant function (p < .001) which explained 46.65 percent of the common variance (canonical correlation = .683). The next chapter is devoted to a discussion of these results.
CHAPTER IV

DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

Whereas the previous chapter dealt with a description of the results, this chapter focuses on implications and conclusions of the results.

As the reader noted in Chapter III, the first stepwise multiple discriminant analysis incorporating the thirteen independent variables explained 59 percent of the variance with a canonical correlation of .77. However, an examination of the Pearson r intercorrelation matrix revealed substantial overlap among the predictor variables indicating interdependence. Since one assumption of the multivariate analysis demands independence of predictor variables, the data were submitted to a factor analysis procedure with varimax rotation which eliminated the problem of intercorrelation. The orthogonal factor analysis produced the five factor solution reported previously in Table 3. The second discriminant analysis, using five factors derived from the thirteen independent variables, yielded a highly significant three factor discriminant function which revealed a canonical correlation of .68 explaining 46.5 percent of the common variance. Consequently, this chapter discusses only those results of the second discriminant
analysis based on the three independent factors.

Utilizing the factor loadings, therefore, one result is that three factors explained 46.5 percent of the variance in adoption/non-adoption of Sigma Nu Fraternity. Those factors in terms of their additive importance are: FACTOR 4 labeled peer group behavior, FACTOR 3 labeled parental support, and FACTOR 1 labeled social attitudes. Consequently, this chapter next reports an interpretation of these three factors in relation to adoption/non-adoption of Sigma Nu.

As a measure of peer group behavior, FACTOR 4 contained high loadings on three variables. In other words, the number of friends a respondent has who are in fraternities, attitude of his friends toward Sigma Nu Fraternity, and the number of organizations in which a respondent belongs all make up FACTOR 4. Also, this factor was the most robust discriminator between adopters and non-adopters. Its discriminant function coefficient (or weight), .93891, may be interpreted as the overall contribution of this factor toward adoption or non-adoption. Essentially, the higher a person scores on these three beforementioned dimensions of FACTOR 4, the greater is the likelihood of that person adopting Sigma Nu. Conversely, the non-adopters are comparatively less likely to: (1) belong to a number of campus organizations, (2) have a high percentage of friends that are fraternity members, and (3) to have friends whose
attitudes are positive toward Sigma Nu. That this combination of variables produces the most powerful discriminant is considered to be the most important finding of the study.

Several implications, therefore, emerge from an understanding of the influence of FACTOR 4. These implications should be useful in understanding the target audience of potential fraternity members. First, greeks tend to associate more with other greeks than do independents. However, both groups have more friends who are not fraternity members, a finding which does not substantiate a common stereotype that greeks are highly exclusive in their friendships. Secondly, in terms of discriminating power, the number of organizations to which an individual belongs has some interesting implications for fraternity adoption. The data indicate that fraternity membership increases the chances for participation in other groups. As a point of interpretive speculation, therefore, adoption may be a function of group orientation rather than individualism, as indicated by the contribution of the variable in this study of "number of organizations" to which the respondent belongs. Finally, adopters and non-adopters tend to associate with people of similar attitudinal evaluation of Sigma Nu. In other words, there is a peer group reinforcement of socially held attitudes so that friends hold similar attitudes toward social objects, in
this case, Sigma Nu.¹

The second most important factor predicting adoption/non-adoption behavior was FACTOR 3 which contained a high loading on the variable of parental financial support as measured by money given from parent to student during a semester. While this predictive factor added to and sharpened the discrimination (or prediction of adoption/non-adoption), its discriminant weight was a negative .17882 which again indicates its relative contribution toward prediction. A cursory glance at the average difference between adopters and non-adopters on the parental economic support variable (ECONIII, Table 1) explains the negative weight for the prediction coefficient. Thus, an interpretation of this coefficient reveals that a high score on the parental financial support index reduces the probability of adoption behavior into Sigma Nu Fraternity. Previous research has indicated that parental economic status is generally higher for fraternity members than for independents.² However, parental economic status was not a predictor in the present study. Rather, parental economic support was the predictor and was found to be higher

