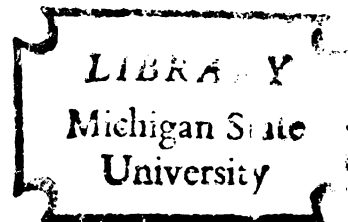


A STUDY OF THE ATTITUDES OF MANAGERIAL
PERSONNEL TOWARD STUDENT PROTEST

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
THOMAS E. McCLUNG
1971

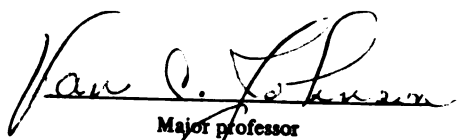
THESIS



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A STUDY OF THE ATTITUDES OF MANAGERIAL
PERSONNEL TOWARD STUDENT PROTEST

presented by
THOMAS E. McCLUNG

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of the requirements for
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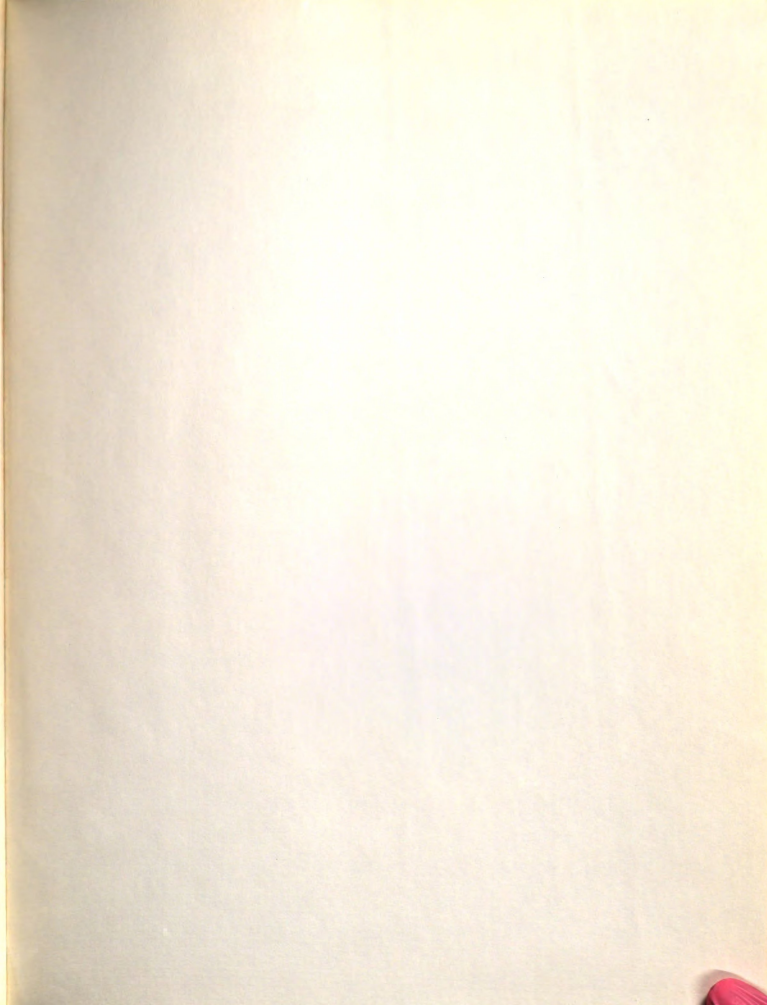

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responsibilities in business, a determination of the attitudes of managerial personnel toward student protest would contribute significantly to assessing the impact of the student protest movement.

Five of the seven items in the ABSTRACT section deal with this research are applicable to personnel in the construction industry. Thus, this study can serve as a basis for a STUDY OF THE ATTITUDES OF MANAGERIAL PERSONNEL TOWARD STUDENT PROTEST

By

Thomas E. McClung

The Problem

This study is concerned with measuring the attitudes of managerial personnel in business toward the student protest movement. More specifically, the purpose of this study is to determine if there is a relationship between selected demographic dimensions and the degree of positive and negative attitudes held toward student protest by managerial personnel. The demographic dimensions selected for this study are as follows: age, rural vs. urban residence, level of formal education attained, political ideology, children of adolescent age, level of supervision, and size of industry where employed.

Significance

To assess adequately the impact of the student protest movement, it is important to determine the thinking of groups other than those used in this study, and are employed in the construction industry working and living on college and university campuses. The industrial sector of our society is a vital part of the American way of life. With the increased emphasis on white-collar occupations and supervisory

responsibilities in business, a determination of the attitudes of managerial personnel toward student protest would contribute significantly to assessing the impact of the student protest movement. Five of the seven demographic dimensions used in this research are applicable to people in all occupations. Thus, this study can serve as a beginning for determining the attitudes of various other groups toward student protest.

Population

The subjects selected for this study are members of an organization comprised of individuals serving in executive or supervisory positions for a manufacturing industry, industrial firm, public utility, construction company, transportation company, or communication system. Membership in this organization is representative of more than 60 firms in a metropolitan area of approximately 300,000 people located in the midwest.

Method of Analysis

An attitude scale based on the Likert method was constructed for measuring the attitudes of the subjects toward student protest. Twenty-two items were concerned with attitude measurement and the remaining seven items were designed to gather pertinent demographic data.

Twenty-five managerial personnel who are members of the organization used in this study, and are employed in a firm of approximately 400 employees, were selected for pretesting the attitude scale. These subjects were administered the attitude scale and an accompanying letter

which explained the intent of the study, clarified the procedures for completing the attitude scale, and defined the term student protest.

The Hoyt method of reliability was the statistical procedure used to determine the internal consistency of the attitude scale. In addition, Pearson product-moment correlations were computed between the scores on each attitudinal item and the total attitude score. Such correlations were computed to determine if each attitudinal item was contributing to the true variance.

The Hoyt method of analysis yielded a reliability coefficient which was considered adequate for continuing the study. In addition, scores on 20 of the 22 attitudinal items were positively correlated with the total attitude score. The remaining two statements were negatively correlated with the total attitude score and thus were excluded from the attitude scale adopted for final use in this study.

The attitude scale adopted in final form and an accompanying letter of explanation were sent to 243 subjects. After two mailings, 148 responses (60.9 per cent) deemed useful were received from the 243 individuals selected to participate in this study.

The data were analyzed through three separate statistical procedures. First, the Hoyt method of reliability was used to determine the reliability of the instrument finally adopted for this study. A second statistical measure employed in this study was the Pearson product-moment correlation coefficient. This statistic was used to correlate the scores on each of the seven demographic dimensions with the scores on the attitude scale. Simple correlations were also computed between the scores on each dimension and the scores on every other dimension. The correlation coefficients were tested for statistical significance through the use of the t distribution.

Multiple correlation was the third statistical procedure used in this research. This statistical measure was used to determine the multiple correlation coefficient between the seven demographic dimensions and attitude regarding student protest. The multiple correlation coefficient was tested for significance through the use of the F ratio.

Findings and Conclusions

There are few significant relationships between the attitudes of the subjects toward student protest and each of the seven demographic dimensions selected for this study. The political ideology dimension was the only demographic dimension which had a statistically significant relationship with the attitudes of the subjects toward student protest.

Selected demographic dimensions used in this study are significantly related to one another. There was a statistically significant relationship between the following pairs of demographic dimensions: age and level of supervision, rural vs. urban residence and level of formal education attained, rural vs. urban residence and level of supervision, level of formal education attained and political ideology, level of formal education attained and level of supervision, and level of supervision and industry where employed.

The group of seven demographic dimensions do contribute to variance in the subjects' attitudes toward student protest. These demographic dimensions accounted for a statistically significant amount of the variance with regard to the attitudes of the subjects toward student protest.

A STUDY OF THE ATTITUDES OF MANAGERIAL
PERSONNEL TOWARD STUDENT PROTEST

By

Thomas E. McClung

A THESIS

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The author would like to express his appreciation to W. Vandel Johnson, Guidance Counselor, for his assistance in conducting this study. In addition, the author wishes to thank the committee members, Dr. John Johnson, Dr. John Johnson, and Dr. John Johnson McFarland, for their guidance.

To my colleagues at the University of Illinois, thank you for assisting in the development of the research and for this research. Also, to Thomas E. McClung for his advice regarding research.

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1971

To my wife Sharon, my love and support, thank you for your understanding while conducting this research.

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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

Introduction

The term "student protest" has been used extensively during the past few years by people throughout the world. It is often used synonymously with such terms as student dissent, campus unrest, and student activism. In addition, student protest activity has centered around such diverse issues as racism, ecology, the Vietnam War, student governance, equality of opportunity, and academic freedom. As a result of student protest, hundreds of colleges and universities have experienced rallies, speeches, teach-ins, sit-ins, marches, and confrontations. While many such demonstrations were conducted in a peaceful manner, an extensive number of others resulted in damaged property, physical harm, and disruption of normal college or university operations.

It is difficult to determine accurately the extent of student protest throughout our country during the past two years. However, in the study entitled Campus Tensions: Analysis and Recommendations (1970), The American Council on Education's Special Committee on Campus Tensions presents statistics released by Alan E. Bayer and Alexander W. Astin regarding the frequency of student protest activities. These researchers state that violence and disruption occurred on an estimated 145, or 6.2 per cent, of the nation's 2,300 colleges and universities during the

1968-69 academic year. In addition, an estimated 379 campuses, or 16.2 per cent, experienced non-violent but disruptive protest [p. 7].

On February 25, 1970, the Higher Education Executive Associates (1970) completed a study of student protest for the Michigan Senate Committee to Investigate Campus Disorders and Student Unrest. This study relates the findings of Harold Hodgkinson who analyzed student protest at 1,230 institutions of higher education during the 1968-69 academic year. The data reveal that 355 institutions, or 28.9 per cent, reported an increase in student protests and/or demonstrations during that year. Of the 38 Michigan colleges and universities in this sample, 16 institutions (42.1 per cent) reported an increase in student protest [pp. 39-40].

As a result of the frequency of student protest activities and the extensive coverage by the news media, most people are aware to some degree of student protest activities. The intent of this study is to assess the impact of the student protest movement on people other than those working and living on college and university campuses.

The Problem

The area of student protest can be researched through a number of different approaches. A study can be made of the personal characteristics of student protestors. Also, an investigation can be made of the legal ramifications of specific protest activities or resultant confrontations. A determination of the causes of student protest is a third general approach. A fourth approach is to study the attitudes of a specific group of people toward student protest. The latter method has been adopted for this study.

This study is concerned with measuring the attitudes of people in the industrial sector of our society toward student protest. More specifically, an attempt will be made to discern the attitudes of those serving in executive or supervisory positions for a manufacturing industry, industrial firm, public utility, construction company, transportation company, or communication system. The subjects which meet the above mentioned criterion are members of an organization comprised of managerial personnel. These individuals work in different levels of supervision and represent more than 60 firms in a metropolitan area of approximately 300,000 located in the midwest.

This organization is sponsored through the Young Men's Christian Association in cooperation with management of the member firms. The purposes of this group of managerial personnel are as follows:

1. To keep its members in touch with the best thought on industrial management and allied subjects;
2. To promote good fellowship and sociability among the industrial executives . . . ;
3. To build character and good-will in industries by recognition of the human element;
4. To keep its members informed on matters of civic and national interest [p. 1].

The purpose of this study is to determine the attitudes held by managerial personnel regarding student protest through the use of an attitude scale. More clearly, this study will attempt to determine if there is a relationship between selected demographic dimensions and the degree of positive and negative attitudes held toward student protest by managerial personnel.

In his article entitled "Opinion-Attitude Methodology" (1948), McNemar states that the typical breakdown for the correlates of attitudes

and opinions include the following: age, sex, rural vs. urban residence, geographical region, racial or national origin, religious affiliation, education, socioeconomic or income status, political party, size of family, occupation, and club membership [p. 353]. For the purpose of this study, an attempt will be made to find if the attitudes held by the subjects vary, favorably or unfavorably, according to each of the following demographic dimensions:

1. Age (a. Under 30 years of age, b. 30-40 years of age, c. 41-50 years of age, d. 51-60 years of age, e. Over 60 years of age)
2. Rural vs. Urban Residence (a. Within . . . city limits, b. Suburb with a population between 10,000 and 20,000, c. City with a population between 5,000 and 20,000, d. Town or village of less than 5,000 people, e. Country setting)
3. Level of Formal Education Attained (a. Less than twelfth grade, b. High school graduate, c. Postsecondary vocational-technical training, d. Less than bachelor's degree, e. Bachelor's degree, f. Master's degree, g. First professional degree, h. Doctorate degree)
4. Political Ideology (a. Strongly Liberal, b. Moderately Liberal, c. Moderately Conservative, d. Strongly Conservative)
5. Children of Adolescent Age (a. No children, b. Under 12 years of age, c. Between 12 and 20 years of age, d. Over 20 years of age)
6. Level of Supervision (a. Top Level Management, b. Intermediate Level Management, c. Low Level Management)
7. Size of Industry Where Employed (a. Less than 100 employees, b. 100-500 employees, c. 500-1,000 employees, d. 1,000-5,000 employees, e. Over 5,000 employees)

The development of an instrument designed specifically for this study negates the opportunity to compare the composite scores of managerial personnel to national norms. Thus, the ability to ascertain the attitudes of the subjects selected for this study, in total, toward student protest is greatly curtailed. However, the subjects can be

compared with one another on specified demographic dimensions to determine if attitudes do vary among individuals on each of the dimensions.

Theory

The actions of an individual may or may not reveal the attitudes held by that person. As discussed by L. W. Doob (1947), an attitude is an implicit response which occurs within the individual and is not immediately observable to an outsider. Such a response may be "conscious or unconscious" and may be "distinctly verbal or vaguely proprioceptive [p. 136]."

One of the most common methods of measuring an attitude, whether it is manifested through observable behavior or not, is the use of attitude scales. When using this measurement device, it is assumed that:

the meaning attributed to a stimulus item and the meaning one intends to convey by his reply are roughly similar, respectively, to the meanings intended and inferred by the investigator [Scott, 1968, p. 214].

The difficulties in adequately measuring an individual's attitude are numerous. As stated by G. W. Allport (1935), an inherent limitation in all methods of attitude testing is that these devices can only measure common attitudes, rather than individual attitudes. Common attitudes are those which are held by many people as a result of such elements as the physical environment, culture, and instinct. Such attitudes are relatively few, according to Allport, and, as a result, attitude scales are only approximations of those attitudes which exist in the mental life of individuals [pp. 826; 832]. These approximations, as described by

Allport, are nevertheless necessary for discerning the feelings of an individual, or a group of individuals, toward a particular stimulus.

Concerted efforts are made to construct the most adequate attitude scale possible for determining the attitudes of a specified group of subjects toward a particular object or issue. This is illustrated in the book entitled Techniques of Attitude Scale Construction (1957). In this writing, Allen Edwards summarizes criteria for establishing attitude statements from the writings of Wang (1932), Thurstone and Chave (1929), Likert (1932), Bird (1946), and Edwards and Kilpatrick (1948).

These criteria are as follows:

1. Avoid statements that refer to the past rather than to the present.
2. Avoid statements that are factual or capable of being interpreted as being factual.
3. Avoid statements that may be interpreted in more than one way.
4. Avoid statements that are irrelevant to psychological objects under consideration.
5. Avoid statements that are likely to be endorsed by almost everyone or almost no one.
6. Avoid statements that are believed to cover the entire range of an affective scale of interest.
7. Keep the language of statements clear, simple, and direct.
8. Statements should be short, rarely exceeding 20 words.
9. Each statement should contain only one complete thought.
10. Statements using universals such as all, always, none, and never often introduce ambiguity and should be avoided.

11. Words such as only, just, merely, and others of a similar interest, should be used with care and minimally.
12. Statements should be in the form of simple sentences.
13. Avoid words that may not be understood by those given the scale.
14. Avoid the use of double negatives [pp. 13-14].

Efforts have been made to adhere to these criteria in developing statements for the proposed attitude scale in the attempt to determine more clearly the attitudes of the subjects toward student protest.

Significance

The significance of this study is twofold:

1. To assess adequately the impact of the student protest movement, it is important to determine the thinking of groups other than those working and living on college and university campuses. The industrial sector of our society is a vital part of the American way of life. With the increased emphasis on white-collar occupations and supervisory responsibilities in business, the determination of the attitudes of managerial personnel toward student protest would significantly contribute to assessing the impact of the student protest movement.
2. Although this proposed study does not test the similarity of attitudes held by managerial personnel and individuals in other occupations, the results of the research can serve as a starting point for determining the attitudes held by various other subgroups of the population. Five of the seven dimensions used in this study are applicable to all people, not just those working in management (i.e., age, urban vs. rural residence, level of formal education attained, political ideology,

children of adolescent age). Thus, this study could better clarify the positive or negative influence of the student protest movement.

Summary

During the past five years, the frequency of student protest activities has greatly increased on American college and university campuses. These activities have been both peaceful and violent and have occurred in response to numerous issues.

As a result of comprehensive coverage by television, radio, and newspapers, the American people have a much greater opportunity to be informed about student protest than ever before. Thus, many individuals have developed attitudes toward the student protest movement.

This study is concerned with determining the attitudes of managerial personnel in business regarding student protest. An attempt will be made to find if the attitudes of the subjects selected for this study vary according to specified demographic dimensions. It is believed that discovering the attitudes of individuals working in this sector of our society would contribute a small amount of pertinent data for assessing the impact of student protest on the American people.

Definition of Terms

Attitude

The concept of attitude has been defined by many authorities in the area of attitude measurement. Although there are numerous definitions, Marvin Shaw and Jack Wright (1967) have identified the following common characteristic in the definitions of attitude:

Attitude entails an existing predisposition to respond to social objects which, in interaction with situational and other dispositional variables, guides and directs the overt behavior of the individual [p. 2].

After reviewing the traditional conceptualizations of attitude, Shaw and Wright devised the following definition of attitude:

Attitude is a relatively enduring system of affective, evaluative reactions based upon and reflecting the evaluative concepts or beliefs which have been learned about the characteristics of a social object or class of social objects [p. 10].

Shaw and Wright's definition of attitude reflects the major factors of the concept, as defined for use in this study. When referring to the attitudes of managerial personnel, reference is being made to the degree of positive or negative feeling, which often exists over a period of time within an individual, regarding student protest on college and university campuses. Such feelings are learned and may well be in response to specific protest activities.

