1970

Experimental investigation of personality factors associated with persuasibility during a fear state

Leon Allen Karjola

The University of Montana

Let us know how access to this document benefits you.
Follow this and additional works at: https://scholarworks.umt.edu/etd

Recommended Citation
https://scholarworks.umt.edu/etd/5777

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
AN EXPERIMENTAL INVESTIGATION OF PERSONALITY
FACTORS ASSOCIATED WITH PERSUASIBILITY
DURING A FEAR STATE

By
Leon Allen Karjola
B.A., Central Washington State College, 1969
Presented in partial fulfillment of the requirements for the degree of
Master of Arts
UNIVERSITY OF MONTANA
1970

Approved by:
Eldon E. Baker
Chairman, Board of Examiners

John N. Howard
Dean, Graduate School
Date
July 28, 1970
ACKNOWLEDGMENTS

I would like to take this opportunity to express my sincere appreciation to Eldon E. Baker, University of Montana. Dr. Baker's assistance in preparation of this thesis has been considered invaluable.

I am also grateful to Professors R. Wayne Pace, Peter Hemingway, and Duane D. Pettersen, University of Montana, for their helpful suggestions and advice.

A special "thank you" goes to my colleague Jim Poirot for his time, effort, and skill in conducting some important procedures during this study.

Finally, I wish to express sincere appreciation to Kent Bullock, Lou Loeb, "Doc" French, Joe Conners, and Joe Kaiser for invaluable assistance in this study.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>v</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td>CHAPTER I. BACKGROUND AND STATEMENT OF THE PROBLEM</td>
<td>1</td>
</tr>
<tr>
<td>Relation of Anxiety and Fear</td>
<td>3</td>
</tr>
<tr>
<td>Irrelevant Fear</td>
<td>6</td>
</tr>
<tr>
<td>Fear and Personality Research</td>
<td>7</td>
</tr>
<tr>
<td>Personality and Persuasibility</td>
<td>10</td>
</tr>
<tr>
<td>Personality Measure</td>
<td>12</td>
</tr>
<tr>
<td>Significance of the Experimental Investigation</td>
<td>14</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>17</td>
</tr>
<tr>
<td>CHAPTER II. EXPERIMENTAL PROCEDURES</td>
<td>20</td>
</tr>
<tr>
<td>Pretest: (Test Weight)</td>
<td>21</td>
</tr>
<tr>
<td>Pilot Study I: (Instrumentation)</td>
<td>22</td>
</tr>
<tr>
<td>Pilot Study II: (Pre-Post-Test Anxiety)</td>
<td>25</td>
</tr>
<tr>
<td>Content Validation Study</td>
<td>28</td>
</tr>
<tr>
<td>General Procedures</td>
<td>37</td>
</tr>
<tr>
<td>CHAPTER III. RESULTS</td>
<td>43</td>
</tr>
<tr>
<td>Analysis of Market Research Data</td>
<td>43</td>
</tr>
<tr>
<td>Matching of Subjects</td>
<td>45</td>
</tr>
<tr>
<td>Statistical Test of the Hypotheses</td>
<td>48</td>
</tr>
<tr>
<td>CHAPTER IV. CONCLUSIONS AND IMPLICATION</td>
<td>61</td>
</tr>
<tr>
<td>General Conclusion</td>
<td>63</td>
</tr>
<tr>
<td>Implications</td>
<td>64</td>
</tr>
<tr>
<td>LIST OF REFERENCES</td>
<td>71</td>
</tr>
<tr>
<td>APPENDIXES</td>
<td>79</td>
</tr>
</tbody>
</table>