¹Researchers in the area of communicator-communicatee similarity have recognized the importance of perception of similar attitudes between source and receiver as an integral part of the persuasion process. The very notions of "homophily" and "heterophily" reflect this understanding. For a review of this research see Rogers and Shoemaker, Communication of, pp. 14-16.

for non-adopters than adopters. One possible answer for this research finding may concern personal autonomy of fraternity members. That is, greeks may feel somewhat more self-sufficient in terms of parental economic support than do their independent counterparts. This notion is based on the premise that greeks are generally taught to accept more responsibility and to be more self-sufficient due to the nature of the fraternity organization. As such, fraternity members maintain a potentially unique economic norm that warrants consideration toward understanding target audiences.

FACTOR 1, finally, was a composite of high loadings on the variables of group identification, liberalism, conservatism, and self-esteem and was labeled the social attitudes factor. This factor had a positive discriminant weight of .15750, which indicates its relative contribution in predicting adoption and non-adoption. Consequently, this positive weight means the higher a respondent scored on these indices of liberalism, conservatism, self-esteem, and need for identification with groups, the greater the likelihood of adoption into Sigma Nu. This result seems to support much of the empirical findings on fraternity membership. An interesting point, though somewhat

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3 In other words, previous research has found that greeks are generally more conservative while independents are consequently more liberal. Likewise, scores on the conservatism scale in this study indicate that fraternity members are more conservative than rushees. But, this study also shows that greeks scored higher on the liberalism
unexplainable, is that the four variables were found to compose one factor. Thus, it might appear that social attitudes play a role in adoption or non-adoption behavior of Sigma Nu Fraternity. Furthermore, social attitudes are not limited only to attitudes toward government, public institutions, and the like (as in liberalism-conservatism) but apparently broadly incorporate attitudes toward self as well as the need for inclusion into membership.

Limitations

Interpretations of the results are subject to several limitations: (1) the sample was taken from only one fraternity. This first limitation points out that these results and explanations are only generalizable, therefore to Sigma Nu. Furthermore, the total number of subjects was also thereby reduced. (2) The design measures only after-the-fact adoption. This second limitation is common to any social scientific research studying a phenomenon without a comparative experimental base in an

scale (Table 1). These seemingly contradictory results can be explained in light of two possibilities. (1) Fraternity members may have responded to items on the scale reflecting their social attitudes toward the concepts on the scale (e.g., church, state, business). Since the scales did discriminate between adopters and non-adopters, then the scale is measuring a "social attitude" (favorable-unfavorable) without regard to liberalism-conservatism. (2) The second possibility related to the question of conservatism and related to the first possibility in this note, is that the conservatism and liberalism scales do not measure what they purport. They do measure some social attitude or series of attitudes, but their utility for conservatism and liberalism per se is questionable.
after-only design. Ideally, a before-after design should be utilized. Without a before-after design, one does not know if differences are due to true individual manifestations or artifacts of the after-only process, such as socialization of the fraternity membership processes.

(3) The four standardized scales used in this study produced the least predictive power of the three factor discriminant model. While this could have occurred by chance, a more sound observation is that these standardized scales lack specificity for unique research problems. Standardized scales of these sorts are often useless unless the circumstances for their inclusion approximate their originally intended use.

Communication Strategies for Fraternities

This section elucidates possible strategic considerations in facilitating adoption behavior of Sigma Nu Fraternity.