Student Protest

For the purpose of this study, the term student protest refers to group actions of dissent by college or university students against rules, policies, or actions related to local, institutional, state, or national situations. Student protest may be peaceful or violent, may or may not result in damaged property, may or may not result in physical harm, may or may not be disruptive of normal college or university operations, may or may not occur on a college or university campus, and may or may not result in the arrest of one or more participants. The term will not be limited to any particular issue that is the subject of student protest. Although participants in this study may relate student protest

to specific incidents or issues, the intent of this study is to measure attitudes toward the total concept of student protest.

CHAPTER II

REVIEW OF LITERATURE

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REVIEW OF LITERATURE

The review of literature in this study is divided into two major sections: attitudes and attitudes management of managers and managerial personnel. The literature pertaining to attitudes and attitudes management is quite extensive. The attitudes of managers and managerial personnel toward the attitudes of managerial personnel were studied. The related issues is seemingly unexplored. The attitudes of managers and managerial personnel related to managerial attitudes is reviewed in this study.

There are six areas of study related to attitudes and attitudes management:

1. Definition of attitudes
2. Basic concepts of attitudes
3. Attitudes and behavior
4. Measurement of attitudes
5. Problems in attitude measurement
6. Limitations of attitude measurement

Similarly, there are two additional areas of study related to attitudes and attitudes management:

1. Related Studies of attitudes management
2. Studies on Role of attitudes management

Deficiencies of attitudes management

Attitudes and attitudes management

Attitude and Attitude MeasurementDefinitions of Attitude

CHAPTER II

REVIEW OF THE LITERATURE

The review of literature for this study is divided into two major sections: Attitude and Attitude Measurement and Research on Managerial Personnel. The literature available on attitude and attitude measurement is quite voluminous. In contrast, research concerned with the attitudes of managerial personnel toward student protest or related issues is seemingly nonexistent. As a result, very little research related to managerial attitudes is included in this chapter.

There are six areas of consideration in the section on attitude and attitude measurement:

1. Definitions of Attitude
2. Basic Dimensions of Attitude
3. Attitude and Related Concepts
4. Measurement of Attitude
5. Problems in Attitude Measurement
6. Likert Method of Attitude Measurement

Similarly, there are two subdivisions of the section concerned with the attitudes of managerial personnel:

1. Related Studies of Managerial Personnel
2. Studies on Need Satisfactions and Need Deficiencies of Managerial Personnel

Attitude and Attitude Measurement

Definitions of Attitude

There are numerous definitions of attitude set forth by researchers in various academic areas of study. Such profusion necessitates an analysis and categorization of attitude definitions. These efforts are deemed necessary to better understand the concept of attitude.

A number of writers have found common threads in definitions of attitude. As previously mentioned, Shaw and Wright (1967) found an inclination toward social objects which directs individual behavior to be a common theme of most definitions [p. 2]. G. W. Allport (1935) states that an essential feature in all definitions of attitude is the conceptualization of attitude as a preparation or readiness for response [p. 805].

In his discussion of social attitudes, B. F. Green (1954) found another common theme in the definitions of attitude; an attitude is conceptualized as a "consistency among responses to a specified set of stimuli, or social objects [p. 335]." Guttman (1950) found two common notions in definitions of attitude, one of which is similar to that discussed by Green. According to Guttman, the commonalities in the definitions of attitude are a predisposition to act in a specified way toward something and a consideration of attitude as "an inference from previous behavior [p. 40]."

Efforts have been made to classify the numerous definitions of attitude into three general categories. These categories are as follows: definitions emphasizing learning and previous experience in the formation of attitudes, definitions emphasizing response to

stimuli, and definitions emphasizing mental preparation and readiness to act rather than behavior itself. These categorizations are by no means mutually exclusive, or necessarily the best means of classifying definitions of attitude. However, they do enable one to consider various conceptions of attitude in a systematic manner.

Learning and Previous Experience

Sherif and Sherif (1967) state that attitude "refers to something that can't be observed directly"; it refers to "a psychological concept designating something inside the individual [p. 112]." In expounding upon this definition, the authors specify two characteristics which differentiate the concept of attitude from other concepts relating to the internal state of an individual. According to Sherif and Sherif, attitudes are dependent upon learning and are not innate. Also, attitudes are relatively enduring and not temporary states within the individual [p. 112].

Newcomb (1966) defines attitude as follows:

Attitude is an individual's organization of psychological processes, as inferred from his behavior, with respect to some aspect of the world which he distinguishes from other aspects [p. 22].

Newcomb continues by stating that attitude "represents the residue of his previous experience with which he approaches any subsequent action." This, in combination with contemporary forces, determines one's behavior in a situation. Newcomb emphasizes the enduring aspect of attitudes in that such residues are often transferred to new situations [p. 22].

It should be noted that the above writers not only emphasize learning and previous experience, but also the enduring characteristic of attitude. The combination of these two aspects of attitude is shared

by Asch (1966). He emphasizes the reasonableness of concluding that attitudes "are particularly enduring sets formed by past experience [p. 36]."

The emphasis on learning and one's environment is apparent in the definition of attitude set forth by Sherif, Sherif, and Nebergall (1965). According to these authors:

Social attitude is a set of evaluative categorizations formed toward an object or class of objects as the individual learns, in interaction with others, about his environment, including evaluations of other persons [p. 20].

Smith, Bruner, and White (1956) infer a learning process in attitudes by emphasizing predictability in the motivational and affective aspects of attitude. These researchers define attitude as follows:

An attitude is a predisposition to experience a class of objects in certain ways, with characteristic affect; to be motivated by this class of objects in characteristic ways; and to act with respect to these objects in characteristic fashion [p. 33].

The definitions of attitude by Sherif, Sherif, and Nebergall and by Smith, Bruner, and White make reference to learning and to additional aspects of attitude. These definitions include motivational, emotional, and affective characteristics of attitude.

Thurstone and Chave (1929) relate attitude to man's total psychological being as seen in the following definition:

Attitude denotes the sumtotal of man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats, and convictions about any specific topic [pp. 6-7].

This definition places attitude in a rather broad context, one which involves both affect and cognition. Reference to such terms as prejudice, preconceived notions, ideas, and convictions once again refer to previous experience and learning.

Response (1911) reduced to the response aspect of attitude is his

The definitions of attitude in this subsection make specific reference to a response or reaction by an individual to a stimulus or group of stimuli. Rosenberg and Hovland (1960) relate the significance of this aspect of attitude when they state that attitudes are typically defined as "predispositions to respond in a particular way toward a specified class of objects [p. 1]."

Rokeach (1968) defines attitude as "a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner [p. 112]." Emphasis is given to the fact that an attitude involves a set of interrelated predispositions and not a single predisposition. Thus, all attitudes are perceived as "agenda for action" with a behavioral component, in addition to cognitive and affective components [pp. 114; 120].

In his discussion on social attitudes, Campbell (1963) states the definition set forth by Lazarsfeld and Green. These researchers define attitude, in part, as a disposition "which we diagnose or measure on the basis of stimulus-response contingencies [p. 149]." Campbell supplements this definition by stating that attitude in the social psychological tradition is not only a predisposition to respond, but also "represents motive attributes, preferences for certain types of goals, or predilections for certain types of outcome [pp. 147-148]."

Attitude, according to Doob (1947), is "an implicit, drive-producing response considered socially significant in the individual's society [p. 136]." This definition connotes arousal within an individual. Arousal, according to Doob, is related to both perception and learning; some attitudes may not be evoked until the stimulus has been perceived [pp. 138-139].

Faris (1931) recognizes the response aspect of attitude in his definition. He defines attitude as "an acquired predisposition to ways or modes of response, not to particular acts except as, under special conditions, these express a way of behaving [p. 8]." To clarify further the concept of attitude, Faris states that attitudes represent only tendencies toward modes of action and "do not have any one-to-one correspondence to specific responses to stimulations [p. 12]."

A number of researchers have explicitly combined the aspects of learning and response in their definitions of attitude. Shaw and Wright (1967), whose definition has been adopted as the model definition for this study, include both aspects in their definition. As previously stated, Shaw and Wright define attitude as follows:

Attitude is a relatively enduring system of affective, evaluative reactions based upon and reflecting the evaluative concepts or beliefs which have been learned about the characteristics of a social object or class of social objects [p. 10].

Nelson (1939) also combines response and learning in the definition of attitude when he states:

Attitude is a felt disposition arising from the integration of experience and innate tendencies which disposition modifies in a general way the response to psychological objects [p. 381].

Osgood, Suci, and Tannenbaum (1957) clearly identify the significance of learning and response in attitude through the following statement:

Most authorities are agreed that attitudes are learned and implicit, they are inferred states of the organism that are presumably acquired in much the same manner that other such internal learned activity is acquired, and they are predispositions to respond but are distinguished from other such states of readiness in that they predispose toward an evaluative response [p. 189].

A review of the definitions by Shaw and Wright and by Osgood, Suci, and Tannenbaum reveals the pertinence of evaluation in addition to learning and response in the concept of attitude.

Mental Preparation and Readiness

The classical definition of attitude which emphasizes mental preparation and readiness is that set forth by Allport (1935).

According to Allport:

An attitude is a mental and neural 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 [p. 810].

Similarly, Droba (1933) states that "attitude is a mental disposition of the human individual to act for or against a definite object." Droba continues by stating that attitude "is based on a series of experiences with respect to the object [451]."

According to English and English (1958), an attitude can be defined as follows:

an enduring, learned predisposition to behave in a consistent way toward a given class of objects; a persistent mental and/or neural state of readiness to react to a certain object or class of objects, not as they are but as they are conceived to be [p. 50].

In addition to stressing mental preparation and readiness, each of the above three definitions emphasizes learning and/or previous experience. This once again illustrates that the categorizations of definitions of attitude are not mutually exclusive.

Although no specific mention is made of mental or neural processes, the following researchers stress the readiness or tendency to act in their definitions of attitude. McNemar (1946) succinctly defines social

attitude as "a readiness or tendency to act or react in a certain manner [p. 289]." Similarly, LaPiere (1934) conceptualizes social attitude to be, in part, an "anticipatory set or tendency to designated social situations, or a conditioned response to social stimuli [p. 22]." Park (1931) identifies the characteristics of attitudes in his discussion of human nature, attitudes, and mores. According to Park, one characteristic of attitude is a "tendency to act - an incompleting act [p. 31]."

The emphasis on readiness or "tendency to act" tends to reduce the importance of cognition. This is particularly apparent in LaPiere's conceptualization of attitude as a "conditioned response to social stimuli [p. 22]." In their typology of attitudes, Katz and Stotland (1959) differentiate between those types of attitudes which involve much and little cognition. Action-oriented attitudes, according to this typology, involves the "satisfaction of needs and development of action tendencies toward valued objects with a minimum of cognitive representation [p. 451]." On the other hand, intellectualized attitudes have a strong "cognitive component with a lack of behavioral structure." These attitudes "may result from the need to understand the world or the need for self-consistency [p. 450]." The intellectualized attitude described by Katz and Stotland could best be categorized with those definitions concerned with learning and previous experience.

Basic Dimensions of Attitude

William Scott (1968) lists numerous dimensions of attitude which must be considered when discussing attitude measurement. According to Scott, the dimensions of attitude are:

1. Direction - Amount of psychological distance from the object,

2. Magnitude - Degree of favorableness and unfavorableness.
3. Intensity - Strength of feeling associated with an attitude.
4. Ambivalence - Follows from the conception of direction and the empirical observation that both favorable and unfavorable components may be present in the attitude since that composite.
5. Salience - Prominence of an attitude or readiness with which a person expresses it.
6. Affective salience - Degree to which a person's view of an object is dominated by evaluative or affect-laden content.
7. Cognitive complexity - Refers to the "richness" of the ideational content, or the number of ideas the person has about an object.
8. Overtness - Prominence of the action component.
9. Embeddedness - Degree of isolation versus connectedness to other cognitive elements (e.g., beliefs, values, etc.).
10. Flexibility - Ease in which an attitude can be modified by a variety of pressures.
11. Consciousness - Perception of attitude as having a range of availability to awareness [pp. 206-208].

Scott concludes that most researchers involved with the properties theoretically attributed to attitudes are primarily concerned with measuring direction and magnitude [p. 209].

Hartley and Hartley (1952) give consideration to four specific dimensions of attitude: direction, degree, intensity, and salience.

As inferred by Scott, Hartley and Hartley state that direction "involves whether a person is for or against a given social stimulus, person, group, activity, process, or institution [p. 665]." The degree dimension refers to the amount of favorableness or unfavorableness of an attitude. This is comparable to the magnitude dimension set forth by Scott. Also, as mentioned by Scott, Hartley and Hartley state that the combination of direction and degree (magnitude) has represented the primary concern of attitude studies during the past few years [p. 666].

Intensity refers to the "degree of conviction with which an attitude is held by an individual [p. 670]." Salience is defined as "an attempt to provide an objective index of the position within the constellation of attitudes of the particular attitude being expressed [p. 673]." Although described in somewhat different terminology, this definition is similar to Scott's consideration of salience as the prominence of an attitude.

In their consideration of attitude, Newcomb, Turner, and Converse (1965) define what they consider to be the basic properties of attitude: direction and degree of feeling. The definitions of these dimensions are consistent with those developed by Scott and by Hartley and Hartley. However, Newcomb et al. proceed in their discussion of attitude by defining the fundamental characteristics of the attitude object.

When referring to the dimensionality of an attitude object, the authors are concerned with the "inclusiveness, or number and variety of elements or properties that they subsume [p. 50]." Newcomb et al. consider inclusiveness of an attitude object to be a second characteristic. In both an objective and subjective sense, inclusiveness refers

to the variability in the range of components that people perceive an object to include. A third characteristic is the psychological centrality of an object for the individual. This characteristic refers to the location of an attitude object in an individual's consciousness; the object can be foremost in one's mind or be psychologically remote [pp. 56-58].

Smith, Bruner, and White (1956) discuss five related but somewhat different characteristics of an attitude object: differentiation, saliency, time perspective, informational support, and object value. According to the authors, differentiation refers to the manner in which attitude objects vary in their organization. As defined by other researchers, saliency involves the extent that an object or class of objects is central in the concerns of an individual. The time perspective of an attitude object refers to the temporal frame of reference that is applied to that object. Informational support is concerned with the amount of available information that is used to develop the conception of the attitude object. Smith et al. define object value as the affective tone of an attitudinal object [pp. 34-36].

In addition to defining the basic dimensions of attitude, researchers have conducted various studies involving these dimensions. Cantril (1946) studied the intensity of attitudes in an attempt to distinguish between an attitude's intensity and direction and to determine the relationship of these two variables. To study these dimensions, Cantril developed an attitude scale for each of two general issues: "The Negro Problem" and "Government Regulation of Business." Each of the statements in both attitude scales was followed by a simple intensity device which had previously been proven reliable.

Both attitude scales and their intensity devices were included in a public opinion poll in 1945 which involved a nation-wide representative sample of the white population [pp. 130-131].

The results revealed that the more extreme the direction of an attitude, the more intensely it is likely to be held. Further scrutiny revealed that those who are better educated, wealthier, and older hold their attitudes more intensely than those at the opposite end of each of the three continuums. Cantril concluded that a knowledge of the intensity and direction of an attitude presents a more accurate and reliable index of public opinion than the measurement of direction alone [pp. 132-133].

DeFleur and Westie (1958) attempted to measure salience in their study of verbal attitudes and overt acts. The authors defined salience as the "readiness of an individual to translate his [previously expressed verbal] attitude into overt action in relation to the attitude object [p. 667]."

The study was concerned with the relationship between the verbal attitudes and overt actions of white subjects in regard to Negroes. It was hypothesized that when white individuals are required to make a decision regarding Negroes, their decision is determined, at least in part, by the norms and policies of social groups considered meaningful to them. DeFleur and Westie attempted to test their hypothesis by studying the relationship of racial attitudes previously indicated on an attitude survey and the willingness of the subjects to sign an agreement to be photographed with a Negro [pp. 668; 671].

It was found that there was significant relationship between the verbal and overt attitudinal dimensions. Although found to be

significant, this relationship did not involve a simple one-to-one correspondence; a number of subjects found to be prejudiced on the attitude scale signed the agreement and vice versa. The authors conjectured that these inconsistencies could be the result of the subjects' involvement in a system of social constraints which prevent them from responding in the direction of their convictions [p. 672].

Attitude and Related Concepts

Numerous researchers have attempted to clarify the similarities and differences of the concept of attitude and other similar concepts. To exemplify, Bain (1930) describes the similarities between attitude and similar concepts in the following statement:

[There is a] common core of meaning in such terms as attitude, trait, opinion, wish, interest, disposition, desire, bias, preference, prejudice, will, sentiment, motive, objective, goal, idea, ideal, and emotion; all refer to acquired and conditioned action-patterns that motivate human social behavior [p. 359].

Although such comparisons for similarities have been conducted, a review of the literature presents one with the opportunity to compare definitions of attitude and similar terms to determine their dissimilarities. Such efforts assist in further clarifying the term attitude. Thus, an attempt will be made to focus on the differences in concepts for purposes of this review.

As exemplified by Bain's statement, there are numerous concepts mentioned in relation to attitude. Those readily apparent in the literature, and thus discussed in this section, are as follows: belief, motive, opinion, and trait.

Belief "evaluative response based upon 'evaluative concepts or beliefs"

One of the more extensive considerations given to both attitudes and beliefs is that done by Krech and Crutchfield (1948). They define belief as "an enduring organization of perceptions and cognitions about some aspect of the individual's world [p. 150]." In contrast, an attitude is defined as "an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world [p. 152]." Through a comparison of these two definitions, Krech and Crutchfield conclude that beliefs are the "cognitive embodiment of attitudes and are motivationally and emotionally neutral [p. 152]." Similarly, Scott (1968) states that "attitudes are commonly distinguished from cognitions or beliefs by the presence of affect in the person who entertains the concept [p. 205]."

In contrast to perceiving belief as being motivationally and emotionally neutral, English and English (1958) define belief as "an emotional acceptance of a proposition or doctrine based upon what one implicitly considers adequate grounds [p. 64]." A comparison of the definitions of belief and attitude set forth by English and English reveals a difference in emphasis; belief is conceived to be the acceptance of a position while attitude is referred to as the predisposition to behave and readiness to react to a stimulus. Attitude appears to be an extension of belief; it involves potential response to a stimulus based upon preconceived notions or beliefs.

Shaw and Wright (1967) draw a similar comparison between these two terms. According to these authors, belief "emphasizes some level of acceptance of a proposition regarding the characteristics of an object or event [p. 4]." On the other hand, an attitude is defined

as an "evaluative reaction" based upon "evaluative concepts or beliefs [p. 10]." Once again attitude is conceptualized as being a response to beliefs that have been previously learned.