iii
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PRE-POST TALLY OF OBSERVATION STUDY</td>
<td>36</td>
</tr>
<tr>
<td>2. RELATED t ANALYSIS OF MEAN ShiftS BETWEEN EXPERIMENTAL AND CONTROL SUBJECTS</td>
<td>50</td>
</tr>
<tr>
<td>3. HIGH AND LOW GROUP PERSUASIVE SHIFT SCORES OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC I</td>
<td>51</td>
</tr>
<tr>
<td>4. ANOVA SUMMARY FOR HYPOTHESES 1 and 2</td>
<td>52</td>
</tr>
<tr>
<td>5. MEAN SHIFTS OF EXPERIMENTAL SUBJECTS FOR INDEPENDENT t ANALYSIS OF $H_1$</td>
<td>53</td>
</tr>
<tr>
<td>6. HIGH AND LOW GROUP PERSUASIVE SHIFT SCORES OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC I</td>
<td>55</td>
</tr>
<tr>
<td>7. ANOVA SUMMARY FOR HYPOTHESES 3 and 4</td>
<td>55</td>
</tr>
<tr>
<td>8. HIGH AND LOW GROUP PERSUASIVE SHIFT SCORES OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC III</td>
<td>56</td>
</tr>
<tr>
<td>9. ANOVA SUMMARY FOR HYPOTHESES 5 and 6</td>
<td>57</td>
</tr>
<tr>
<td>10. HIGH AND LOW GROUP PERSUASIVE SHIFT SCORES OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC IV</td>
<td>59</td>
</tr>
<tr>
<td>11. ANOVA SUMMARY FOR HYPOTHESES 7 and 8</td>
<td>59</td>
</tr>
<tr>
<td>FIGURE</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1. Facial Expressions Reflective of Fear</td>
<td>30</td>
</tr>
<tr>
<td>2. General Procedures</td>
<td>42</td>
</tr>
<tr>
<td>3. Market Research Statistical Design</td>
<td>44</td>
</tr>
<tr>
<td>4. Scores on Market Research Pre-Post Measurements Where No Persuasion Took Place</td>
<td>44</td>
</tr>
<tr>
<td>5. Scores on Market Research Pre-Post Measurements Where High Persuasion Took Place</td>
<td>45</td>
</tr>
<tr>
<td>6. Meshing of the Personality Means</td>
<td>48</td>
</tr>
</tbody>
</table>
The purpose of this study was to investigate whether: (1) subjects scoring high in particular personality characteristics measured by the California Psychological Inventory (C.P.I.) would be more persuasible during a manipulated fear state than subjects scoring low in those personality characteristics and (2) subjects would be more persuasible during a manipulated fear state than during a non-fear state.

Personality scores, operationalized as representing independent variation during the experiment, served as a basis for matching experimental and control subjects. Indices of fear constituted dependent variation during the experiment.

A fear state was created artificially by giving experimental subjects failing grades on an important examination which counted 33 1/3 per cent of their final grade in a university course. Validity of the experimental manipulation was ascertained during a series of pilot studies. Content analysis of subjects self-reports and observational-techniques employing video-tape apparatus, the major validity estimation procedures, indicated that the fear state was created. During the manipulated fear condition, an associate, introduced as a market researcher, presented a persuasive message designed to generate attitude change. A series of semantic differential scales were used to measure attitude change.

Statistical analyses on data from the "market research study" indicated that subjects who scored high in the personality characteristic of poise, ascendency and self-assurance were more persuasible than subjects who scored low on the particular characteristic during the fear state. None of the remaining personality characteristics were associated statistically with increased persuasibility during the manipulated fear condition: (1) socialization, maturity, and responsibility, (2) achievement potential and intellectual efficiency, and (3) intellectual and interest modes. Data analyses, after subjects were matched on the basis of C. P. I. scores, revealed that experimental subjects were more persuasible when exposed to the manipulated fear condition than control subjects exposed to the non-fear condition.

A major conclusion reached by this investigation was that personality is most likely a key random variable which should be considered empirically in communicology experiments.
CHAPTER I

BACKGROUND AND STATEMENT OF THE PROBLEM

Research dealing with fear, or threat, arousal has typically yielded inconclusive results. The reasons for discrepancy may be inherent within the context of the research design.

Research procedures utilizing threat* have generally attempted to either associate undesirable practices (e.g., smoking) with negative consequences (e.g., lung cancer), or to associate desirable practices (e.g., brushing teeth) with avoidance of negative consequences (e.g., cavities). In other words, the content of a message has been usually directed toward depicting a state of affairs in which the goals, security, or values of an audience seem threatened. After making the association, recommendations are offered for attitude change, or for action to be taken, to avoid the undesirable consequences.