1. An effective communication strategy should encompass specific considerations to optimally utilize interpersonal communication networks. That is, a primary emphasis of future persuasive attempts should be directed toward a prospective adopter's peer group. The results of this study indicate that the peer group behavior factor composed of group participation, number of friends, and attitude of friends is the most robust predictor of adoption behavior. Since peer groups exert strong networks
of influence, communications designed to elicit positive attitudes of peers can facilitate the rushee adoption process. However, to facilitate this peer group strategy, a persuasive attempt should also incorporate a broadly based appeal employing a format somewhat similar to a public relations campaign. Due to a high correlation (.85) between the perceptions of the Fraternity Concept and Sigma Nu, this author speculates that persuasive attempts need not incorporate selling of the fraternity concept before emphasizing the values of Sigma Nu.

Essentially, future fraternity based persuasive attempts should employ both the interpersonal and broadly based communication strategies to maximumly facilitate the adoption process by directing these communications not only toward the individual but his peer group as well.

2. An effective communication strategy could also be directed toward individuals on economic lines. As the data indicate, fraternity members are more likely to receive less parental financial support than their independent counterparts. A reasonable speculation is that a message should incorporate an element of individual autonomy or self-sufficiency in terms of parental economic support. In this way, the speaker would be tapping into existing economic norms.

3. Effective strategy should calculate its use of messages incorporating social attitudes. That is, social attitudes such as liberalism and conservatism should be
emphasized as important elements operating in the fraternity organization. Also, messages should be directed toward individuals based on eliciting feelings of self-esteem and identification with groups as necessary for individual development.

Implications for Future Research

The results of this study shed considerable light on the adoption process of one social fraternity. In general, the study uniquely demonstrated that adoption behavior can be significantly predicted by use of independent variables. One of the strengths of adoption related theory lies in its ability to be tested. In this sense, the communication theory paradigm provides a vehicle for empirically testing future hypotheses concerning adoption and non-adoption in a social context.

The present study encouraged the researcher to explore possibilities for future research that could greatly add to existing knowledge of the fraternity adoption process. The remainder of this chapter contains some of those intuitive explorations.

As suggested earlier in this study, future research predicting fraternity adoption should be sensitive to the comparative base. Very little consideration has been paid to rushees, rather than independents, as a methodological consideration. Future research should compare all three mutually exclusive groups over a long term basis. Thus,
actual adoption behavior may be traced from an individualistic standpoint over the period of college experience.

In addition to the comparative base, future researchers should consider a battery of variables potentially related to behavioral adoption of fraternities. Factor analysis would prove useful for arranging unidimensional scales. In this way, we would be assured that variables do not overlap. Suggested categories of variables should include interpersonal communication variables, mass media variables, economic variables, social variables, and psychological variables such as affiliative needs, need for power, aggressiveness, etc.

Finally, future research should encompass large geographical regions in assessing fraternity adoption behavior. By sampling larger segments of campus populations, the empirical findings will be more generalizable to the total population. Additionally, geographic factors which are intervening variables could be accounted for in this way.

An ideal study for future research, therefore, would include the following entities. (1) Research should continue to incorporate a multivariate approach including a battery of attitudinal, personality, socioeconomic, psychological, and communication-oriented variables. (2) Subjects should be randomly sampled from geographical regions throughout the United States. This larger sample size could number approximately 300-400, a figure sufficient
enough to provide a strong statistical base. (3) Meanwhile, research should focus on a comparative base by contrasting adopters of Sigma Nu with independents and with rushees who chose not to pledge. (4) The research questions should be examined in a before-after design. In this way, measures of communication networks or attitudes, for example, could be compared before and after adoption or non-adoption of a fraternity. One could more clearly see, then, the effects of other variables such as the number of organizations a person belongs to and their relation to fraternities. (5) Finally, a longitudinal aspect of the study should provide insight into long-term changes, as in the area of socialization, shifts in sources of communication and information, etc. A well executed longitudinal study should be conducted over four years.