Motive

In his discussion of the nature of attitudes, Droba (1933) compares attitude to a number of other phenomena. When referring to motives, he states that motives serve as starters while attitudes assist in determining the direction of activity. However, both may be causally related, according to Droba [p. 459].

Newcomb (1965) distinguishes motives from attitudes by their length of endurance. Motives, according to Newcomb, exist only when an organism is activated in some manner. In contrast, attitudes are more persisting, even during "periods of behavioral quiescence." He concludes by stating that attitudes are usually more persistent and inclusive than motives [pp. 23-24].

Scott (1968) relates that an attitude may be distinguished from a motive by the presence of a cognitive and perhaps an evaluative component [p. 205]. One could infer from this statement by Scott that an attitude involves learning while a motive serves mostly to activate the organism in some direction. In addition, one could conclude from Droba and Newcomb that directionality and endurance characterize attitude to the exclusion of motive.

Although these distinctions have been drawn, Allport (1935) cautions that motives and attitudes may become indistinguishable. As stated by Allport, "the development of dynamic attitudes can result in both motivation and guidance [p. 818]." Both motivation and guidance supply drive and direction. Allport concludes by identifying two types of attitudes,

one attitude that is organized and energized such that it drives an organism, and a second that merely directs an individual [p. 819].

ion and the ostensibly verbal attitude [p. 819]."

Opinion

The definition of opinion by Rokeach (1968) characterizes the thinking of many researchers. Rokeach defines an opinion as "a verbal expression of some belief, attitude, or value [p. 125]." He continues by stating that opinion may well represent a public belief. However, an opinion may more accurately reflect one's private belief when it is expressed in situations involving privacy [p. 125].

Hartley and Hartley (1952) expand upon the definition of opinion by Rokeach. These researchers feel that opinions become prevalent when attitudes do not adequately enable an individual or group to cope with a particular situation. An opinion is concerned with such doubtful elements as conflicts and uncertainties thus making opinion a more rational construct than attitude. Hartley and Hartley continue by stating that an opinion corresponds to a complex of attitudes rather than to a single attitude and therefore involves the "extra-individual aspect of the situation [p. 657]." As stated by Rokeach, Hartley and Hartley consider an opinion to be an expression of attitudes which often are not readily apparent [p. 658].

In their dictionary of psychological terms, English and English (1958) define opinion as follows: "A belief that one holds to be [true] without emotional commitment or desire, and to be open to reevaluation since the evidence is not affirmed to be convincing [p. 358]." English and English compare attitude and opinion by stating that the "presumed objectivity of opinion distinguishes it from other attitudes, even though the objectivity may be self-deception [p. 358]." The authors

caution the use of attitude and opinion interchangeably because it "blurs a useful distinction between the ostensibly intellectual opinion and the ostensibly valuative attitude [p. 359]."

Hartley and Hartley's emphasis on rationality compares favorably with the intellectual emphasis on opinion by English and English. Such an emphasis, in addition to the emphasis on opinion as a verbal response to belief, appear to be the essential elements of the opinion concept.

Trait

A review of the literature regarding the comparison of attitude and trait reveals one major difference, the specificity of the referent. Droba (1932) states that a trait has a vague referent while an attitude has a specific object of reference [p. 458]. Shaw and Wright (1967) concur with Droba regarding the specificity, or lack of specificity, of the referent [p. 5]. Although using somewhat different terminology, Allport (1935) draws a similar comparison between the two concepts. He states that a trait is a manner of behaving while an attitude is a "directed tendency [p. 809]."

Measurement of Attitude

In his article on attitude measurement, Scott (1968) presents a comprehensive discussion on the types of measuring instruments. This discussion categorizes instruments for measuring attitude according to the types of responses that subjects may elicit. To provide a general background into the area of attitude measurement, these categories and a paraphrased description of each are listed as follows:

1. Verbal responses - Includes both open-ended questions (no suggested

answers) and closed questions (forced reply to a set of categories).

2. Method of single stimuli -

Involves the acceptance or rejection of a particular item individually.

3. Method of forced choice between pairs -

Involves the acceptance or rejection of an item from a pair of items.

4. Method of multiple choice -

Involves the acceptance or rejection of an item from a set of stimuli.

5. Indirect measures -

Involves response to a particular stimulus (e.g., pictures) and the interpretation of the response in terms of one or more attitudinal components.

6. Physiological measures -

Involves measurement of autonomic arousal (e.g., heart beat, galvanic skin response, pupil dilation) in response to a stimulus and interpretation of measured response in terms of one or more attitudinal components.

7. Overt behavior -

Involves measurement of overt behavior in response to a focal object to determine attitude. This can be achieved through such procedures as role playing [pp. 210-217].

Campbell (1967) discusses four different categorizations of attitude scales. These four types of tests and a paraphrased description of each are as follows:

1. Non-disguised-structured -

Includes the classic attitude tests of Thurstone and Likert where the subject is

knowledgeable of the purpose of the instrument and is asked to respond to one item in a set of responses for each statement.

2. Non-disguised-non-structured -

Includes free-response interviews and essay studies where the subject is knowledgeable of the purpose of the instrument, but is not required to respond in a specified manner.

3. Disguised-non-structured -

Includes projective techniques where a subject is asked to respond to a particular stimulus for the purpose of determining his attitude. The subject is not knowledgeable of the purpose of the instrument and is not required to respond in a specified manner.

4. Disguised-structured -

Includes tests which approximate the objective testing of attitudes. The subject is not knowledgeable of the purpose of the instrument, but is asked to respond to each statement in a specified manner [p. 163].

Despite the different types of attitude measurement, an attempt has been made to review the literature with regard to the attitude scale. More specifically, primary consideration has been given to the traditional non-disguised-structured attitude tests, as classified by Campbell. Of the many elements in attitude measurement worthy of discussion, two elements have been given primary attention: components of a good attitude scale, and reliability and validity in the use of attitude scales.

Components of a Good Attitude Scale

Green (1954) states that "attitude measurement consists of assessing an individual's responses to a set of social objects or situations

[p. 336]." Attitude scales are a primary means of determining one's responses to a stimulus or a group of stimuli. According to Diab (1967), there are two common characteristics in all attitude scales:

1. They all represent the individual's attitude toward an object by a single preference score or average "most acceptable" position on a continuum of positions ranging from highly favorable to highly unfavorable.
2. In every case, the individual is fully aware that his attitude on the issue in question is being measured [p. 141].

The second characteristic listed by Diab clearly indicates his considerations of non-disguised tests, as labeled by Campbell.

An important concern in the construction of an adequate attitude scale is the degree to which it is unidimensional. Krech, Crutchfield, and Ballachey (1962) describe a unidimensional scale as one which measures only one attitude dimension and, as a result, "a person with a higher total score will have on every item a score equal to, or higher than, that of a person with a lower total score [p. 179]." Similarly, Green (1954) considers unidimensionality to mean that people with the same score on an attitude scale will have a similar attitude on the particular stimulus in question [p. 338].

Conrad (1946) states that, in a psychological sense, a unidimensional scale would of necessity be composed of items that are homogeneous in regard to the quality being measured. He continues by relating the acceptance of a certain amount of heterogeneity in an attitude scale if such heterogeneity is non-systematic and if the scale is "sufficiently long to permit the effective operation of counterbalancing tendencies [p. 571]." Krech and Crutchfield (1948) concur in that they see nothing improper about an attitude test that covers

different aspects of the attitude provided these aspects are part of a constellation which comprise the attitude [p. 231].

Many researchers give considerable attention to the selection of appropriate items for an attitude scale. Krech and Crutchfield (1948) identify four criteria for the selection of scale items. First, an item must discriminate among individuals with different beliefs such that they will respond to the item in systematically different ways. Second, an item must clearly differentiate among those people whose attitudes are at different points along the dimension being measured. A third criterion involves the selection of items that discriminate at every point along the dimension. Fourth, although practicality considerations limit the total number of items that can be included in an attitude scale, there should be a minimal number of items for reliability [pp. 211-214].

Selltiz, Jahoda, Deutsch, and Cook (1966) set forth two criteria for selecting items in an attitude survey. According to these writers, items in an attitude survey "must elicit responses that are psychologically related to the attitude being measured." Secondly, as stated by Krech and Crutchfield (1948), the attitude scale "must differentiate among people who are at different points along the dimension being measured [p. 305]."

Perhaps the most comprehensive listing of criteria for developing attitude statements is that by Edwards (1957). As previously mentioned, these criteria are summarized from the writings of Wang (1932), Thurstone and Chave (1929), Likert (1932), Bird (1946), and Edwards and Kilpatrick (1948).

The criteria developed by Thurstone and Chave (1929) are as follows:

1. Statements should be as brief as possible.
2. Statements should be such that they can be endorsed or rejected in accordance with their agreement or disagreement with the attitude of the reader.
3. Statements should be such that acceptance or rejection of the statement does indicate something regarding the reader's attitude about the issue in question.
4. Avoid double-barreled statements [as they] have high ambiguity.
5. At least a fair majority of statements must [correspond to the] attitude variable that is measured [pp. 22-23].

Reliability and Validity

Essential to the discussion of reliability and validity is a clarification of both terms. In his discussion of reliability, Kerlinger (1964) relates that such terms as dependability, stability, consistency, predictability, and accuracy are synonyms for reliability. Kerlinger continues by defining reliability as "the relative absence of errors of measurement in a measuring instrument [pp. 429-430]."

McNemar (1946) defines reliability in terms of attitude measurement as follows:

[Reliability is the] accuracy with which an individual's attitude is measured, or the degree of error involved in assigning an individual to a class or in establishing his rank-order position [p. 294].

Krech and Crutchfield (1948) list test-retest, equivalent forms, and split-half techniques as the primary methods of measuring reliability [p. 258]. The test-retest method involves testing a group of subjects

at two different times with the same test. Two separate halves of a test are tested for similarity of response with the split-half method. Similarly, the equivalent forms method is concerned with testing the same group of subjects with two different but supposedly equivalent tests in the attempt to measure the same dimension. Each technique is concerned with determining the consistency of measurement and therefore the amount of error involved in the measuring devices.

Validity, according to Kerlinger (1964), involves the concern for a test to measure what it was designed to measure. There are three different measures of validity discussed by Kerlinger: content validity, predictive or concurrent validity, and construct validity. Content validity involves the representativeness of the content of a measuring instrument. Predictive or concurrent validity is characterized by checking a measuring instrument at some point in time against some type of outcome. Construct validity involves the determination of certain factors that account for variance in test performance [pp. 444-448].

Guttman (1950) categorizes two different types of validities: internal validity and external validity. Internal validity involves testing each item to determine if the items belong in the universe being tested. External validity, on the other hand, is concerned with the problem of prediction. An attempt must be made to determine what is to be predicted and then to determine the correlation between the predictor and the specified criterion of prediction [pp. 55-58].

McNemar (1948) discusses a number of factors which can affect reliability and/or validity of attitude measurement either positively or negatively. It is considered important that the respondent understand the issue being measured. Also, the questions or statements must

be clearly stated to enhance the respondent's understanding and eliminate ambiguity. Third, the less an issue is personally relevant to a respondent, the lower will be the reliability and validity of attitude measurement. Finally, stereotypes and emotionally charged words may result in greater consistency but may also lead to lower reliability and validity [p. 297].

Krech and Crutchfield (1948) list numerous factors which contribute to unreliability. Complex and ambiguous items, items with special meanings not common to all persons, and items not consistent with one another are contributing factors. They also list errors by the respondent in reading the items or marking the items, inadequate instructions when administering the test, and disruptive factors in the measurement situation as debilitating factors for reliability [pp. 258-259].

Problems in Attitude Measurement

The above discussion on factors which affect reliability and/or validity and factors which contribute to unreliability leads to the consideration of problems in attitude measurement.

McNemar (1946) discusses various statistical issues which reveal problems in attitude measurement. In discussing attitudinal research, McNemar emphasizes the need for adequate sampling, freedom from erroneous statistical manipulation, and a satisfactory statistical analysis. Without consideration of these essential factors, an attitudinal study is of little value [p. 331]. In regard to sampling, McNemar questions the value of any attitudinal research which uses groups that are from highly restricted universes. Also, according to McNemar, the comparability of attitudinal studies is greatly diminished when researchers fail to report means and standard deviations in their results [p. 341].

Another area of concern in attitudinal measurement is the "zero point of scales." According to Krech and Crutchfield (1948), the neutral, or zero, point of an attitude continuum cannot be ascertained directly through attitude scales. As a result, it must suffice to assume that those subjects whose scores are in the middle of all attitudinal scores measured are closest to the region of the zero point [p. 229]. Caution must be used in making these assumptions, however. As discussed by Rosenberg (1960) in his article on attitude dynamics, the results from an attitude scale which indicate that an individual is occupying a non-neutral position may well not be the case. Rosenberg continues by stating that an individual's attitude toward an object may not be stable over time and in altered circumstances [pp. 333-334].

Sherif and Sherif (1965) discuss yet another problem in attitude measurement. Although attitude scales indicate the degree of positive or negative feeling held by an individual about an object, these results relate little about other factors. Thus, little is known about the subject's susceptibility to change, the direction of change, the individual's tolerance of other positions, or the degree of commitment that an individual has to a particular stand [p. 20].

As a result of these inadequacies in attitude measurement, Sherif and Sherif propose consideration of the following categories when classifying individuals through attitude measurement:

1. Latitude of Acceptance -

Determination of the most acceptable position toward an issue or an object in addition to other acceptable positions.

2. Latitude of Rejection -

Determination of the most objectionable position toward an issue or an object in addition to other unobjectionable positions.

3. Latitude of Noncommitment -

Determination of those positions not categorized as either acceptable or objectionable in some degree [p. 24].

Diab (1967) concurs with the concerns of Sherif and Sherif when he states:

Rather than a single preference score on a continuum, it appears that a consideration of ranges of acceptance and rejection of various positions on an issue would result in a more realistic representation of the individual's attitude [p. 141].

As previously discussed, Allport (1935) expresses the concern that attitude tests are limited in that they only measure common attitudes, not individual attitudes. Allport concurs with Sherif and Sherif that the results of attitude measurement are subject to question as a result of attitude change; an investigation made under one set of conditions may not present an accurate picture of the attitudes of an individual or group of individuals [p. 832]. Allport continues by discussing the difficulty in classifying attitudes satisfactorily as a result of the complexity of the human personality; it is "an infinitely variable and changing structure [p. 836]."

Doob (1947) discusses the problems of attitude measurement which are related to the testing situation. According to Doob, a question used in the measuring device may involve a cliché which could evoke an attitude not directly related to the attitude being measured. In addition, Doob mentions the problem that individuals may answer questions

superficially as a result of the testing situation; the stimulus pattern may be so different from the real-life situation such that different implicit and overt responses are evoked. Mention is also made of the fact that an individual's attitude may change after taking an attitude test. Thus, the response(s) registered previously may not be indicative of an individual's current attitude [p. 148].

LaPiere (1934) discusses the problem of assessing attitudes from actions in his classic study of attitudes versus actions. To determine the relationship of these two factors, LaPiere traveled with a Chinese couple throughout the United States to observe the reactions of various people (primarily owners of lodging facilities) to these individuals from a minority group. Based upon observation, LaPiere concluded that the "attitudes" of those with whom the Chinese couple had contact were not negative toward the Chinese people [p. 233].

At a later time, LaPiere sent a questionnaire to those people whom the Chinese couple encountered in their trip across the United States to determine their attitudes toward the Chinese. Over 92 per cent of the respondents stated that they would not accomodate Chinese people. LaPiere concludes that there is no assurance that a reaction to a symbolic situation (questionnaire) indicates what an individual will do when confronted with the situation. Thus, the questionnaire provides quantitative results while the study of human behavior gives qualitative results [pp. 234-237].

Likert Method of Attitude Measurement

There are two primary emphases in the literature regarding the Likert method of attitude measurement: a description of the Likert method and a comparison of the Likert method with other techniques in

attitude measurement, primarily the Thurstone approach. Each of these emphases will be discussed in this portion of the review of literature.

The Likert Method

Scott (1968) states that the Likert method is a summative scale which is scored by adding the response scores on its component items.

In the Likert technique, according to Scott:

subjects respond to a series of items in single-stimulus form, indicating their degree of agreement or disagreement, usually on a five-point rating scale which might be represented by the whole numbers from -2 to +2 [p. 218].

Although Scott mentions the five-point rating scale for each item, he does not indicate how each of these five points are normally categorized. In most instances, these points, or responses, are as follows: strongly disagree, disagree, undecided, agree, and strongly agree.

Likert (1967) discusses the scoring procedure for an attitude scale based on the Likert method in his discussion on the construction of an attitude scale. According to Likert, a "1" is assigned to the response of an extreme (positive or negative) and a "5" is assigned to the response of the other extreme for each statement. Such a procedure should be done consistently for each of the statements in the attitude scale [p. 91]. Although Likert does not state it explicitly, a "2," "3," and "4" are assigned to the three alternative responses between "1" and "5." As stated by Scott, the scores of each selected response are added to determine the total score of a respondent on the attitude scale.

Edwards and Kenney (1967) further clarify the scoring procedure in their discussion of the method of summated ratings. These researchers state that:

About one-half of the statements are worded so that a "strongly agree" response indicates a favorable reaction to the issue in question, while the other one-half of the statements are worded so that a "strongly agree" response indicates an unfavorable reaction [p. 250].

Thus, an attempt is made to develop a nearly equal number of positive and negative statements in regard to the attitude being measured. If it is decided that the extreme positive response for an individual will be assigned a score of "5," this score will be given to a person who responds "strongly agree" to a positive statement and "strongly disagree" to a negative statement.

Regarding the selection of statements, Likert (1967) states that each statement should be such that persons with different attitudes toward a particular stimulus will respond differently to the statement [p. 90]. Although this is considered important, Selltiz, Jahoda, Deutsch, and Cook (1966) state that, in summated scales, no attempt is made to develop statements that are distributed evenly over a scale ranging from favorableness through unfavorableness. Items that appear to be definitely favorable or unfavorable to the attitude object rather than those considered neutral or slightly favorable or unfavorable are used in the attitude scale [p. 313].

The normal procedure for constructing a Likert scale is discussed by Selltiz et al. First, a large number of items are assembled for inclusion in the attitude scale. Likert (1967) also mentions this procedure in his article on attitude construction. Such an effort, according to Likert, is necessary because pretesting procedures may reveal some items to be inadequate and therefore they must be eliminated [p. 90]. Second, as mentioned by Selltiz and his colleagues, these items are administered to a group of subjects considered representative

of the actual subjects. Third, the responses of the pretest group are scored and, fourth, the scores are analyzed. This analysis involves determining those items that don't correlate substantially with the total score, or don't differentiate between those individuals with positive and negative attitudes toward the attitude object. Such items are eliminated to insure internal consistency [p. 314].