It would appear that most studies have conceptualized fear as a "unitary variable" that would be able to be fixed and held constant at all times, across any field, to yield consistent results. Research results have shown quite the opposite, that

*For the purpose of this study threat and fear will be used synonymously.
is, fear is not a unitary variable, but a variable which varies across the social context in which fear is relevant. Conflicting results have typically been explained in terms of fear as an independent variable. Different conclusions have been given because different results have been gained from the particular independent variable used. For instance, Janis and Feshbach, (1953); Goldstein, (1959); and Janis and Terwilliger, (1963), imply that the less threat implied in a message, the more the persuasive effect. Conversely, Berkowitz and Cottingham, (1960); Leventhal and Niles, (1964), (1965); Niles, (1964); Leventhal, et al, (1965); and Singer, (1965), have implied that the more threat inherent within a persuasive message the more resulting attitude change.

Although the results of research studies investigating the relative effects of fear have been conflicting, there has been little attempt to establish empirically why opposing results occur. If the results indicate that fear is not a unitary variable because the results have not been consistent, the fault may lie, not with the independent variable of fear, but rather with some "intervening variable" not held constant in the conflicting studies. It is the author's contention that an intervening variable may be the reason for the confusing results gathered by prior research experiments dealing with fear. This intervening variable could be personality. Personality is generally thought to be a variable that can be eliminated by
randomization. This study sought to illustrate that personality was a variable that randomization could not account for in a small-sample experiment. Therefore, this study will seek to answer the question: To what extent are certain personality characteristics associated with persuasibility during a fear state?

Before proceeding further into the design and method of this particular experiment, it seems desirable to clarify five general areas of interest: (1) the relation of anxiety and fear, (2) irrelevant fear, (3) fear and personality, (4) personality and persuasibility, and (5) personality measure.

**Relation of Anxiety and Fear**

When certain defense mechanisms influence a human to react to painful or threatening stimuli, certain patterns of responses occur as spontaneous reactions. These responses may occur as overt reactions, as covert chemio-physio reactions within the human reaction mechanism, or both. Observers of these responses tend to categorize the responses into two correlated groups of fear and anxiety. When these reactions develop in the presence of a stimulus which may be perceived as "realistically threatening", fear rather than anxiety is produced (Maher, 1966). The term "anxiety", although somewhat more loosely defined, is generally used to refer to the same reaction pattern as fear when it is made in the presence of stimuli which are not intrinsically threatening. Anxiety, then, refers to the fear response when it is made to stimuli which elicit its physiological manifest reactions on the basis of past learning (Maher, 1966).
Both fear and anxiety although closely related differ primarily with regards to stimuli or a stimulus, that elicits the response in the human reaction mechanism. To categorize the power of a stimulus which elicits either fear or anxiety is difficult to do. Therefore, most psychological clinicians tend to categorize the two by what appears to be normal behavior for the general population (Maher, 1966). For example many people are anxious while flying. They may be tense, and do not relax until their flight is over. This is not regarded as psychopathological and therefore not deviant. Other people, however, may not fly at all, but upon seeing an airplane may experience acute anxiety symptoms. This may be regarded as psychopathological. Anxiety may nevertheless be transformed into fear. Fear involves certain chemio-physio responses of the body that are also common to anxiety. Fear simply has an increased number of the life elements in common plus some additional ones. Therefore, it should be evident that there is some level of anxiety inherent within the human reaction mechanism at all times. Some of us may have more anxiety than others and anxiety may be directional at different times (Malmo, 1969).

To elicit fear, the human reaction mechanism must experience realistic and immediately perceived threat to the well-being of the individual. It is inherent within this idea that the stimulus for fear, unlike anxiety, originates from the outside. If the individual flying in the airplane noticed two of the
four engines of the airplane on fire, he might indeed experience fear rather than anxiety.

Heightened psychopathological anxiety may also be transferred into fear. For example, a child may be imprinted with an intense "fear of spiders" during his early life. Later in life the sight of any spider could produce anxiety reactions within the human reaction mechanism. If a spider, poisonous or not, is placed upon the skin of the child intense fear reactions could result. Another example of how anxiety may be transferred into fear is represented by responses to testing. Many school children are taught to get good grades. The thought of a failing grade can produce anxiety. If the child is actually given a failing grade on an important test, the anxiety could actually be transformed into fear. Therefore, it should be evident that fear has certain manifestations of anxiety. The chief difference lies in the stimulus of the human reaction mechanism. The stimulus to elicit fear must be perceived as realistically and immediately threatening.