**Summary**

The results from this quantitative project have led to a clear answer to the research questions. For example, variables contributing to factors of peer group behavior, parental support, and social attitudes significantly predict adoption or non-adoption into Sigma Nu Fraternity. The importance of these findings lies in their value for fraternity strategies of encoding persuasive messages for recruiting purposes.
APPENDIX

QUESTIONNAIRE

1. AGE _______ (years old)

2. MARITAL STATUS (__) single (__) married (__) divorced

3. HOMETOWN RESIDENCE city __________ state _______

4. Where do you currently live while attending college?
   (check one)
   ______ live on-campus
   ______ live off-campus
   ______ live in fraternity house

5. What is your personal annual (gross) income exclusive of any parental support?
   $___________ (give closest estimate in dollars)

6. What is your parents combined annual income?
   $___________ (give closest estimate in dollars)

7. How much financial assistance do you receive each semester while in college from your parents, apart from tuition?
   $___________ (give closest estimate in dollars)

Given below are statements on various social problems about which we all have beliefs, opinions, and attitudes. We all think differently about each matter, and this scale is an attempt to let you express your beliefs and opinions. There are no right and wrong answers. Please respond to each of the items as follows:

   Agree very strongly 6   Disagree very strongly 1
   Agree strongly 5       Disagree strongly 2
   Agree 4               Disagree 3

For example, if you agree very strongly with a statement, you would write 6 in the left margin beside the statement but if you happened to disagree with it, you would put a 3 in the left margin. Respond to each statement as best you can. Go rapidly but carefully. Do not spend too much time on any one statement; try to respond and then go on. Don't
1. Individuals who are against churches and religions should not be allowed to teach in college.

2. I feel that I'm a person of worth, at the least on an equal plane with others.

3. It is important for an individual to be closely identified with at least one group.

4. Large fortunes should be taxed fairly heavily over and above income taxes.

5. I feel that I have a number of good qualities.

6. Individuals do not really fulfill their human potentials unless they involve themselves deeply in some group.

7. Both public and private universities and colleges should get generous aid from both state and federal governments.

8. All in all, I am inclined to feel that I am a failure.

9. In life an individual should for the most part "go it alone" assuring himself of privacy, having much time to himself, attempting to resist being influenced by others.

10. Science and society would both be better off if scientists took no part in politics.

11. I am able to do things as well or better than most other people.

12. People who identify strongly with some group usually do so at the expense of their development and individual self-fulfillment.

13. Society should be quicker to throw out old ideas and traditions and to adopt new thinking and customs.

14. I feel that I do not have much to be proud of.

15. Man is a social animal; he cannot flourish and grow without identifying himself with some group.

16. To ensure adequate care of the sick, we need to change radically the present system of privately controlled medical care.
17. I take a positive attitude toward myself.

18. Men are first and foremost individual beings; the identifications they may have with groups never really alters their essential separateness from one another.

19. If civilization is to survive, there must be a turning back to religion.

20. On the whole, I am satisfied with myself.

21. Man's natural state is as an independent, unattached individual; he acts in conflict with his essential qualities when he acts with others as a member of a highly unified group.

22. A first consideration in any society is the protection of property rights.

23. I wish I could have more respect for myself.

24. Individuals and groups exist in a symbiotic relationship; neither can flourish without satisfying the needs of the other.

25. Government ownership and management of utilities leads to bureaucracy and inefficiency.

26. I certainly feel useless at times.

27. An individual truly finds himself when he merges with a social group and joins with others in resolute and determined activity for the realization of social goals.

28. If the United States takes part in any sort of world organization; we should be sure that we lose none of our power and influence.

29. At times I think I am no good at all.

30. Only a person who remains aloof from social organizations and group allegiances can fully develop his potential as an individual.

31. Funds for school construction should come from state and federal government loans at no interest or very low interest.

32. Man's natural state is as a member of a group; the individual who holds himself aloof from active participation in a community is acting against his natural inclinations.
33. Inherited racial characteristics play more of a part in the achievement of individuals and groups than is generally known.

34. It is wrong if an individual refuses to participate actively in at least some of the group activities of the community in which he lives.

35. Federal government aid for the construction of schools is long overdue and should be instituted as a permanent policy.