The final step in attitude scale construction, as mentioned by Likert, is selecting the most differentiating statements for the final form of the attitude test. If statements related to a particular aspect of the attitude being measured are eliminated, "the final scale can only be said to measure the attitude continuum represented by the remaining statements [p. 95]."

Likert Method Versus Other Methods

A number of researchers have attempted to compare the Likert and Thurstone methods for constructing an attitude scale. As previously mentioned, an individual who uses the Likert method is only concerned with developing statements that reflect favorableness or unfavorableness toward the attitude that is being measured; no attempt is made to select items on a continuum from extreme favorableness to extreme unfavorableness. The Thurstone method, on the other hand, involves the use of judges to select items for an attitude scale which reflect points along a continuum from a positive extreme to a negative extreme.

Krech and Crutchfield (1948) attempt to compare a number of aspects of the Thurstone and Likert methods. They felt that neither method has a distinct advantage regarding the ease of construction. However, it appears to these researchers that the Likert method enables one to gather more information; the Likert approach involves a five-point

judgment on each item rather than mere acceptance or rejection which characterizes the Thurstone method. Krech and Crutchfield state that there is little definitive evidence regarding relative validity. Yet, the Thurstone scores have more meaningfulness than scores obtained through the Likert method. Likert scale scores can only be interpreted in terms of where an individual's score falls in comparison to the total distribution of scores. Thurstone scale scores, according to Krech and Crutchfield, are more absolute and rational; that is, they have meaning independent of scores registered by other people in the population [pp. 218-219].

Contrary to Krech and Crutchfield, Selltiz, Jahoda, Deutsch, and Cook (1966) state that the Likert scale is generally considered simpler to construct. In addition, Selltiz et al. consider the Likert method preferable to the Thurstone scale because it permits the use of items that are not "manifestly related" to the particular attitude being measured. The Likert method is also considered preferable because it is probably more reliable than the Thurstone method. Selltiz et al. attribute this to the greater number of alternative responses available for each item. Finally, the greater range of responses provides the researcher with more precise information about the subject's attitude toward the issue referred to by a particular item [p. 315].

The disadvantages attributed to the Likert scale by Selltiz and his colleagues are two in number. First, the Likert scale is no more than an ordinal scale; it does not provide a basis for determining the degree to which one individual is more favorable than another. Second, the total score of a respondent often has little clear meaning since numerous patterns of response to various statements in an attitude

scale can result in the same score. Note is made of the fact, however, that this difference in response patterns may be a function of individual differences in the perception of the attitude being measured rather than the obscurity of true differences in attitude by identical scores [p. 315].

Various studies have been conducted to compare the relative value of the Likert and Thurstone scales. Likert, Roslow, and Murphy (1934) conducted a study in which they compared the reliability coefficients for attitude scales involving both the Likert and Thurstone techniques. Using the criterion of internal consistency, the reliability coefficients for ten separate attitude scales were computed for both methods of scoring. In addition, coefficients of correlation were computed between the two methods of scoring. Likert and his colleagues found that the Likert method yielded higher reliability coefficients than the Thurstone method for each of the ten attitude scales. It was also found that the correlation between the two methods of scoring was consistently high. This, according to Likert and his colleagues, indicates that the Likert method, generally considered a simpler method to construct, measures essentially what is measured through the Thurstone method [pp. 228-234].

In response to the above study, Ferguson (1941) attempted to correlate scores based on the Likert and Thurstone methods to determine the comparability of the results. Thus, Ferguson used items from the Minnesota Scale for the Survey of Opinions, which were developed through the Likert technique, and rescaled them according to the Thurstone method. Although this scale was originally constructed to meet the criterion of

internal consistency, it was found through rescaling that "little success was achieved in securing statements representing all degrees of attitude along each scale [p. 56]."

To lend further support to his argument, Ferguson correlated items developed according to the Likert method and the Thurstone method. Of the five individual scales incorporated within the Minnesota Scale for the Survey of Opinions, the scale with the most adequate distribution of statements along a continuum (economic conservatism) was selected. A correlation of $+0.70$ was found between the two sets of items. As a result, Ferguson concluded that the Likert technique does not eliminate the need for a judging group when selecting items for an attitude survey [pp. 56-57].

McNemar (1946) reviewed the studies of both Likert and his colleagues and Ferguson in his discussion on the Likert method of attitude scale construction. McNemar states:

In the absence of any information regarding the homogeneity of the group upon which it is based and the reliability of the scores obtained by the median scale scoring, Ferguson's conclusion doesn't follow the correlation [pp. 306-307].

Furthermore, "it can be argued that it is unnecessary to have statements which yield well distributed scale values [pp. 306-307]." McNemar concludes by stating the need for a combination of both methods. This conclusion reflects the feeling that the selection of items according to the Thurstone technique "may not functionally fall along a single continuum" and that the "internal consistency criterion alone is not sufficient condition for selecting items which belong to a single dimension [p. 308]."

Edwards and Kenney (1967) also criticize Ferguson's refutation of Likert scales. These researchers conclude that one can determine the necessity of a judging group for selecting items only by determining whether scales constructed independently according to the two methods will yield comparable scores or not [p. 253].

In an effort to implement the above recommendation, Edwards and Kenney constructed two separate attitude scales on the same subject; one scale was based on the Likert method while the other involved the Thurstone technique. It was found that the reliability for the Likert scale was .94 while the reliability of the equivalent Thurstone scales was .88. A correlation of the Likert scale with two equivalent Thurstone scales was .79 and .92 [pp. 254-255].

Edwards and Kenney draw a number of conclusions from this study. It appears that the attitude of a judging group is not an important factor for determining the scale values of attitudinal items that are sorted by the Thurstone technique. Also, Likert scales will yield higher reliability coefficients with a fewer number of items used in Thurstone scales. Evidence also indicates that construction of attitude scales using the Likert technique is less time-consuming and laborious. Finally, the results of this study indicate that there is nothing of a "practical nature" which makes a judging group a prerequisite for the construction of an adequate attitude scale [pp. 254-255].

Research on Managerial Personnel

Although research regarding the attitudes of managerial personnel toward student protest is seemingly nonexistent, a few studies concerned with the attitudes, values, need satisfactions, and need deficiencies of

individuals in management positions are pertinent for inclusion in this review of literature. These studies are relevant because of their reference to specific dimensions discussed in this research. In addition, the results of these studies assist in understanding the thinking and needs of managerial personnel. Such background information is of value for considering the results of this study.

Related Studies of Managerial Personnel

England (1967) conducted a study to determine the personal value systems of managerial personnel employed in American industrial firms. The term "value system" is defined by England as a "relatively permanent perceptual framework which shapes and influences the general nature of an individual's behavior [p. 54]." (Note should be made that this definition of "value system" is similar to some previously mentioned definitions of attitude.) When compared to the concept of attitude, England states that values are more ingrained, permanent, and stable in nature. Furthermore, a value is considered more general and less tied to a specific object than an attitude [p. 54].

To determine the value system of managerial personnel, a Personal Values Questionnaire was sent to 3,042 managers in different levels of management employed in industry throughout the country. The numerous items in this questionnaire were concerned with sixty-six different concepts which were categorized into five classes: goals of business organizations, personal goals of individuals, groups of people, ideas associated with people, and ideas about general topics. The rationale for using the Personal Values Questionnaire was that the meaning attached to a specified set of concepts by an individual would provide

a description of his personal value system. This, in turn, would assist in better understanding an individual's behavior [p. 56].

The results revealed that the subjects were primarily practical (pragmatic) in their orientation. Furthermore, England found the managers to be more pragmatically oriented than ethically or morally oriented. In addition, the respondents placed high importance on such "operative values" as high productivity, ambition, and skill [pp. 58-60].

It was found that the subjects adopted various values which they considered necessary for being a successful manager but which they found difficult to internalize. Also, numerous respondents indicated that such values as trust, loyalty, individuality, and religion have been considered important throughout their lives but have not been adaptable to their work experience [pp. 60-62].

The results also revealed the perceived importance of ideas which are associated with people, ability, ambition, and skill. Such ideas are considered necessary for an effective manager and, according to England, these operative values influence a manager's behavior and the manner in which he evaluates others. This is not true for such values as loyalty, trust, and honor; they are considered important but are not always employed in the organizational setting. England hypothesizes that a manager may not be influenced to a great extent by such values but may evaluate others in terms of such factors as "loyalty of behavior [p. 64]."

Alsikafi, Jakinen, Spray, and Tracy (1968) conducted a study to determine managerial attitudes toward labor unions in the South. These researchers developed an attitude scale regarding labor unions and

administered the scale to industrial managers located in a southern city. The subjects were seventy lower-level officials and twenty top management executives employed in five bulk raw material processing plants. These plants were situated in an industrial center in the South with a metropolitan area population of approximately 275,000. An attempt was made to assess the extent to which attitudes of the subjects differed with those held by managers in other regions by comparing the results from the scales developed by Alsikafi et al. with those from comparable scales administered outside the South. An effort was also made to assess the attitudes of southern industrial managers toward organized labor [p. 448].

Alsikafi et al. found that the subjects employed in the largest corporation had the least negative views of organized labor while those subjects working in "medium-sized" and small corporations had the strongest negative views. It was conjectured that these results may be an artifact of the specific union-management relationships in the particular organizations studied [p. 450].

The results of this study were compared with a study conducted by Stagner, Chalmers, and Derber (1958). This study was conducted in the northern section of the United States and was concerned with determining the attitudes of union and management toward each other. A comparison of the two studies revealed that northern managers had more positive attitudes toward organized labor than did southern managers. This was particularly true regarding contract negotiations and regarding the power of labor unions and their interference in production and discipline [p. 452].

Need Satisfactions and Need Deficiencies of Managerial Personnel

Porter (1961, 1962, 1963) conducted a number of studies to determine the need satisfactions and need deficiencies of managers. A series of studies on this issue were based upon data received from a single group of subjects. In the early 1960's, Porter selected 6,000 managers representing all levels of management and all different age levels from throughout the country to participate in his study. The breakdown of this sample according to type of industry was as follows: approximately two-thirds from manufacturing companies, 7 per cent from transportation and public utilities industry, 7 per cent from finance and insurance businesses, 5 per cent from wholesale and retail trade industry, and the remaining 15 per cent from other types of companies [pp. 141-142].

The subjects were sent a questionnaire which was designed to measure Maslow's five areas of psychological needs: security, social, esteem, autonomy, and self-actualization. Of the 6,000 subjects selected for this study, 1916 responded to the questionnaire [p. 141].

In his first study, Porter (1961) attempted to study the perceived satisfactions in bottom and middle management jobs. A review of the data revealed a number of definite trends. First, Porter found that the vertical location of management positions is an important factor for determining the extent to which psychological needs are fulfilled. It was also found that needs concerned with esteem, security, and autonomy are significantly more satisfied in middle than bottom management. Porter also concluded that the higher-order psychological needs are the least satisfied in both bottom and middle management. The data revealed that individuals in both levels of management view

self-actualization and security as more important areas for the satisfaction of needs than the three remaining areas. Finally, self-actualization was perceived as the most critical need area by all subjects both in terms of perceived deficiency in fulfillment and perceived importance to the individual [pp. 380-381].

In a second study using the same data, Porter (1962) attempted to determine the differences in the perceived deficiencies in need fulfillment at all levels of management. It was found that the need fulfillment deficiencies for three need categories (esteem, autonomy, self-actualization) increased as the level of managerial position decreased. Age was not found to be a significant factor in the perceived need fulfillment deficiencies. Self-actualization and autonomy were regarded as the least fulfilled needs at all levels of management. Similarly, self-actualization, autonomy, and esteem were found to be the most critical areas of need fulfillment deficiencies for nearly all levels of management [pp. 380-385].

A third study using the original data was concerned with the perceived importance of needs in different job levels. Porter (1963) found that those in higher levels of management tended to place a greater emphasis on needs involving autonomy and self-actualization. It was also found that there was more homogeneity among the different levels of managers in terms of the importance attached to the psychological needs than to the degree of perceived satisfaction ascribed to these needs [pp. 143-148].

In a separate study, Porter (1959) conducted a study of the self-perceptions of line workers, first-level supervisors, and upper level management. A representative number of individuals in each of these

levels of employment were administered a self-description inventory of a 64-pair forced-choice adjective check list [p. 184].

The data revealed that the first-level supervisors tended to view themselves as more conservative and cautious individuals when compared with individuals in higher levels of management. The first-level supervisors also tended to view themselves as more careful and restrained than line workers. It was concluded that there is not a consistent continuum in self-perceptions as one moves from upper-level managers to first-line supervisors and then to line workers [pp. 184-186].

Cummings and ElSalmi (1970) conducted a study to determine the relationships between measures of managerial satisfaction and numerous organizational variables. The dependent variables for measuring managerial satisfaction were perceived need importance, perceived need fulfillment, perceived need fulfillment deficiency, and perceived possibility of need fulfillment. The independent organizational variables were job level, company size, subunit size, and role-set diversity [p. 1].

A group of 900 managers were sent a questionnaire which measured the five need categories (security, social, esteem, autonomy, self-actualization) used by Porter in his series of studies on need satisfactions and need deficiencies. Cummings and ElSalmi found, as did Porter, a tendency for need fulfillment deficiencies to increase from higher to lower-level managers. Managers with more highly diversified role-sets (working relationships) were found to perceive greater possibilities for need fulfillment than managers with less diversified role sets [p. 5].

The data revealed that smaller companies tend to be more closely associated with need fulfillment than medium-sized and large companies. However, no significant differences were found among the respondents in the three categories of company size regarding their perceptions of need importance. The mean need fulfillment deficiency did increase when moving from larger to smaller subunits and more diversified role-sets [pp. 5-8].

Summary

An attempt has been made to provide the reader with a rather comprehensive review of the literature in the area of attitude and attitude measurement. Thus, numerous definitions of attitude were presented, the basic dimensions of attitude were discussed, the concept of attitude and similar constructs were compared, the principles of attitude measurement were presented, the problems in attitude measurement were identified, and the Likert method of attitude measurement was clarified.

A search of the literature revealed no research directly concerned with the measurement of managerial attitudes toward student protest or related issues. However, research deemed pertinent to this area has been included. Efforts have been made to identify studies concerned with the values, attitudes, need satisfactions, and need deficiencies of managerial personnel. It is hoped that this information will present a better understanding of the individuals employed in positions of management.

CHAPTER III

DESIGN

Population

All subjects selected for this study are members of an organization comprised of managerial personnel. As previously mentioned, members of this organization serve in executive or supervisory positions for a manufacturing industry, industrial firm, public utility, construction company, transportation company, or communication system. These individuals represent different levels of management and are from more than 60 firms in a metropolitan area of approximately 300,000 located in the midwest.

Selection of Subjects

To assist in the selection of subjects for this study, a listing was procured which contained the names of all members of the organization. The names of the members were included in alphabetical order according to each business or firm represented in the organization. Although the individual firms could not be identified, the grouping of individuals according to the separate businesses represented was apparent in most instances. This was the result of the recycling of names alphabetically throughout the total listing.

A job title accompanied the vast majority of names included on the roster of members. The inclusion of job titles provided the

opportunity to review each name and determine if any of the members should not be considered for participation in this study. This procedure resulted in the elimination of a number of the 824 names included in the listing.

Members of the organization who are employed at a firm employing approximately 400 people were selected as the pretest group for the attitude scale used in this study. Thus, these 36 members were excluded in the selection of subjects for participation in this research. Also, 17 additional members were eliminated as a result of not being employed in the business or industrial setting; these individuals are teachers or professors in business and related areas at educational institutions. Similarly, 42 individuals were excluded because they are retired and therefore are not currently employed in a managerial position. The above deletions reduced the number of potential subjects for this study to 729.

Variability in the number of members representing different businesses had direct implications for the selection of subjects to participate in this research. If a specified number of the members had been randomly selected, a disproportionate number of individuals employed in those firms with large representation could have been selected. In the attempt to have a large number of firms represented in the sample, the subjects were selected in accordance with the stratified format in the roster of names. Every third name of the 729 members considered eligible for participation was selected. This resulted in the selection of 243 subjects for this study.

Demographic Characteristics of Subjects

Of the 243 individuals selected for participation in this research, 156 returned the attitude survey. Eight of these responses were not used for the following reasons: two respondents were retirees; two individuals were deceased during the past year; two individuals indicated they did not wish to complete the questionnaire; one attitude scale was returned to sender because of an incorrect address; one questionnaire was eliminated because an individual returned two completed questionnaires, one from each of the two mailings. Thus, 148 responses were used in this study.

Table 3.1 reveals the distribution of the subjects on each of the seven demographic dimensions used in this research. The age of the subjects range from under 30 to over 60 years of age. There is a relatively equal distribution of respondents in the age categories of 30-40 years of age, 41-50 years of age, and 51-60 years of age. The subjects vary along a continuum with regard to the rural vs. urban dimension (i.e., from those who live within the city limits of a moderately large city to those who reside in a rural or country setting). A vast majority reside in a urban rather than rural setting, however. As with the above dimensions, there is a wide variation among the subjects regarding the level of formal education attained. A vast majority of the subjects are high school graduates and have at least some postsecondary schooling.

It is readily apparent that the respondents consider themselves to be moderate in their political thinking, whether it be in a conservative or liberal direction. A substantial number categorize themselves as being moderately conservative. There is a nearly equal

Table 3.1

Distribution of Subjects According to Seven Demographic Dimensions:
 Age, Rural Versus Urban Residence, Formal Education Attained,
 Political Ideology, Children of Adolescent Age, Level
 of Supervision, and Size of Industry Where Employed

AGE:

Under 30 years of age	13
30-40 years of age	47
41-50 years of age	41
51-60 years of age	39
Over 60 years of age	<u>8</u>
	148

RURAL VERSUS URBAN RESIDENCE:

Within . . . city limits	71
Suburb with a population between 10,000 and 20,000	26
City with a population between 5,000 and 20,000	17
Town or village of less than 5,000 people	9
Country setting	24
No response	<u>1</u>
	148

LEVEL OF FORMAL EDUCATION ATTAINED:

Less than twelfth grade	8
High school graduate	35
Postsecondary vocational-technical training	22
Less than bachelor's degree	30
Bachelor's degree	44
Master's degree	7
First-professional degree	1
Doctorate degree	<u>1</u>
	148

POLITICAL IDEOLOGY:

Strongly liberal	1
Moderately liberal	46
Moderately conservative	93
Strongly conservative	3
No response	<u>5</u>
	148

CHILDREN OF ADOLESCENT AGE:

Adolescent children (12-20 years of age)	73
No children or children not of adolescent age	74
No response	<u>1</u>
	148

LEVEL OF SUPERVISION:

Top level management	20
Intermediate level management	87
Low level management	40
No response	<u>1</u>
	148

Table 3.1 (cont'd.)