This section has attempted to differentiate between the two psychological conditions of fear and anxiety. Fear and anxiety are closely related. Both differ primarily in the stimulus eliciting the response in the human reaction mechanism. Basically anxiety is intrinsically generated on the basis of past learning. Fear is basically extrinsically generated. Although one might argue that both fear and anxiety require past learning, if a threat is not perceived as immediately threatening
anxiety rather than fear is produced. Therefore fear requires an immediately perceived threat to the sense of well-being of the individual. The next section will describe the use fear has as an irrelevant or distracting influence to the persuasibility of an individual.

Irrelevant Fear

As indicated above, this project did not deal with fear as the primary independent variable. Rather fear was operationalized as a dependent variable. In essence fear was used solely as a "distracting variable," in which fear assumes certain qualities. Fear was not thought to be a primary variable but an isolated intervening or "irrelevant" variable. By considering fear in this fashion, studies by Festinger and Maccoby (1964), and Simonson and Lundy (1966), found distractability to be a variable that facilitated persuasibility. Simonson and Lundy (1966), used the "fear" of an immediately impending mid-term examination and found that irrelevant fear facilitates the acceptance of persuasive messages. Their results were explained in terms of a distraction influence exerted by the experimental setting. It is the author's contention that: (1) Simonson and Lundy were not concerned with fear as much as anxiety associated with testing, and (2) "fear" may indeed be a distraction, but it is the individual and his particular personality that determines whether or not he will be persuasible under fear conditions. In other words, some individuals with particular personalities may be more persuasible under
threatening conditions than other people with differing personality characteristics.

This section has given the reader an idea how fear has been used as an irrelevant variable in the past. The next section will present what personality factors have been investigated with regards to threatening persuasion.

**Fear and Personality Research**

The reader might wonder why this section has been included since this experiment will not be concerned with fear as the primary independent variable. Although fear was regarded as an irrelevant threat, this is not to say that conclusions regarding fear, personality and persuasibility are irrelevant also. Irrelevant threat was used merely to imply that fear was not the primary reason for persuasion taking place. Personality will be regarded as the major reason for persuasibility. Fear was only regarded as a catalyst to "ignite" persuasibility. As such, any personality factor related to fear must be related to persuasion that has taken place. In other words, it is postulated that all previous research utilizing threat has been dependent upon personality, not fear or level of fear.

Unfortunately, to some researchers, there has been little empirical support for personality as the real controlling variable underlying persuasion utilizing threat.

When a communication message uses a fear factor its effectiveness in arousing tension has been, in the past, generally
thought to depend on such variables as explicitness, involvement, source credibility, prior experience, and consequences of involvement. (Hovland, et al., 1953; Hollander, 1967; and Cohen, 1964.)

Nevertheless, Miller and Newgill (1966) suggested that individuals differ with regards to perception of threatening appeals. Similarly, Leiber (1967), suggested that personality may be the important variable to reception of threatening messages. However, neither study empirically tests personality traits as correlates to persuasibility. For instance, Leiber (1967), only suggested that the type of person who responds to a threatening mail questionnaire is different from the type of individual who responds to a non-threatening questionnaire. Thus, Leiber suggested that the characteristics and predispositions of the threat-appeal recipients may contribute to relative effectiveness of a threatening message, but did not attempt to determine what were the characteristics and predispositions contributing to persuasibility.

Several studies have dealt with two personality variables, self-esteem and anxiety relatedness, as they relate to persuasion utilizing threat. However, the results have been inconclusive. Self-esteem on the part of the recipient has contributed to conflicting results with the interaction effects of fear and persuasion. For example, Leventhal and Perloe (1962), found low self-esteem to be negatively related to acceptance of threat.
appeals. Subjects high in self-esteem were more influenced by non-threat messages while subjects with low self-esteem were influenced more by threatening messages. Subsequent studies, however, found a positive relationship between high self-esteem and high threat appeals (Dabbs and Leventhal, 1966; Leventhal and Trembly, 1968; Kornzweig, 1968). Leventhal and Trembly found that by increasing the intensity of threat it was possible to change the attitudes of the high self-esteem subjects.