36. A man's self-fulfillment through his work and his life with family and friends should almost always transcend his obligation to participate in the civic activities of his communities, e.g., being active in a local civic, political, cultural or charitable organization.

37. Our present economic system should be reformed so that profits are replaced by reimbursements for useful work.

38. Individuals should feel no obligation to participate in the group activities of the communities in which they happen to work or live.

39. Public enterprises like railroads should not make profits; they are entitled to fares sufficient to enable them to pay only a fair interest on the actual cash capital they have invested.

40. Some of life's greatest satisfactions are found in working cooperatively with others.

41. Government laws and regulations should be such as first to ensure the prosperity of business since the prosperity of all depends on the prosperity of business.

42. It is often more gratifying to work for the accomplishment of a goal held by a group to which one belongs than to work for the attainment of a purely personal goal.

43. All individuals who are intellectually capable of benefiting from it should get a college education, at public expense if necessary.

44. It is just as important to work toward group goals and adhere to the established rules of the group as it is to gratify one's individual desires.
45. The well-being of a nation depends mainly on its industry and business.

46. True democracy is limited in the United States because of the special privileges enjoyed by business and industry.

47. The gradual social ownership of industry needs to be encouraged if we are ever to cure some of the ills of our society.

48. There are too many professors in our colleges and universities who are radical in their social and political beliefs.

49. There should be no government interference with business and trade.

50. Some sort of religious education should be given in the public schools.

51. Unemployment insurance is an inalienable right of the working man.

52. Individuals with the ability and foresight to earn and accumulate wealth should have the right to enjoy that wealth without government interference and regulations.

53. The United Nations should be whole-heartedly supported by all of us.

54. Please check any of the following who are members of a fraternity or sorority.

   Father    ____yes  ____no
   Mother    ____yes  ____no
   Brother   ____yes  ____no
   Sister    ____yes  ____no
   Aunt/Uncle ____yes  ____no

55. Approximately what percentage of your friends are members of a social fraternity?

   ____% of friends that are members
56. In your opinion, how do most of your friends feel about Sigma Nu as a social fraternity on your campus? Check one of the following which best represents their attitude.

- very strongly dislike
- strongly dislike
- moderately dislike
- neutral
- moderately like
- strongly like
- very strongly like

57. How many groups or organizations on campus do you belong to?

- (total number of groups)

Below you will see a set of opposite adjectives, as for example good-bad. You need to examine the concept at the beginning of each set of these opposite adjectives. Then respond to each concept by placing an "X" in the space that most clearly resembles how you feel about the concept. The following is an example of how this works.

concept: Home Cooking

<table>
<thead>
<tr>
<th>case 1</th>
<th>good</th>
<th>X:</th>
<th>:</th>
<th>:</th>
<th>:</th>
<th>:</th>
<th>bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>case 2</td>
<td>good</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>X:</td>
<td>:</td>
<td>bad</td>
</tr>
<tr>
<td>case 3</td>
<td>good</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>X</td>
<td>bad</td>
</tr>
</tbody>
</table>

If a person felt this concept was extremely good, he would have checked the first space, as in the case 1 above. If a person felt neutral about the concept he was asked to rate, he would have checked the fourth space from the ends, as in case two above. If the person felt the concept was extremely bad, he would have marked the space closest to the word "bad", as in case 3. Of course, these are only examples, and there could be a mark in any one of the seven spaces between good and bad depending upon the person's attitude toward the concept. Work quickly, but read and evaluate each set of opposite adjectives individually. Place an "X" in only one of the seven spaces for each pair of adjectives. Be sure to respond to every adjective pair.
concept: THE CONCEPT OF GREEK FRATERNITIES

concept: SIGMA NU FRATERNITY

What if you were seeing life from your parents eyes? Try to pretend by role playing how your parents see things. In other words, try to respond with their reaction as you feel they would to the following:

THANKS FOR YOUR COOPERATION
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