SIZE OF INDUSTRY WHERE EMPLOYED:	
Less than 100 employees	22
100-500 employees	32
500-1,000 employees	16
1,000-5,000 employees	22
Over 5,000 employees	55
No response	<u>1</u>
	148

breakdown among the subjects as to whether they have adolescent children (12-20 years of age) or not.

The respondents vary according to the level of supervision in which they are employed. However, a majority are working in the intermediate level of management. Similarly, there is diversity among the subjects with regard to the size of the industry or firm where they are working. As anticipated in a locale with large industry, the greatest number of respondents are employed in an industry of over 5,000 employees.

Instrument

An attitude scale based on the Likert method was constructed for measuring the attitudes of managerial personnel toward student protest. This method was selected for this study because of its relative ease of construction and, as clarified in Chapter II, because of its relative effectiveness in measuring attitude. Emphasis was given to selecting the most appropriate attitudinal items and to including the proper statements requesting demographic data in this instrument.

Construction of the Attitude Scale

The initial step in the development of the instrument involved "brainstorming." An attempt was made to list statements that were

deemed pertinent for discerning attitudes toward student protest. These statements were then reviewed to eliminate any duplicate statements and any that were considered inadequate for the proposed attitudinal survey. The remaining statements were categorized according to various aspects of student protest. This procedure was implemented to insure that the instrument covered those aspects of student protest considered important for this study. The number of statements related to each category of student protest varied according to the perceived importance of the category in question by this researcher.

An attempt was made to formulate an equal, or nearly equal, number of positive and negative statements for each aspect of student protest. The labeling of statements as being positively or negatively related to student protest was determined by this researcher and thus is a limitation of the attitude scale. However, providing the subjects with statements which relate positively and other statements which relate negatively to the issue in question enables the researcher to better determine the overall attitude of each respondent.

A concerted effort was made to develop statements that would measure most effectively the attitudes of the subjects toward student protest. As stated in Chapter I of this thesis, an attempt was made to adhere to the criteria summarized by Edwards (1957) regarding the development of attitudinal statements.

The efforts to develop sound attitudinal statements were supplemented by efforts to select appropriate alternative responses for each of the seven statements in the attitude scale corresponding to the demographic dimensions. Emphasis was given to selecting those alternatives which would effectively categorize the respondents on each of the

seven dimensions used in this study: age, rural vs. urban residence, level of formal education attained, political ideology, children of adolescent age, level of supervision, and size of industry where employed. For example, the alternative responses developed for the statement corresponding to the level of supervision dimension were: top level management, intermediate level management, and low level management.

The final step in the construction of the attitude scale, prior to pretesting, was determining the sequence in which each of the 24 attitudinal statements and seven demographic items would be placed. Efforts were made to distribute the attitudinal statements evenly throughout the instrument according to the various aspects of student protest covered by the items. In addition, consideration was given to alternating the positive and negative statements as evenly as possible. The seven demographic items were included after the attitudinal statements with no specific emphasis on the ordering of the items. With the completion of the above procedures, the attitude scale was completed and prepared for pretesting (Appendix A).

Scoring of Instrument

As previously discussed, Likert (1967) states that a "1" is assigned to the response of one extreme (positive or negative) and a "5" is assigned to the response of the other extreme for each statement when using the Likert method [p. 91]. In the attitude scale used in this research, the subjects were given five alternative responses for each attitudinal statement: strongly agree, agree, undecided, disagree, and strongly disagree. For the purposes of this study, a "5" was assigned to each response that reflected an extreme positive

position toward student protest. Thus, a person who responded "strongly agree" to a positive statement and "strongly disagree" to a negative statement was assigned a score of "5." Conversely, a subject who responded "strongly disagree" to a positive statement and "strongly agree" to a negative statement was assigned a score of "1." The three alternative responses between a "1" and "5" were assigned the values of "2," "3," and "4."

When discussing the Likert method, Havens, Rogers, and Lipmann (1965) state that "an individual's attitude can be determined from a summation of his responses to statements in the scale." These researchers continue by stating that the final score of an individual is considered an "average estimate" which is achieved by applying many different yardsticks. Thus, each statement is, in itself, "considered as a continuum which taps the entire attitude range when the statements are considered together [p. 2]."

It becomes apparent from the writing of Havens et al. that the responses of each individual to all attitudinal statements were summated to determine the total score of each participant. These scores were then analyzed through statistical procedures adopted for this research.

The alternative responses for the seven demographic items included in the instrument (items 23-29) were assigned a number from one through the number of responses assigned to each item. An attempt was made to number the alternative responses from low (i.e., under 30 years of age, country setting, less than twelfth grade, etc.) to high (i.e., over 60 years of age, doctorate degree, etc.) in a consistent manner for each of the seven items. Such a procedure would delineate the categorizations for the demographic items and would facilitate the statistical procedures used in this study.

McFarland (1970) presents a description of the primary concerns of different levels of management [pp. 31-35]. Although the labels for the different levels of management used in this study are not the same as those used by McFarland, the descriptions for low, intermediate, and top levels of management were taken from McFarland's writing. A sentence description for each of the three levels of management was incorporated in the demographic item concerned with the subjects' level of supervision. The intent of this procedure was to provide all subjects with a common definition for each level of supervision and thus assist them in accurately categorizing themselves.

In addition to this effort, each subject was asked to indicate his formal job title. This procedure was designed to compare the job title with a subject's response on the item concerned with level of supervision. To assist in the categorization of job titles into one of the three levels of management, reference was made to Evans' (1964) job descriptions of managerial personnel in manufacturing. As a result, 19 responses to this item were changed. An attempt was made to change only those considered obviously in error and those which would promote consistency among the responses.

Pretesting of Instrument

The 36 members of the organization who are employees of a firm employing approximately 400 people were selected as subjects for pretesting the attitude scale developed for this study. These subjects were selected because they were members of the organization used to select subjects, were considered a sufficiently large sample for pretesting, and were readily accessible for testing purposes. Of these 36

subjects, seven were not available because of vacation or termination of job. Twenty-five of the remaining 29 responded to the questionnaire.

The subjects participating in the pretesting procedure were administered an attitude scale and an accompanying letter. This cover letter explained the intent of the study, clarified the procedures for completing the attitude scale, and defined the term student protest (Appendix B).

The Hoyt method of reliability was the statistical procedure used to assess the internal consistency of the attitude scale employed in pretesting. This statistical method yields a single coefficient of reliability which, according to Hoyt (1941), reveals the "percentage of the obtained variance in the distribution of test scores that may be regarded as true variance [p. 153]." True variance represents the "variance not due to the unreliability of the measuring instrument [p. 153]."

Through the Hoyt method, internal consistency is estimated by analysis of variance rather than by traditional methods such as the "odd-even" technique. Hoyt found that dividing a test into halves or other fractional parts to determine internal consistency could, depending upon the instrument, either underestimate or overestimate the discrepancy between the obtained and true variance [p. 155].

The use of the Hoyt method to measure the internal consistency of the attitude scale yielded a reliability coefficient of .66. Although this coefficient was not as high as desired, it was deemed adequate for continuing the study.

Pearson product-moment correlations between the scores on each attitudinal item and the total attitude score were also computed. Table 3.2 reveals the simple correlation for each of the 24 attitudinal statements.

Table 3.2

Simple Correlations Between Scores on
Each Item and the Total Attitude Score

<u>Item Number</u>	<u>Correlation Coefficient</u>	<u>Item Number</u>	<u>Correlation Coefficient</u>
1.	.49	13.	.67
2.	.61	14.	.29
3.	.41	15.	.38
4.	.30	16.	.55
5.	.65	17.	.26
6.	.29	18.	.37
7.	-.02	19.	.05
8.	.005	20.	.07
9.	-.007	21.	.70
10.	.60	22.	.62
11.	.53	23.	.16
12.	.17	24.	.61

As with the coefficient of reliability, a number of the above correlations were not as high as desired. However, all but two of the statements have a positive correlation coefficient; they contribute in varying amounts to the true variance. Such is not the case with the two statements which have a negative correlation coefficient. As a result, these two statements were excluded from the attitude scale adopted for use in this study.

Development of Attitude Scale in Final Form

When the instrument was developed for pretesting, it was reviewed and revised numerous times by this researcher and other colleagues to improve content validity. After pretesting for internal consistency, it was decided that two attitudinal statements should be eliminated

thus requiring an alteration of the instrument once again. The final attitude scale differs slightly from the pretesting instrument in regard to the categories of response for two demographic items and the number of positive and negative statements corresponding to the specific aspects of student protest. Table 3.3 reveals the comparability of the two attitude scales regarding the aspects of student protest covered and the number of positive and negative statements related to each aspect.

Table 3.3

The Aspects of Student Protest and Number of Positive and Negative Statements Related to Each Aspect Included in the Initial and Final Attitude Scales

<u>Category</u>	<u>Initial Attitude Scale</u>		<u>Final Attitude Scale</u>	
	<u>Positive Statements</u>	<u>Negative Statements</u>	<u>Positive Statements</u>	<u>Negative Statements</u>
Benefit of Student Protest	5	4	4	4
Police Intervention and Law Enforcement of Student Protest Activities	1	2	1	2
Participants in Student Protest Activities	2	1	2	1
Relationship of Student Protest and Business	2	2	2	2
Handling of Student Protest Activities by College and University Administrators	1	1	0	1
Involvement of the Michigan Legislature in Handling Student Protest	1	1	1	1

Table 3.3 (cont'd.)

<u>Category</u>	<u>Initial Attitude Scale</u>		<u>Final Attitude Scale</u>	
	<u>Positive Statements</u>	<u>Negative Statements</u>	<u>Positive Statements</u>	<u>Negative Statements</u>
Cause of Student Protest	$\frac{0}{12}$	$\frac{1}{12}$	$\frac{0}{10}$	$\frac{1}{12}$

Mailing Procedures

As in the pretesting procedure, each of the 243 subjects was sent an attitude scale with an accompanying letter which explained the intent of the study, clarified the procedures for completing the attitude scale, and defined the term student protest (Appendix C). After a two week period, the subjects were sent a second mailing asking them to complete the attitude scale if they had not responded to the first mailing. In addition, a sentence of clarification was added in the cover letter of the second mailing to specify that the questionnaire was an essential part of a doctoral dissertation. This was prompted by a number of inquiries by the subjects after the first mailing regarding the intended use of the information to be gathered. All other information in the second cover letter remained the same as that in the first letter (Appendix D).

After two mailings, 148 responses deemed useful were received from the 243 individuals selected to participate in this study. This represented a return of 60.9 per cent. Such a return was considered adequate for performing a statistical analysis of the data. The attitude scales were not coded and therefore the respondents could not be identified unless they elected to leave the cover letter attached when returning the questionnaire. The failure to code the attitude scales has resulted in another limitation of this study. The non-respondents could not be

identified and therefore no attempt was made to discern the attitude of this group. If this could have been accomplished, a comparison of the respondents and non-respondents could have been made to determine if attitudes of the respondents are characteristic of the entire sample. Although uncertain about the attitudes of the non-respondents, the relatively homogeneous responses of the respondents give credence to the thinking that the attitudes of the entire sample may well be similar regarding student protest.

Method of Analysis

After receiving the responses from the subjects, the data were analyzed through three separate statistical procedures. First, the Hoyt method of reliability was used once again to determine the reliability of the instrument finally adopted for this study. The Hoyt method of reliability on the 148 respondents yielded a reliability coefficient of .76. This represents an increase of .10 in internal consistency between the first and second reliability measures.

A second statistical measure employed in this study was the Pearson product-moment correlation coefficient. This statistic was used to correlate the scores on each of the seven demographic dimensions with the scores on the attitude scale. Simple correlations were also computed between the scores on each dimension and the scores on every other dimension. The use of the Pearson product-moment correlation coefficient enables one to determine the magnitude and the direction of the relationship between sets of scores with regard to managerial attitudes toward student protest.

Multiple correlation was the third statistical procedure used in this research. An effort was made to determine the multiple correlation coefficient for the seven demographic dimensions. Through this statistical procedure, one can determine the amount of variance which is attributed to the group of seven dimensions. A knowledge of this data assists in clarifying the degree to which the demographic dimensions are related to the attitudes held by managerial personnel regarding student protest.

The use of the Pearson product-moment correlation coefficient and multiple correlations require that every subject responds to each of the seven demographic items. Therefore, seven of the attitude scales returned were excluded when the above statistics were used because a category for one or more of the demographic items was not marked. All of the 148 responses were used when computing the Hoyt method of reliability as this statistical procedure is concerned only with attitudinal items, not demographic items.

Null Hypotheses

- Ho₁ There is no relationship between age and the attitudes held by managerial personnel regarding student protest.
- Ho₂ There is no relationship between rural or urban residence and the attitudes held by managerial personnel regarding student protest.
- Ho₃ There is no relationship between the level of formal education attained and the attitudes held by managerial personnel regarding student protest.
- Ho₄ There is no relationship between political ideology and the attitudes held by managerial personnel regarding student protest.
- Ho₅ There is no relationship between individuals with or without adolescent children and the attitudes held by managerial personnel regarding student protest.

- Ho₆ There is no relationship between level of supervision and the attitudes held by managerial personnel regarding student protest.
- Ho₇ There is no relationship between the size of industry where employed and the attitudes held by managerial personnel regarding student protest.

Summary

The purpose of this research design and method of analysis has been to determine the attitudes of managerial personnel toward student protest. Thus, an attempt has been made to determine if there is a relationship between selected demographic data and the attitudes of managerial personnel held toward student protest. To accomplish this purpose, the subjects selected for this study were sent an attitude scale designed to measure attitudes toward student protest.

Simple correlations were computed to determine the magnitude and direction of the relationship between sets of scores with regard to managerial attitudes toward student protest. The multiple correlation procedure was used to determine the amount of variance which can be attributed to the seven demographic dimensions selected for this study.

CHAPTER IV

ANALYSIS OF THE RESULTS

Means and Standard Deviations

The scores of the seven demographic dimensions and the scores of the attitude scale were computed for use in this study. A statistical analysis of these data provided the opportunity to determine the relationship of the demographic dimensions to the attitudes held by managerial personnel toward student protest. Table 4.1 reveals the means and standard deviations in the computation of the scores for each of the demographic dimensions and for the attitude scale. The attitude scale is represented by the row labeled "Total."

Table 4.1

Means and Standard Deviations for the Scores
on the Demographic Dimensions and for the
Scores on the Attitude Scale

	<u>Mean</u>	<u>Standard Deviation</u>
AGE	2.887	1.070
RURAL VS. URBAN RESIDENCE	3.801	1.489
LEVEL OF FORMAL EDUCATION ATTAINED	3.723	1.455
POLITICAL IDEOLOGY	2.305	.506
CHILDREN OF ADOLESCENT AGE	1.525	.501
LEVEL OF SUPERVISION	1.894	.618
SIZE OF INDUSTRY WHERE EMPLOYED	3.376	1.529
TOTAL	49.149	9.559

As stated in Chapter III, each of the alternative responses for the seven demographic items included in the instrument (items 23-29) were assigned a number. The alternative responses were numbered from one through the number of responses assigned to each item. The number of responses available to the subjects for categorizing themselves on the seven demographic dimensions were as follows: age (5), rural vs. urban residence (5), level of formal education attained (8), political ideology (4), children of adolescent age (2), level of supervision (3), and size of industry where employed (5). Although four responses were included in the instrument for item 27 (children of adolescent age), they were combined into two responses for scoring purposes [adolescent children (12-20 years of age) - no children or children not of adolescent age].

The alternative responses for each of the attitude items in the attitude scale (items 1-22) were numbered from one to five. Thus, the lowest and the highest total scores that a subject could achieve on these items were 22 and 110 respectively. As revealed in Table 4.1, the mean score on these items was 49.149 and the standard deviation was 9.559.

Pearson Product-Moment Correlation Coefficient

The Pearson product-moment correlation coefficient was the statistical procedure used to correlate the scores on each of the seven demographic dimensions with the scores on the attitude scale. In addition, this statistical procedure was used to correlate the scores on each dimension with the scores on every other dimension. The correlation coefficients were tested for statistical significance through the

use of the t distribution. This test revealed those demographic dimensions which are significantly related to the attitudes held by managerial personnel regarding student protest.

Table 4.2 contains the simple correlations between the scores on each dimension and the attitudinal scores. These correlations are found in the last row of correlations which is labeled "Total." Each column of correlations reflects a demographic dimension as indicated at the base of the columns. Thus, the correlation coefficient in the last row of each column reveals the magnitude and direction of the relationship between the scores on each of the dimensions and the scores on the attitude scale.

Table 4.2

Simple Correlations Between the Scores on Each Demographic Dimension and the Scores on the Attitude Scale and Between the Scores on Each Demographic Dimension and the Scores on the Remaining Dimensions

AGE	1.000							
RURAL VS. URBAN RESIDENCE	.147	1.000						
LEVEL OF FORMAL EDUCATION ATTAINED	-.085	.225	1.000					
POLITICAL IDEOLOGY	-.147	.109	-.205	1.000				
CHILDREN OF ADOLESCENT AGE	.005	.083	.152	-.016	1.000			
LEVEL OF SUPERVISION	.306	.194	.349	.036	-.049	1.000		
SIZE OF INDUSTRY WHERE EMPLOYED	-.013	-.017	.070	.008	.011	-.245	1.000	
TOTAL	-.058	.146	-.085	.340	.133	-.006	-.002	1.000
	AGE	RURAL VS. URBAN RESIDENCE	LEVEL OF FORMAL EDUCATION ATTAINED	POLITICAL IDEOLOGY	CHILDREN OF ADOLESCENT AGE	LEVEL OF SUPERVISION	SIZE OF INDUSTRY WHERE EMPLOYED	TOTAL

The other correlation coefficients within each column reflect the correlation between each of the remaining demographic dimensions and the specific dimension indicated at the base of the column. Each of the demographic dimensions correlated with the dimension indicated at the base of the column can be identified by the labels for the rows at the left of the table.

Significance of Simple Correlations Between the Scores on Each Demographic Dimension and the Scores on the Attitude Scale

Ho₁ There is no relationship between age and the attitudes held by managerial personnel regarding student protest.

The correlation between scores on the age dimension and scores on the attitude scale is $-.058$. This correlation is not significant at the $.05$ level and, therefore, the null hypothesis is not rejected.

Ho₂ There is no relationship between rural or urban residence and the attitudes held by managerial personnel regarding student protest.