Perhaps, the discrepancy is not due to the personality characteristics, but rather the original personality measuring instrument. For example, Leventhal and Perloe's personality test was a subject-response test with no mention of an attempt to establish the measure of self-esteem's reliability or validity. Subjects rated themselves on an attitude scale directed toward depicting high and low self-esteem. No mention in the research study was made of an attempt to establish validity or reliability of the measuring instrument for self-esteem. (A conflicting study by Dabbs and Leventhal used a similar personality measurement.)

The second area of research dealing with negative message appeals and personality concerns itself with anxiety. Janis and Feshbach (1954), suggested that anxiety level may be an important variable for threat appeals. They felt that subjects who were high in anxiety were less influenced by strong fear appeals than those who had low anxiety. Subsequent studies, however, have not been able to replicate interaction in the chronic anxiety level.
reported by Janis and Feshbach (e.g., Goldstein, 1959; Niles, 1964; and Singer, 1965); therefore, it is not possible to justifiably posit a causal relationship between the effects on persuasibility of anxiety and fear appeals.

In summary, of the personality characteristics which have been suggested as interacting with fear level, only self-esteem appears to have any real support. Chronic anxiety does not appear to be an important variable. The next section will present what specific personality factors have been correlated with persuasibility.

**Personality and Persuasibility**

Knowledge of personality is important because it is largely dependent upon the individual's concern with himself and his relationship to society. As such, personality encompasses many interrelated constructs stemming from an individual's psychological core, to role related behavior, and ultimately, to social and environmental influence (Hollander, 1967). Consequently, a potential persuader must ask himself what personality characteristics make a subject susceptible to various kinds of communication. In other words, what personality characteristics make an individual more persuasible than other individuals with other personality characteristics?

Personality research within the area of persuasion has been generally directed to the discovery of what personality characteristics lead to the most "persuasible person." Such
personality variables have typically included characteristics such as: (a) self-esteem (Janis and Field, 1959; Linton and Graham, 1959; Leventhal and Perloe, 1962; Gollab and Dittes, 1965; Crawford and Gergen, 1966; Zemach, 1966; Leventhal and Trembly, 1965), (b) hostility (Janis, 1963), (c) socially withdrawn individuals (Janis, 1963), (d) richness in fantasy (Janis, 1963), (e) other directedness (Janis, 1963), (f) authoritarianism (Janis, 1963), and (g) anxiety relatedness (Janis and Feshbach, 1954; Goldstein, 1956; Niles, 1964; Leventhal and Watts, 1966; Millman, 1965; and Singer, 1965).

Such research has generally produced information that states that individuals with certain levels of one personality characteristic will be more persuasible than others. Personality levels that have generally led to persuasibility include individuals who are (a) overtly hostile (Janis, 1963), (b) low in self-esteem (Darley, 1966), (c) low in anxiety (Goldstein, 1959), (d) authoritarian (Cohen, 1964), (e) rich in fantasy (Janis, 1963), and (f) conformists (Janis, 1963). Individuals with opposite or differing personality characteristics are generally less persuasible. Such research is unfortunate because there is no means of summing a series of personality traits across the wide field of total personality into one persuasible person. It is only possible to combine certain related personality characteristics into general personality areas of characterization. In other words, personality traits may be regarded as possible keys to
persuasion, but no mistake should be made by thinking that traits are additive. For example, low anxiety and high self-esteem may be negatively correlated to persuasibility because each individual has his own personality profile, and no one personality trait combines with another according to some law (Lindsey and Aronson, 1969). Therefore, it should be evident that personality profiles (total personality graphs) will need to be compared for significant differences of some treatment, rather than generalizing from certain individual traits. In other words, rather than looking at the personality characteristic of sociability, it will be necessary to look at the broader personality context of poise, ascendency, and self-assurance of which sociability is only one part, before a generalization about persuasibility can be made.

In summary, this section has tried to present a rationale concerning why personality research is important to persuasion research. Second, this section has suggested that there exists certain characteristics that persuasible individuals exhibit. Third, this section has suggested that personality traits are not additive but are subdivided into certain profiles which are made up of a number of personality characteristics. The next section will explain and present a rationale for the personality tool to be used in this experiment.

**Personality Measure**

This study will use a personality measure with established
reliability and validity, the California Psychological Inventory (hereafter referred to as the C.P.I.)