The correlation between the scores on the rural vs. urban residence dimension and the scores on the attitude scale is $.146$. This correlation is not significant at the $.05$ level and, therefore, the null hypothesis is not rejected.

Ho₃ There is no relationship between the level of formal education attained and the attitudes held by managerial personnel regarding student protest.

The correlation between the scores on the level of formal education attained dimension and the scores on the attitude scale is $-.085$. This correlation is not significant at the $.05$ level and, therefore, the null hypothesis is not rejected.

Ho₄ There is no relationship between political ideology and the attitudes held by managerial personnel regarding student protest.

The correlation between the scores on the political ideology dimension and the scores on the attitude scale is .340. This correlation is significant at the .001 level and, therefore, the null hypothesis is rejected.

- Ho₅ There is no relationship between individuals with or without adolescent children and the attitudes held by managerial personnel regarding student protest.

The correlation between the scores on the children of adolescent age dimension and the scores on the attitude scale is .133. This correlation is not significant at the .05 level and, therefore, the null hypothesis is not rejected.

- Ho₆ There is no relationship between level of supervision and the attitudes held by managerial personnel regarding student protest.

The correlation between the scores on the level of supervision dimension and the scores on the attitude scale is -.006. This correlation is not significant at the .05 level and, therefore, the null hypothesis is not rejected.

- Ho₇ There is no relationship between the size of industry where employed and the attitudes held by managerial personnel regarding student protest.

The correlation between the scores on the size of industry where employed dimension and the scores on the attitude scale is -.002. This correlation is not significant at the .05 level and, therefore, the null hypothesis is not rejected.

Significance of Simple Correlations Between the Scores on Each Demographic Dimension and Every Other Dimension

Table 4.3 specifies those simple correlations between scores on each demographic dimension with scores on every other demographic

dimension which are statistically significant. In addition, the table contains the level of significance for each of the correlations.

Table 4.3

Statistically Significant Simple Correlations Between Scores on Each Demographic Dimension and Every Other Demographic Dimension

<u>Demographic Dimensions</u>	<u>Correlation Coefficient</u>	<u>Level of Significance</u>
AGE and LEVEL OF SUPERVISION	.306	.001
RURAL VS. URBAN RESIDENCE and LEVEL OF FORMAL EDUCATION ATTAINED	.225	.01
RURAL VS. URBAN RESIDENCE and LEVEL OF SUPERVISION	.194	.02
LEVEL OF FORMAL EDUCATION ATTAINED and POLITICAL IDEOLOGY	-.205	.02
LEVEL OF FORMAL EDUCATION ATTAINED and LEVEL OF SUPERVISION	.349	.001
LEVEL OF SUPERVISION and SIZE OF INDUSTRY WHERE EMPLOYED	-.245	.01

Multiple Correlation Coefficient

Multiple correlation was the statistical procedure used to determine the amount of variance attributed to the group of seven demographic dimensions employed in this study. Table 4.4 contains the results of this statistical procedure when used to analyze the scores of the seven demographic dimensions.

Table 4.4

Selected Data From Analysis of Scores on the Demographic Dimensions Through Multiple Correlation

<u>Multiple Correlation Coefficient</u>	<u>Amount of Variance Accounted For</u>	<u>Level of Significance</u>
.387	.150	.003

As revealed in the above table, the scores on the seven demographic dimensions accounted for 15 per cent of the total variance with regard to managerial attitudes toward student protest. Through the use of the F ratio, it was found that the multiple correlation coefficient is significant at the .003 level.

Summary

The Pearson product-moment correlation coefficient was used to correlate the scores on each demographic dimension with the scores on the attitude scale. Table 4.5 summarizes the results by stating each hypothesis, the accompanying simple correlation coefficient, and its significance or lack of significance.

Table 4.5

Hypotheses of Study, Accompanying Simple Correlations, and Level of Significance

	<u>Hypothesis</u>	<u>Correlation Coefficient</u>	<u>Level of Significance</u>
Ho ₁	There is no relationship between age and the attitudes held by managerial personnel regarding student protest.	-.058	Not Significant
Ho ₂	There is no relationship between rural or urban residence and the attitudes held by managerial personnel regarding student protest.	.146	Not Significant
Ho ₃	There is no relationship between the level of formal education attained and the attitudes held by managerial personnel regarding student protest.	-.085	Not Significant

Table 4.5 (cont'd.)

	<u>Hypothesis</u>	<u>Correlation Coefficient</u>	<u>Level of Significance</u>
Ho ₄	There is no relationship between political ideology and the attitudes held by managerial personnel regarding student protest.	.340	.001
Ho ₅	There is no relationship between individuals with or without adolescent children and the attitudes held by managerial personnel regarding student protest.	.133	Not Significant
Ho ₆	There is no relationship between level of supervision and the attitudes held by managerial personnel regarding student protest.	-.006	Not Significant
Ho ₇	There is no relationship between the size of industry where employed and the attitudes held by managerial personnel regarding student protest.	-.002	Not Significant

Correlation of the scores on each demographic dimension with the scores on other demographic dimensions resulted in six statistically significant correlations. The statistically significant correlations between two demographic dimensions are as follows:

1. Age and Level of Supervision
2. Rural vs. Urban Residence and Level of Formal Education Attained
3. Rural vs. Urban Residence and Level of Supervision
4. Level of Formal Education Attained and Political Ideology
5. Level of Formal Education Attained and Level of Supervision
6. Level of Supervision and Size of Industry Where Employed

The use of multiple correlation revealed that the seven demographic dimensions used in this study accounted for 15 per cent of the total variance with regard to managerial attitudes toward student protest.

Furthermore, the multiple correlation coefficient (.387) was found to be statistically significant at the .003 level.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

During the past five years, the number of student protest activities has increased greatly on American college and university campuses. Such activities have been both peaceful and violent and have focused on numerous local, state, and national issues.

Student protest has been given extensive coverage by the news media and, as a result, most Americans have become aware of the student protest movement. Thus, many individuals have developed attitudes, whether positive or negative, toward student protest.

This study is concerned with measuring the attitudes of managerial personnel in business toward the student protest movement. More specifically, the purpose of this study is to determine if there is a relationship between selected demographic dimensions and the degree of positive or negative attitudes held toward student protest by managerial personnel. The demographic dimensions selected for this study are as follows: age, rural vs. urban residence, level of formal education attained, political ideology, children of adolescent age, level of supervision, and size of industry where employed.

The subjects selected for this study are members of an organization comprised of individuals serving in executive or supervisory positions for a manufacturing industry, industrial firm, public utility,

construction company, transportation company, or communication system. Membership in this organization is representative of more than 60 firms in a metropolitan area of approximately 300,000 people located in the midwest.

Through a stratified sampling procedure, 243 of 729 potential subjects were selected to participate in this study. The subjects were grouped according to categories that were developed for each of the seven demographic dimensions. It was found that the subjects were relatively well distributed according to the categories for each dimension.

An attitude scale based on the Likert method was constructed for measuring the attitudes of the subjects toward student protest. Twenty-two of the items in the scale were concerned with attitude measurement and the remaining seven items were designed to gather pertinent demographic data. Five alternative responses were available for each of the 22 attitudinal items: strongly agree, agree, undecided, disagree, and strongly disagree. Similarly, alternative responses designed to categorize the subjects on the demographic dimensions were available for each of the seven demographic items.

Twenty-five managerial personnel who are members of the organization used in this study, and are employed in a firm of approximately 400 employees, were selected for pretesting the attitude scale. These subjects were administered an attitude scale and an accompanying letter which explained the intent of the study, clarified the procedures for completing the attitude scale, and defined the term student protest.

The Hoyt method of reliability was the statistical procedure used to determine the internal consistency of the attitude scale. Through

the Hoyt method, internal consistency is determined by estimating the discrepancy between the obtained and true variance using analysis of variance. In addition to the Hoyt method of reliability, Pearson product-moment correlations were computed between the scores on each attitudinal item and the total attitude score. Such correlations were computed to determine if each attitudinal item was contributing to the true variance.

The Hoyt method of analysis yielded a reliability coefficient of .66 which was considered adequate for continuing the study. In addition, scores on 20 of the 22 attitudinal items were positively correlated with the total attitude score. The remaining two statements were negatively correlated with the total attitude score and thus were excluded from the attitude scale adopted for final use in this study.

The attitude scale adopted in final form and an accompanying letter of explanation were sent to 243 subjects. To improve the percentage of response, the subjects were sent a second mailing after a two week period asking them to complete the attitude scale if they had not responded to the first mailing. After the two mailings, 148 responses (60.9 per cent) deemed useful were received from the 243 individuals selected to participate in this study.

The data were analyzed through three separate statistical procedures. First, the Hoyt method of reliability was used to determine the reliability of the instrument finally adopted for this study. This statistical analysis yielded a reliability coefficient of .76 which represents an increase of .10 in internal consistency between the first and second reliability measures.

A second statistical measure employed in this study was the Pearson product-moment correlation coefficient. This statistic was used to correlate the scores on each of the seven demographic dimensions with the scores on the attitude scale. Simple correlations were also computed between the scores on each dimension and the scores on every other dimension. The correlation coefficients were tested for statistical significance through the use of the *t* distribution.

The null hypothesis, there is no relationship between age and the attitudes held by managerial personnel regarding student protest was not rejected.

The null hypothesis, there is no relationship between rural or urban residence and the attitudes held by managerial personnel regarding student protest was not rejected.

The null hypothesis, there is no relationship between the level of formal education attained and the attitudes held by managerial personnel regarding student protest was not rejected.

The null hypothesis, there is no relationship between political ideology and the attitudes held by managerial personnel regarding student protest was rejected.

The null hypothesis, there is no relationship between individuals with or without adolescent children and the attitudes held by managerial personnel regarding student protest was not rejected.

The null hypothesis, there is no relationship between level of supervision and the attitudes held by managerial personnel regarding student protest was not rejected.

The null hypothesis, there is no relationship between the size of industry where employed and the attitudes held by managerial personnel regarding student protest was not rejected.

Six correlations between scores on each dimension and every other dimension were statistically significant. The significant correlations included the following pairs of demographic dimensions: age and level of supervision, rural vs. urban residence and level of formal education attained, rural vs. urban residence and level of supervision, level of formal education attained and political ideology, level of formal education attained and level of supervision, and level of supervision and size of industry where employed.

Multiple correlation was the third statistical procedure used in this research. This statistical measure was used to determine the multiple correlation coefficient between the seven demographic dimensions and attitude regarding student protest. Such a statistical procedure is necessary to determine the amount of variance in attitudes which can be attributed to the group of seven demographic dimensions. It was found that the scores on the seven demographic items accounted for 15 per cent of the total variance with regard to managerial attitudes toward student protest.

The multiple correlation coefficient was tested for significance through the use of the F ratio. Through this statistical test, the multiple correlation coefficient was found to be significant at the .003 level.

Findings and Conclusions

1. There was a significant relationship between political ideology and the attitudes of the subjects toward student protest.

2. There was no significant relationship between age, rural vs. urban residence, level of formal education attained, children of adolescent age, level of supervision, and size of industry where employed and the attitudes of the subjects toward student protest.
3. There was a significant relationship between the following pairs of demographic dimensions: age and level of supervision, rural vs. urban residence and level of formal education attained, rural vs. urban residence and level of supervision, level of formal education attained and political ideology, level of formal education attained and level of supervision, and level of supervision and industry where employed.
4. The seven demographic dimensions employed in this study accounted for a statistically significant amount of the variance with regard to the attitudes of the subjects toward student protest.

Discussion

General Limitations of Study

The results of this study reveal that the managerial personnel selected to participate in this research are generally negative toward the student protest movement. This becomes apparent when one reviews the mean score and standard deviation for the attitude scale. It is also apparent when one reviews the subjects' responses to each item (Appendix E). The lowest and highest total scores that a subject could have received on the 22 attitudinal items were 22 and 110 respectively.

As mentioned previously, the higher the subject's score, the more positive the attitude toward student protest.

The mean score for the 148 subjects was 49.15 with a standard deviation of 9.56 (Table 4.1). Thus, there is a difference of 16.85 between the mean score on the attitude scale (49.15) and the middle score on the range of possible scores (66). Also, it would require an addition of approximately 1.75 standard deviations to the mean score to reach the middle score on the range of possible scores. When plotted on a normal curve, ± 1.75 standard deviations to the mean score (32.42; 65.88) represents 91.98 per cent of the respondents. As a result, approximately 8.02 per cent of the respondents scored either below 32.42 or above 65.88 on the attitude scale.

The above data reveal that the responses of the subjects were relatively homogeneous, in addition to clarifying the negative attitudinal trend regarding student protest. This relative homogeneity limits the variability of response which, in turn, decreases the possibility of significance through a statistical analysis. Therefore, the subjects' homogeneous attitudes toward student protest is a factor which may have contributed to the rejection of only one of seven null hypotheses.

The metropolitan area in which this research was conducted may have been a contributing factor for the relatively homogeneous responses. This study was conducted in a state which has a rather extensive system of higher education. In addition, the organization used in this study is located in a city which is in close proximity to a major, four-year public university. As a result, the subjects have been exposed to extensive news coverage of numerous student

protest activities, some of which were violent in nature. Such a situation may have precipitated the formation of generally negative views toward student protest.

Similarly, this research was conducted shortly after numerous student protest activities had occurred on campuses throughout the country. Thus, the period of time in which the attitude scale was administered may have influenced the subjects' responses.

Limitations of Instrument

In addition to discussing the relative homogeneity of response, its effect on the results of the study, and possible contributing factors for such a condition, consideration also must be given to the limitations of the testing procedure used in this study. The reliability of response is a basic concern when a questionnaire (attitude scale) is sent to a group of subjects. The subjects do not know the researcher and often do not know the purposes for which the data will be used. As a result, some subjects answer the questionnaire as they feel the researcher would like them to respond, rather than how they, themselves, feel they should respond. There are others who deliberately falsify their responses to the questionnaire. Such conditions may bias the final results of the study. Although the subjects are encouraged to answer the questionnaire accurately, the possibility of unreliable results is an inherent weakness when such an instrument is used in research.

Two limitations have been mentioned previously in regard to the instrument used in this study. First, an attempt was made to include a nearly equal number of positive and negative attitudinal items in the attitude scale. The items were categorized by this researcher

and therefore were labeled subjectively as being positive or negative. Some of the subjects may have viewed one or more of the attitudinal statements differently than this researcher and, as a result, the scoring of various responses may not have reflected the thinking of the respondents.

Second, the attitude scale was not coded and, therefore, the respondents and non-respondents could not be identified. The failure to code the attitude scale eliminated the possibility of selecting a sample of non-respondents for the purpose of encouraging them to complete the attitude scale. If this could have been accomplished, a comparison of the respondents and non-respondents could have been made to determine if the attitudes of the respondents are characteristic of the entire sample.

Another limitation of the attitude scale was the subjectivity involved in determining those aspects of student protest which should be covered by the attitudinal items. The decisions to incorporate certain aspects of student protest, and to include a specified number of statements corresponding to each of these aspects, were made by this researcher. The subjects' attitudes might have been defined differently if the attitude scale was concerned with other aspects of student protest.

The study, as a whole, was limited by the population which was used. Although the results of this study are an indication of the attitudes of managerial personnel regarding student protest, they can only be generalized explicitly to the organization used in this research.

Location was also a limiting factor of the study. The research of Alsikafi, Jakinen, Spray, and Tracey (1968) cited in Chapter II

reveals that the attitudes of managerial personnel can vary according to the section of the country. Thus, a replication of this study in a different part of the country could result in different findings. Such concerns must be considered when discussing the results of this research.

Null Hypotheses

The prior comments regarding the results and limitations of this study provide pertinent background information for discussing the null hypotheses employed in this research. As mentioned previously, the null hypothesis which states that there is no relationship between political ideology and the attitudes held by managerial personnel regarding student protest was rejected. A review of Table 3.1 shows that a large majority of the subjects categorized themselves as being moderately conservative. This information lends credence to the findings that the subjects were generally negative toward student protest and were relatively homogeneous in their response to the attitude scale.

A further review of Table 3.1 shows that nearly all of the respondents who did not categorize themselves as being moderately conservative, categorized themselves as being moderately liberal. An analysis of the data indicates that these individuals received generally higher scores on the attitude scale than the majority who considered themselves to be moderately conservative. The difference in attitude between these two groups of individuals was quite marked as the test for significance on this demographic dimension was significant at the .001 level. This indicates that, for the subjects used in this

research, as an individual considers himself to be more liberal in his thinking, he tends to be more positive toward the student protest movement.

The results did not reveal a significant relationship between the remaining six demographic dimensions and the attitudes held by managerial personnel regarding student protest. This signifies that the subjects' attitudes toward student protest do not vary significantly according to such factors as: age, place of residence, amount of formal education, whether they do or do not have children of adolescent age, the managerial level in which they are employed, and the size of business where they work.

A review of the literature reveals evidence concerning three of the demographic dimensions which would indicate the plausibility of a relationship between these dimensions and attitudes toward a particular stimulus. In the study by Alsikafi, Jakinen, Spray, and Tracey (1968), it was found that the subjects employed in the largest corporations tended to have less negative views toward labor unions than those employed in "medium-sized" and small corporations [p. 450]. Such a finding lends support to the thinking originally employed in this study that managerial personnel working in the larger firms would have more positive attitudes toward student protest than those working in smaller businesses.

While discussing their findings, Alsikafi et al. cited pertinent research conducted by S. H. Stouffer (1955). According to Alsikafi and his colleagues, Stouffer found that those subjects with more formal education and a more urban place of residence, tended to be more tolerant of non-conformists [p. 452]. These findings are

consistent with the thinking originally employed in this research that managerial personnel with more formal education and a more urban place of residence would be more positive toward student protest.

Numerous hypotheses could be made to explain why no significant relationship was found between six of the seven demographic dimensions and the subjects' attitudes toward student protest. In a general sense, those limitations mentioned previously (i.e., homogeneity of response, specific locale of subjects, time in which the study was administered, limitations of the instrument) may have been contributing factors. There may also be reasons which are related to specific demographic dimensions. For example, nearly all of the subjects used in this research reside in a relatively close proximity to a moderately large population center. Thus, although some reside in rural areas or in small cities, their attitudes may be more cosmopolitan than rural oriented because of their frequent contact with the large city.

Reference to the above factors should not overshadow two important considerations. First, the organization used in this study may be attractive to the more conservative managerial personnel working in this particular locale. Second, many Americans, not just managerial personnel, have become quite concerned about the threat of certain types of student protest activities to our society. The combination of these two conditions, in addition to other factors such as those mentioned previously, could result in the formation of negative attitudes toward student protest regardless of the subjects' variation on any demographic dimensions.

Relationship of Demographic Dimensions to One Another

The scores on each of the seven demographic dimensions were correlated with one another and these correlations were tested for significance. The results of these efforts are not related to the attitudes of the subjects toward student protest and thus are not of primary importance to this research. However, the results are worthy of mention.

It was found that the relationship between age and level of supervision is statistically significant. This indicates that the older subjects tend to be employed in higher levels of management. The demographic dimensions rural vs. urban residence and level of formal education attained were also found to have a significant relationship. This indicates a tendency for those subjects with more formal education to reside in an urban rather than rural setting. The correlation between rural vs. urban residence and level of supervision was also found to be statistically significant. According to this finding, those subjects who work in higher levels of management tend to live in an urban rather than rural setting.

The demographic dimensions level of formal education attained and political ideology were found to be significantly related in a negative direction. Contrary to the above mentioned correlations, this correlation is not in the direction that one might predict. This correlation indicates that those with more formal education tend to be more conservative in their political thinking. Such a finding could be unique to the membership of the organization used in this study.

The fifth significant correlation involves the level of formal education attained and level of supervision dimensions. This indicates that those subjects who work in higher levels of management tend to have more formal education. Finally, level of supervision and size of industry where employed were found to be significantly related in a negative direction. According to this finding, those subjects who work in higher levels of management tend to work in smaller firms. Therefore, it appears that the organization used in this research tends to attract lower level managerial personnel from the larger firms and higher level managerial personnel from the smaller firms.

Multiple Correlation

As stated previously, the seven demographic dimensions employed in this research accounted for 15 per cent of the variance with regard to attitudes of managerial personnel toward student protest. This was statistically significant at the .003 level.

It is important to differentiate between statistical and social significance. The statistical significance of the amount of variance attributed to these dimensions is worthy of mention. However, 85 per cent of the variance in the total attitude score is still unexplained. It is important from a social point of view to be aware that there are other unidentifiable factors which account for a majority of the variance of the total attitude score.

One could surmise logically that the limitations mentioned previously are contributing factors to the unexplained variance. Although other factors are undoubtedly involved, those discussed

previously should be given serious consideration when discussing variables which might affect the formation of attitudes toward student protest.

Significance of Study

As mentioned in Chapter I, this study is significant for two reasons. With the current emphasis on white-collar occupations and supervisory responsibilities in American industry, the determination of managerial attitudes toward student protest would contribute to assessing the impact of the student protest movement. Also, since five of the seven demographic dimensions used in this research are applicable to people in all occupations, this study could serve as a beginning for determining the attitudes of various other groups toward student protest.

This study is also of value as a result of the development of an attitude scale to measure attitudes toward student protest. Although subject to further revision, this instrument provides the opportunity for additional attitudinal research concerning student protest.

Implications for Future Research

There are numerous implications for future research as a result of conducting this study. Three alternatives are particularly worthy of mention.

It was mentioned previously that the organization used in this study may be attractive to more conservative managerial personnel. A study could be made to determine if this thinking is correct. Thus, the instrument used in this study could be administered to

managerial personnel who work in the locale where this research was conducted, are employed in the firms which are represented by the organization used in this research, and are not members of this organization. Such a study would assist in determining if managerial personnel in this locale have generally negative and homogeneous attitudes toward student protest regardless of whether they are members of this organization or not.

Another possibility for future research would involve a study of managerial personnel who are employed in firms located throughout the country. The instrument used in this study could be administered to a sample of managerial personnel who vary according to a number of specified demographic dimensions. The results from this proposed study would present a more realistic picture of the attitudes of managerial personnel toward student protest. Such an assertion is made because the proposed study would not be limited to a particular locale or to members of a specific managerial organization.

A third possibility for future research would involve the attempt to compare the attitudes of managerial personnel with individuals in another occupation regarding student protest. This could be achieved by administering the same attitude scale to all subjects and testing the results through appropriate statistical analyses. The results of this research would assist in clarifying whether the attitudes of managerial personnel toward student protest are unique or are similar to those in other occupations.

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APPENDICES

Appendix A

INITIAL
STUDENT PROTEST QUESTIONNAIRE

Instructions: Circle one response for each item.

1. Most student protest reflects the lack of concern of youth about the betterment of society.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
2. The National Guard should not be permitted to carry loaded weapons if summoned to control violent student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
3. Non-violent student protest should be encouraged.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
4. The majority of student protestors are "radicals."
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
5. Student protestors should be permitted to picket company recruiters on college campuses.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
6. Student protest fails to reveal most of the shortcomings of American colleges and universities.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
7. There are too few concessions to the demands of student protestors.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
8. The Michigan Legislature should withhold funds from institutions that do not stop violent student protest activity.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
9. The student protest movement reveals the merits of dissent.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
10. Police intervention is necessary for handling violent student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree

Appendix A - Continued

11. Involvement in non-violent student protest better prepares an individual for serving in future managerial positions.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
12. The student protest movement fails to make people more aware of the problems of our society.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
13. Faculty participation in any type of student protest is desirable.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
14. Student protestors directly involved in the destruction of property or physical abuse should be expelled from school.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
15. Participants in violent student protest are exercising their constitutional right to assemble.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
16. Stronger laws should not be passed to control student protest activities.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
17. There is little similarity between the basic concerns of student protestors and those of industrial workers.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
18. A majority of student protestors are not concerned about resolving specific issues.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
19. Few participants in protest activities are non-students.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
20. Parental permissiveness is a major cause of student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree

Appendix A - Continued

21. Participation in non-violent student protest increases a student's knowledge of current issues.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
22. The destruction of campus property by student protestors should be considered a felony.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
23. Industry should not hire students who have participated in violent student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
24. Most of the demands of student protestors are justifiable.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
25. I am within the following age group:
(a) Under 30 years of age (b) 30-40 years of age (c) 41-50 years of age
(d) 51-60 years of age (e) Over 60 years of age
26. I live within one of the following population areas:
(a) Within Lansing or East Lansing city limits (b) Suburb with a population between 10,000 and 20,000 (c) City with a population between 5,000 and 20,000 (d) Town or village of less than 5,000 people (e) Country setting
27. The highest level of formal education that I completed was:
(a) Less than twelfth grade (b) High school graduate (c) Post-secondary vocational-technical training (d) Less than bachelor's degree (e) Bachelor's Degree (f) Master's Degree (g) First-Professional Degree (h) Doctorate Degree
28. Although there are numerous categorizations of political thinking, I would generally classify myself as:
(a) Strongly Liberal (b) Moderately Liberal (c) Moderately Conservative (d) Strongly Conservative
29. I have children in the following age group(s): (Circle all that apply)
(a) No children (b) Under 12 years of age (c) Between 12 and 20 years of age (d) Over 20 years of age
30. I currently work at the following supervisory level:
(a) First-level Supervision (b) General Supervisor (c) Superintendent/Department Head (d) Plant Manager/President (e) Other - please specify

Appendix A - Continued

31. The number of employees (professional and non-professional) in the firm where I am employed is:
(a) Less than 500 employees (b) 500-1,000 employees (c) 1,000-5,000 employees (d) 5,000-10,000 employees (e) Over 10,000 employees

PLEASE MAKE SURE EACH STATEMENT HAS A RESPONSE - THANK YOU FOR YOUR ASSISTANCE

Appendix B

August 27, 1970

Dear

During the past year, there has been an increased number of student protest activities on American college and university campuses. Such activities have resulted in varied reactions by people throughout the country.

I am interested in studying the feelings of people regarding student protest to assess the impact of the student protest movement. More specifically, I would like to research the attitudes of managerial personnel in the industrial sector of our society.

Thus, I am soliciting your help by asking if you would fill out the attached questionnaire. The first twenty-four statements are designed to determine one's feelings about student protest. The last seven statements ask for background information necessary for completing the study. This instrument is quite short and should take no longer than 5 minutes to complete.

To clarify the term student protest, I have defined it as group actions of dissent, whether peaceful or violent, by college or university students against rules, policies, or actions related to local, institutional, state or national situations.

I would like you to circle the letter preceding the response that you consider to be most appropriate for each statement. It is important that all statements (except Item 29) have one, and only one, response.

Please do not sign the questionnaire. The responses will be completely anonymous.

Thank you for assisting me in completing my research.

Sincerely yours,

Thomas E. McClung

Appendix C

September 11, 1970

Dear

During the past year, there has been an increased number of student protest activities on American college and university campuses. Such activities have resulted in varied reactions by people throughout the country.

I am interested in studying the feelings of people regarding student protest to assess the impact of the student protest movement. More specifically, I would like to research the attitudes of managerial personnel in the industrial sector of our society.

Thus, I am soliciting your help by asking if you would fill out the attached questionnaire. The first twenty-two statements are designed to determine one's feelings about student protest. The last seven statements ask for background information necessary for completing the study. This instrument is quite short and should take no longer than 5 minutes to complete.

To clarify the term student protest, I have defined it as group actions of dissent, whether peaceful or violent, by college or university students against rules, policies or actions related to local, institutional, state, or national situations.

I would like you to circle the letter preceding the response that you consider to be most appropriate for each statement. It is important that all statements (except Item 27) have one, and only one, response.

Please remove this cover letter and return the questionnaire when completed. A return addressed envelope is included for your convenience. Please do not sign the questionnaire. The responses will be completely anonymous.

I would appreciate it very much if you would return the questionnaire as soon as your schedule will permit.

Thank you for assisting me in completing my research.

Sincerely yours,

Thomas E. McClung

Appendix C - Continued

FINAL STUDENT PROTEST QUESTIONNAIRE

Instructions: Circle one response for each item.

1. Most student protest reflects the lack of concern of youth about the betterment of society.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
2. The National Guard should not be permitted to carry loaded weapons if summoned to control violent student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
3. Non-violent student protest should be encouraged.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
4. The majority of student protestors are "radicals."
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
5. Student protestors should be permitted to picket company recruiters on college campuses.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
6. Student protest fails to reveal most of the shortcomings of American colleges and universities.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
7. The Michigan Legislature should withhold funds from institutions that do not stop violent student protest activity.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
8. Police intervention is necessary for handling violent student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
9. Involvement in non-violent student protest better prepares an individual for serving in future managerial positions.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree

Appendix C - Continued

10. The student protest movement fails to make people more aware of the problems of our society.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
11. Faculty participation in any type of student protest is desirable.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
12. Student protestors directly involved in the destruction of property or physical abuse should be expelled from school.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
13. Participants in violent student protest are exercising their constitutional right to assemble.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
14. Stronger laws should not be passed to control student protest activities.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
15. There is little similarity between the basic concerns of student protestors and those of industrial workers.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
16. A majority of student protestors are not concerned about resolving specific issues.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
17. Few participants in protest activities are non-students.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
18. Parental permissiveness is a major cause of student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
19. Participation in non-violent student protest increases a student's knowledge of current issues.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree

Appendix C - Continued

20. The destruction of campus property by student protestors should be considered a felony.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
21. Industry should not hire students who have participated in violent student protest.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
22. Most of the demands of student protestors are justifiable.
(a) Strongly Agree (b) Agree (c) Undecided (d) Disagree
(e) Strongly Disagree
23. I am within the following age group:
(a) Under 30 years of age (b) 30-40 years of age (c) 41-50 years of age (d) 51-60 years of age (e) Over 60 years of age
24. I live within one of the following population areas:
(a) Within Lansing or East Lansing city limits (b) Suburb with a population between 10,000 and 20,000 (c) City with a population between 5,000 and 20,000 (d) Town or village of less than 5,000 people (e) Country setting
25. The highest level of formal education that I completed was:
(a) Less than twelfth grade (b) High school graduate (c) Post-secondary vocational-technical training (d) Less than bachelor's degree (e) Bachelor's Degree (f) Master's Degree (g) First-Professional Degree (h) Doctorate Degree
26. Although there are numerous categorizations of political thinking, I would generally classify myself as:
(a) Strongly Liberal (b) Moderately Liberal (c) Moderately Conservative (d) Strongly Conservative
27. I have children in the following age group(s): (Circle all that apply)
(a) No children (b) Under 12 years of age (c) Between 12 and 20 years of age (d) Over 20 years of age
28. I would consider my job to be within the following level of management: (Select the most appropriate response)
(a) Top Level Management - (Concerned primarily with overall policies, long-run strategies and commitments and the choice of major goals).
(b) Intermediate Level Management - (Concerned primarily with the execution of policies and implementation and communication of basic administrative decisions respecting goals, strategies, and policies).

Appendix C - Continued

28. (c) Low Level Management - (Concerned primarily with carrying out operating plans and policies within the framework of previously developed plans and policies).
29. The number of employees (professional and non-professional) in the firm where I am employed is:
(a) Less than 100 employees (b) 100-500 employees (c) 500-1,000 employees (d) 1,000-5,000 employees (e) Over 5,000 employees

My formal job title is: _____

PLEASE MAKE SURE EACH STATEMENT HAS A RESPONSE - THANK YOU FOR YOUR ASSISTANCE

Appendix D

September 26, 1970

Dear

On September 11, I sent you a questionnaire on student protest and asked if you would: (1) complete the questionnaire and (2) return it to my home address. This questionnaire is important as it is an essential part of my doctoral dissertation.

As previously mentioned, I am interested in studying the feelings of people regarding student protest to assess the impact of the student protest movement. More specifically, I want to research the attitudes of managerial personnel in the industrial sector of society.

If you have completed the questionnaire sent on September 11, please disregard this second mailing. If not, I would like you to fill out the attached questionnaire and return it to my home address. It will take no longer than five minutes to complete.

I have defined the term student protest as group actions of dissent, whether peaceful or violent, by college or university students against rules, policies or actions related to local, institutional, state or national situations.

I would like you to circle the letter preceding the response considered to be most appropriate for each statement. It is important that all items (except item 27) have one, and only one, response.

Please remove this cover letter and return the questionnaire when completed. A return addressed envelope is included for your convenience. Please do not sign the questionnaire as the responses will be completely anonymous.

I would appreciate it very much if you would return the questionnaire as soon as your schedule will permit.

Thank you for assisting me in completing my research.

Sincerely,

Thomas E. McClung

Appendix E

RESPONSES OF SUBJECTS TO ATTITUDINAL AND DEMOGRAPHIC ITEMS

Subjects	Attitudinal Items										Demographic Items																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
	N	P	P	N	P	N	N	N	P	N	P	N	P	P	N	N	P	N	P	N	N	P	Age	Res.	Ed.	P.I.	Child.	Sup.	Size	
1	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2	5	5	3	3	2	1	4	
2	4	1	2	3	1	2	2	2	4	1	1	2	1	1	2	2	3	2	1	2	2	1	3	2	2	2	1	2	2	
3	4	4	4	4	2	4	2	2	4	1	1	2	2	2	2	2	5	3	4	1	2	3	2	5	5	2	2	2	3	
4	4	2	2	4	4	2	3	3	4	4	2	2	4	2	4	3	4	4	4	3	3	4	3	5	5	3	1	2	3	
5	4	4	2	4	1	2	2	2	4	4	2	1	2	4	2	4	4	4	4	1	4	3	4	5	4	2	2	2	5	
6	4	2	2	4	2	2	2	2	4	4	2	2	2	2	2	4	3	3	2	2	3	2	3	5	8	2	1	3	5	
7	2	2	3	1	1	3	1	1	3	4	1	1	1	5	1	1	2	2	2	1	2	2	4	1	3	2	2	2	5	
8	3	1	1	1	1	2	1	2	4	1	2	1	1	1	4	2	4	1	1	1	5	1	2	5	1	3	1	1	1	
9	2	1	2	2	1	1	2	1	2	2	1	1	2	2	3	2	3	2	2	1	2	2	2	1	2	3	1	2	5	
10	4	1	4	4	2	2	2	1	2	2	1	1	1	1	4	2	4	3	2	2	4	2	2	3	2	2	1	1	2	
11	1	1	2	3	1	2	2	2	2	2	2	1	3	2	4	2	4	2	3	1	2	2	3	5	2	3	1	1	4	
12	1	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	4	5	1	1	1	1	4	4	6	2	2	2	5	
13	5	1	2	2	1	2	1	1	4	1	1	1	1	1	2	1	5	4	2	1	2	1	2	1	3	2	2	2	2	
14	2	1	2	4	2	2	1	2	1	2	2	1	1	1	2	2	4	2	2	1	2	3	3	1	4	2	1	2	3	
15	4	2	2	2	2	2	2	2	4	1	1	1	1	2	4	3	4	4	4	1	3	2	2	4	2	3	1	2	4	
16	4	2	2	4	1	2	2	2	4	2	2	2	1	2	4	4	4	4	3	2	4	2	3	4	5	2	1	2	5	
17	2	1	1	4	1	2	1	2	2	1	1	1	1	1	2	2	2	2	2	1	2	2	3	5	2	2	1	2	2	
18	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	2	2	3	2	2	4	2	2	1	2	2	
19	4	5	4	4	2	4	2	2	4	4	2	1	5	5	2	2	2	1	2	1	4	2	2	1	4	2	2	3	2	
20	4	2	2	5	2	4	2	2	4	4	2	1	2	2	1	4	2	2	2	2	4	2	1	5	5	2	2	1	5	
21	4	1	2	2	2	2	1	1	2	1	4	1	2	2	2	1	4	3	1	1	2	1	5	5	1	2	2	1	2	
22	4	2	3	4	2	2	4	2	2	4	2	2	2	4	3	4	4	2	2	2	3	4	4	5	5	2	1	3	2	
23	2	1	4	2	1	2	2	1	1	1	2	1	1	4	1	2	3	2	3	1	2	2	2	4	5	2	2	2	2	
24	2	4	5	2	1	2	4	1	5	2	2	2	2	2	4	2	4	2	4	2	3	2	4	4	5	2	1	2	1	
25	5	1	4	4	1	2	2	1	4	3	1	1	4	4	4	2	2	2	2	1	4	2	3	5	5	2	1	2	1	
26	5	4	5	4	4	4	5	2	1	4	2	1	3	4	1	4	4	5	4	1	4	3	3	5	5	3	2	2	5	
27	2	1	2	4	1	2	1	1	2	1	1	1	1	1	2	1	4	1	4	1	1	2	4	5	3	2	2	1	5	
28	5	1	3	4	2	3	2	1	1	4	2	1	1	2	2	2	3	2	2	2	4	2	1	5	4	2	2	1	5	
29	2	1	4	2	1	1	1	1	4	2	2	1	1	1	2	1	4	4	4	1	1	1	1	1	3	3	2	2	4	
30	1	5	1	5	1	5	1	1	1	1	1	1	5	1	1	1	5	1	1	1	1	1	2	5	6	1	2	2	2	
31	4	2	2	4	1	2	2	1	2	4	2	1	1	3	2	2	2	4	4	2	2	2	4	1	6	2	2	2	2	3

Appendix E - Continued

Subjects	Attitudinal Items										Demographic Items																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	N	P	P	N	P	N	N	N	P	N	P	N	P	P	N	N	P	N	P	N	N	P	Age	Res.	Ed.	P.I.	Child.	Sup.	Size
32	2	2	1	5	1	2	4	2	1	2	1	1	1	4	2	3	2	2	1	1	1	2	2	1	3	2	1	2	5
33	4	1	3	4	3	2	3	1	2	2	2	1	1	2	4	4	2	2	4	1	4	2	1	5	2	3	2	1	3
34	4	2	4	5	1	2	1	1	2	4	1	1	1	4	2	4	2	2	4	1	1	2	4	5	4	3	2	2	5
35	2	1	1	1	1	2	2	2	2	2	2	1	1	1	2	2	2	4	4	1	3	2	4	5	3	3	1	2	4
36	4	2	3	1	1	1	4	3	2	4	3	1	1	3	2	2	2	2	2	1	3	3	2	4	3	3	2	2	1
37	1	1	1	4	1	1	1	1	1	1	1	1	1	5	1	1	1	1	1	1	1	1	5	4	6	1	2	2	5
38	2	2	4	3	3	2	4	2	2	2	2	1	2	2	2	2	2	2	3	2	3	3	2	5	5	3	2	2	2
39	4	1	5	2	1	2	3	5	1	5	1	1	2	2	2	2	2	4	2	2	2	1	3	4	5	2	1	2	5
40	2	1	2	5	1	5	2	1	1	1	1	1	2	2	2	2	2	4	1	2	2	3	5	5	5	2	1	2	5
41	1	1	2	5	1	4	1	1	2	1	1	1	1	5	1	1	5	1	1	4	4	1	4	1	4	3	1	2	2
42	4	4	4	1	1	4	1	1	2	2	1	1	2	2	2	2	2	2	2	3	1	4	4	3	3	2	1	1	2
43	4	1	5	4	1	5	1	1	5	1	5	1	1	1	1	4	4	1	5	1	4	4	4	5	3	3	2	3	5
44	5	2	5	3	1	2	2	1	2	4	2	1	1	1	2	5	2	3	2	1	4	2	2	5	4	3	2	2	2
45	2	1	2	4	1	1	2	2	2	2	1	2	1	2	1	2	4	1	2	1	4	1	4	5	3	3	2	3	4
46	4	2	2	4	2	3	2	2	3	3	2	2	2	2	2	4	2	2	3	1	2	2	4	5	2	3	1	3	5
47	3	2	2	2	1	2	2	2	2	2	3	1	3	2	3	2	3	1	2	2	3	1	2	5	7	2	2	2	5
48	4	1	2	4	1	2	1	1	2	2	1	1	1	1	1	1	4	2	2	1	2	1	4	5	2	2	2	2	3
49	1	2	4	3	2	1	1	3	1	1	1	1	1	1	4	1	5	1	2	1	1	1	3	1	2	2	1	2	3
50	2	2	4	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2	4	2	3	2	4	5	4	3	2	2	3
51	1	1	5	1	1	1	1	1	1	5	1	1	1	1	1	1	5	2	4	1	1	1	4	6	6	2	2	2	5
52	4	1	1	4	1	2	1	1	1	1	1	1	1	1	2	4	2	1	1	1	1	2	2	1	5	1	2	1	5
53	4	2	2	4	1	2	4	2	2	2	2	2	2	4	4	2	2	2	2	4	2	4	4	4	4	2	2	2	5
54	1	2	2	4	2	2	1	1	4	2	1	1	1	2	2	2	1	1	4	1	4	1	2	3	3	3	2	2	5
55	4	1	4	4	1	4	1	1	4	4	2	1	1	1	2	4	4	3	4	1	3	3	2	3	4	3	2	2	4
56	2	1	4	4	2	2	1	1	1	4	1	1	1	1	2	2	1	2	2	1	2	1	2	4	6	2	1	2	4
57	1	2	2	1	1	1	1	1	2	2	1	1	1	1	1	1	4	2	2	1	4	5	3	5	4	2	1	2	4
58	2	2	4	4	2	3	2	1	2	4	1	1	2	2	2	2	3	1	4	1	1	2	4	4	5	2	1	3	1
59	4	1	4	4	4	2	1	1	2	4	2	1	1	2	2	2	4	2	4	1	4	3	1	5	5	3	2	2	2
60	4	1	4	1	2	2	2	1	3	4	1	1	1	2	2	3	3	2	2	2	4	2	4	4	2	3	1	1	5
61	1	2	2	2	1	2	1	1	1	2	1	1	2	1	4	2	2	2	2	1	2	2	4	5	5	2	2	2	3
62	2	1	2	1	1	2	1	2	2	2	1	1	1	1	2	1	4	1	4	1	1	2	4	5	5	2	1	2	4
63	4	1	2	4	1	3	1	1	3	3	1	1	1	1	1	4	4	3	2	1	4	2	2	2	4	-	1	1	5
64	4	2	4	4	2	3	2	2	2	3	2	1	1	2	2	2	3	2	2	1	4	2	2	2	2	2	1	2	3
65	4	2	4	4	2	2	2	2	4	4	1	1	2	2	2	2	3	4	4	2	2	4	4	4	2	2	2	2	5
66	4	2	2	5	1	1	3	1	2	1	1	1	1	1	2	2	3	2	2	2	2	2	2	1	5	3	2	2	2
67	4	1	2	1	1	5	1	1	3	1	1	1	5	1	4	2	4	1	3	1	1	2	1	1	4	2	1	1	2

Appendix E - Continued

Subjects	Attitudinal Items										Demographic Items																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	N	P	P	N	P	N	N	N	P	N	P	N	P	P	N	N	P	N	P	N	N	P	Age	Res.	Ed.	P.I.	Child.	Sup.	Size
68	2	2	2	1	2	2	2	1	2	4	4	1	2	4	4	2	2	4	2	1	2	2	5	5	2	4	-	1	4
69	3	2	3	2	2	2	3	2	2	2	2	2	2	3	2	2	2	2	2	2	3	2	4	5	5	2	2	3	1
70	4	2	2	2	2	2	2	2	2	4	2	2	2	2	4	2	2	2	2	2	4	1	1	2	4	3	2	2	2
71	3	1	4	1	1	2	1	1	2	3	1	1	1	1	3	2	2	2	1	1	1	2	1	1	5	2	2	1	2
72	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	4	2	2	2	2	2	2	2	1	2	1	1	5
73	3	2	2	3	2	3	2	2	2	2	2	2	2	2	4	3	2	2	2	2	2	3	3	3	2	2	2	-	-
74	4	2	2	4	2	2	4	2	2	2	2	2	4	4	2	2	4	2	2	2	4	2	4	5	3	3	1	3	1
75	2	1	4	1	5	4	3	2	1	4	3	2	1	5	2	3	2	4	4	3	3	2	2	5	3	2	2	1	2
76	4	1	5	5	4	3	2	1	4	4	3	1	1	2	3	3	4	4	4	1	1	4	1	5	5	3	2	1	5
77	2	2	4	2	1	2	4	2	4	4	1	1	1	2	2	2	5	1	4	1	2	2	4	5	4	2	2	2	2
78	4	1	1	2	2	1	1	1	1	2	2	2	1	1	2	2	2	2	2	1	2	1	4	3	3	2	2	2	5
79	4	1	2	2	2	2	2	2	2	4	2	1	1	2	2	2	4	4	4	2	2	1	3	5	5	2	2	2	5
80	4	2	2	2	1	2	4	2	2	3	2	4	1	4	2	2	2	3	2	2	4	2	3	3	5	3	1	3	5
81	4	2	2	4	3	2	1	2	2	3	2	1	2	2	2	2	2	1	2	1	4	2	3	4	4	2	2	2	1
82	4	1	4	4	2	2	1	2	4	4	2	1	1	1	4	2	4	2	4	1	2	2	1	3	6	2	2	1	5
83	1	1	2	1	1	2	1	1	2	1	1	1	1	1	2	1	-	2	1	1	2	2	4	4	2	2	2	2	2
84	2	2	2	4	1	2	1	1	1	1	1	1	1	2	2	2	2	3	2	2	2	1	3	3	5	3	1	2	2
85	3	1	2	4	2	2	1	1	2	4	5	1	1	3	2	3	4	1	2	1	1	3	3	3	2	2	1	2	3
86	2	1	1	3	2	2	1	1	1	1	1	1	1	2	5	2	2	2	2	1	1	2	2	5	5	2	2	2	5
87	1	1	1	1	1	1	1	1	1	2	1	1	1	2	5	1	5	1	1	1	1	1	2	5	2	2	1	1	5
88	4	2	4	4	2	2	2	2	3	4	2	2	2	2	2	2	4	2	2	4	2	2	3	5	2	3	1	2	2
89	2	1	4	4	1	3	1	1	2	4	1	1	1	1	1	2	2	1	4	1	3	1	3	4	2	2	1	1	5
90	5	1	5	4	4	2	3	1	2	5	1	2	1	2	3	2	4	4	4	3	2	4	1	5	5	3	2	2	3
91	4	2	5	4	4	4	4	1	2	5	1	1	1	2	4	4	4	4	5	1	1	2	2	5	2	3	2	1	5
92	2	2	2	2	2	2	1	2	2	4	2	1	2	2	2	2	3	2	2	2	2	3	3	-	2	3	1	1	4
93	4	2	4	2	2	2	2	2	2	2	1	1	2	2	4	3	4	2	2	2	2	2	2	1	2	2	1	2	2
94	1	2	5	4	2	2	1	2	1	2	1	1	1	1	2	2	4	4	1	1	2	2	4	1	1	2	2	2	5
95	5	1	1	5	5	5	1	1	1	5	1	1	1	1	1	1	5	1	2	2	1	4	3	5	5	2	1	2	3
96	4	2	4	4	2	4	1	1	1	3	1	1	1	4	2	2	4	4	2	2	2	1	3	5	5	2	2	2	4
97	4	2	2	4	1	3	4	2	2	4	2	1	2	2	4	4	3	2	4	2	2	2	3	5	5	2	2	3	1
98	4	4	4	4	1	2	3	2	2	2	2	2	1	2	2	2	3	2	3	1	2	2	3	5	5	2	1	2	1
99	4	1	3	3	1	2	1	1	2	2	1	1	1	1	2	2	2	3	2	2	3	2	2	4	5	2	1	2	4
100	1	1	3	3	1	3	1	1	3	3	1	1	1	1	3	1	1	1	1	1	1	1	3	5	4	2	1	3	1
101	4	1	1	2	1	1	4	5	5	1	1	1	1	2	1	2	4	4	1	1	1	1	3	5	4	2	1	3	1
102	2	1	2	4	1	5	2	2	2	1	1	1	1	1	4	1	4	4	2	2	3	3	3	1	3	2	1	1	1
103	2	1	3	2	2	4	5	2	2	4	3	1	1	2	4	3	4	4	4	2	2	2	1	5	2	2	2	2	5

Appendix E - Continued

Subjects	Attitudinal Items										Demographic Items																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
	N	P	P	N	P	N	N	N	P	N	P	N	P	P	N	N	P	N	P	N	N	P	Age	Res.	Ed.	P.I.	Child.	Sup.	Size	
104	4	2	2	4	2	2	2	3	3	4	1	2	2	4	2	2	2	4	3	2	2	2	2	2	2	3	1	2	5	
105	2	4	4	1	3	2	1	2	2	4	4	1	2	3	2	3	4	3	4	2	4	4	2	1	1	2	1	1	5	
106	2	2	2	4	2	2	4	2	2	2	2	2	2	2	2	2	4	4	2	2	4	2	4	2	1	3	1	2	4	
107	4	1	4	4	1	2	2	1	4	1	1	1	1	2	4	2	4	4	4	4	2	2	1	5	3	3	2	1	1	
108	5	1	1	2	1	3	1	2	4	1	1	1	1	1	2	2	1	2	1	3	2	2	3	5	1	2	2	1	2	
109	4	2	2	4	2	2	1	1	3	4	5	1	1	1	4	2	3	2	1	3	3	1	2	5	5	3	1	3	5	
110	5	3	5	3	4	3	1	1	3	4	4	5	1	1	2	3	3	3	4	2	4	3	2	4	4	2	2	1	2	
111	4	2	4	3	2	2	2	1	4	2	3	1	1	4	2	3	3	2	4	2	3	2	2	4	2	2	2	2	4	
112	3	1	2	2	1	4	1	1	1	2	1	1	1	1	2	3	2	2	2	1	2	1	4	5	5	2	2	2	5	
113	4	5	5	4	3	4	3	2	4	4	4	2	2	4	4	4	4	2	4	2	4	3	2	4	1	3	2	1	2	
114	4	1	2	4	2	2	1	4	1	2	1	1	2	4	2	2	2	2	1	2	2	2	4	5	5	2	1	2	5	
115	4	4	3	2	2	2	2	4	4	4	2	1	4	2	2	3	3	3	3	1	4	3	4	5	3	3	2	1	5	
116	4	2	4	5	4	3	2	2	3	5	2	1	1	5	5	3	2	1	5	1	3	3	2	4	2	3	1	1	5	
117	4	2	5	5	2	3	2	2	4	4	1	2	2	4	3	5	3	2	4	2	4	2	5	5	3	2	2	2	4	
118	4	3	2	4	1	4	1	1	2	5	1	1	1	1	2	4	4	2	3	1	1	2	2	5	5	2	2	2	2	
119	4	2	1	3	1	1	1	1	3	4	1	1	1	2	5	4	2	2	4	1	3	1	3	5	5	2	1	3	1	
120	4	2	5	5	2	2	2	2	4	4	1	5	1	1	5	4	5	2	4	2	2	3	5	3	2	2	2	3	1	
121	3	2	2	2	1	3	2	2	1	2	1	1	1	2	2	2	1	3	2	2	3	2	2	5	5	3	1	2	1	
122	4	2	2	4	1	2	2	2	3	4	1	1	2	2	2	4	2	4	4	1	2	2	3	3	2	3	1	1	2	
123	2	1	4	5	1	1	1	1	5	2	1	1	1	1	5	5	4	1	1	1	1	2	4	3	3	2	2	2	3	
124	2	1	1	2	1	1	2	1	1	2	1	1	1	1	1	1	4	2	1	4	1	4	4	5	4	2	1	3	1	
125	5	1	5	1	2	2	1	1	3	2	1	1	1	1	1	1	2	1	3	1	1	3	3	5	4	3	1	2	3	
126	4	2	4	1	3	4	1	1	1	1	3	1	1	1	2	4	4	4	1	4	2	3	3	2	5	2	1	2	2	
127	4	1	2	2	2	2	1	2	2	2	1	1	2	2	2	2	2	2	2	4	2	2	2	1	4	2	1	1	4	
128	4	2	5	5	2	4	4	1	2	4	2	1	1	2	5	1	4	4	2	2	2	2	2	5	4	2	1	1	4	
129	4	1	4	1	2	2	1	1	2	5	1	1	1	1	2	1	5	2	4	1	1	2	4	1	3	2	2	2	4	
130	2	1	5	1	1	3	1	1	3	2	2	1	3	1	1	2	4	4	2	1	1	1	1	3	3	3	2	2	1	
131	3	2	2	5	1	2	4	1	1	2	2	1	1	4	2	2	3	2	2	2	4	2	4	5	4	2	2	2	5	
132	4	1	2	4	1	2	2	1	2	2	1	1	1	2	2	2	4	2	4	1	2	2	4	2	4	2	2	2	2	
133	2	1	4	4	2	2	4	2	2	4	1	1	1	2	3	4	2	2	4	2	4	2	2	1	2	2	2	1	2	
134	5	1	5	1	2	2	1	1	4	2	1	1	1	1	1	1	3	1	4	1	1	2	2	2	5	3	2	2	4	
135	2	2	2	2	2	1	2	2	1	2	1	1	1	1	5	1	5	4	1	1	2	2	4	5	4	2	1	2	5	
136	1	1	2	3	1	2	1	1	2	2	2	1	1	3	2	2	2	1	1	1	2	2	3	5	4	2	1	1	5	
137	4	1	4	4	1	2	1	1	2	3	3	1	2	2	3	4	4	3	2	1	1	2	4	5	5	2	2	3	2	
138	5	5	4	2	1	4	1	1	2	4	2	1	1	2	5	1	1	4	4	1	1	2	4	4	5	2	2	2	2	3

Appendix E - Continued

Subjects	Attitudinal Items										Demographic Items																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	N	P	P	N	P	N	N	N	P	N	P	N	P	P	N	N	P	N	P	N	N	P	Age	Res.	Ed.	P.I.	Child.	Sup.	Size
139	4	2	4	4	4	2	4	1	2	4	1	1	2	5	2	4	3	3	4	2	4	2	2	4	4	3	1	2	5
140	4	2	5	2	2	2	2	3	4	3	1	1	2	2	2	4	4	4	2	2	4	3	3	1	2	2	1	1	5
141	1	1	5	5	2	2	1	1	3	4	1	1	1	1	2	1	1	3	2	1	1	2	2	1	2	-	1	1	1
142	4	1	2	4	1	1	1	1	1	1	1	1	1	5	1	1	1	3	2	1	2	1	3	3	5	2	1	2	2
143	1	1	5	1	1	3	1	1	5	1	1	1	1	1	3	1	3	2	3	1	1	1	2	1	2	-	1	1	5
144	2	1	4	2	2	4	5	1	5	2	5	1	4	5	5	1	5	1	5	1	1	2	5	5	4	3	2	3	2
145	4	2	4	2	2	2	2	2	2	2	1	1	1	5	2	2	4	2	4	1	1	2	3	5	4	2	1	2	5
146	4	2	2	2	2	2	2	3	2	-	2	2	2	2	2	2	4	2	4	2	2	5	5	5	5	2	2	2	5
147	4	2	2	5	2	3	2	1	2	3	1	1	1	4	1	4	3	1	2	1	3	2	2	4	5	2	2	2	5
148	5	5	5	5	5	3	3	1	1	4	1	1	4	2	2	4	4	1	1	1	2	3	3	3	5	3	2	2	5

N=Negative
P=Positive

Age - Age
Res. - Rural vs. Urban Residence
Ed. - Level of Formal Education Attained
P.I. - Political Ideology
Child. - Children of Adolescent Age
Sup. - Level of Supervision
Size - Size of Industry Where Employed

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