The C. P. I. was developed from the so-called "empirical technique" (Gough 1964). In this method a criterion dimension which one wants to measure is first defined. Secondly, inventory statements about the criterion dimension are assembled in a preliminary scale. These questions are then administered to persons who can be shown by some procedure to be entirely independent of the test and to be strongly characterized by this trait or dimension. The goals of this item analysis are to discover those questions which are answered in a "differential" way by the nominated subjects. The items which are relevant are subsequently further defined and tested using essentially the same technique.

Ultimately, the ideal results yield a series of statements or questions (30-40) used as identification variables of some demonstratable relationship to the behavior being measured (Gough, 1964). The empirical technique in essence is a construct validation technique, because the test is concerned with what properties explain the variance of the test items. The concern seems to be what personality characteristics are being measured by each question. Therefore, what may be the highest form of validity estimation, construct validity, is the basis of the C. P. I.

The C. P. I. has also been concerned with accurate and
dependable reliability. Test-retest, and cross-validation techniques have been used to support the reliability of the measuring instrument. The test-retest reliability based on a sample of 200 range from .49 to .87 with a median of .80.

Finally, Gough (1969), states that the latest edition of the C. P. I. has been used in over 900 personality research studies. Therefore, since the C. P. I. has a good "reputation" and satisfactory reliability and validity, the C. P. I. was selected for this experiment.

Significance of the Experimental Investigation

Knowledge of personality and persuasibility in a threatening situation might allow the following distinct advantages: First of all, knowledge of personality and persuasibility might provide new insight into the clarification and interpretation of the many conflicting empirical investigations dealing with threatening and persuasive communication. Second, knowledge of personality factors relating to persuasion might allow the "professional persuader" new insight for audience analysis. Third, the results of this study might allow for a more accurate prediction of audience behavior under threatening stimuli. Fourth, knowledge about the interactions of fear, personality, and persuasibility might allow for inoculation and screening of those who might be employed
for possible security purposes.* Finally, the results of this experimental investigation could give new insight to the controversy surrounding extrinsically-vs-intrinsically generated persuasion.

This study differs from other empirical studies in at least three fundamental ways: (1) previous research has not investigated multiple personality characteristics as the independent variable of communication, (2) this experimental investigation will attempt to analyze what personality characteristics enhance or inhibit persuasive appeal in threatening situations, and (3) this experimental investigation will utilize a non-threat persuasive message, but under threatening conditions with results analyzed in terms of the independent variable—personality of the receivers.

Hypotheses and Definitions

The specific purpose of this study will be to assess what personality factors are associated with persuasible individuals while influenced by fear. Specific definitions inherent in this purpose are:

---

*Individuals who differ in personality are constantly being employed in various security positions. They may be the engineers behind a space project or a communication officer behind enemy lines. These individuals may be involved in some threatening situation. They may "break" or be persuaded to adopt a policy contrary to the decrees of his government. It is the job of someone to screen these individuals before they are allowed to be in a position of unusual stress. If personality could be measured and certain types shown to break easily, i.e., be persuaded easily, it would allow certain security screening to take a new dimension. In addition, further precautions could be taken to innoculate those individuals needed who would possibly exhibit certain undesirable characteristics—front line soldiers, etc.
Personality factors may be broadly defined as the sum total of an individual's characteristics that make him human. Operationally, a personality factor will be a characteristic the individual exhibits that is distinctly different from other characteristics he may exhibit as measured by the C. P. I.

Associated refers to an interrelation between those personality factors observed in a subject and the amount of persuasibility that takes place during the experiment.

Persuasible individuals refers to those individuals who after hearing a persuasive message will significantly change a preassessed attitude in a desired direction expressed by the experimenter as measured by a post test.

While influenced refers to a psychological process whereby the subject is exposed to a particular variable. In this case, influence constitutes exposure to the threatening situation.

Fear may be defined as a temporary, focused, yet transient concern about a specific event, situation, or relationship that may or may not give rise to the more long lasting state of anxiety or (defused) feeling of uneasiness. In this case fear will be defined operationally as the immediate feeling the individual maintains after knowledge of failure of an important test.
Two of the most necessary assumptions this study makes is that personality may be judged with some reliability, and fear can be created by experimental manipulation. Once these two assumptions are met, the following specific hypotheses can be tested:

Hypotheses

$H_1$: Characteristic I:

A. There will be no significant difference in persuasibility with subjects who exhibit low personality characteristics of poise, ascendency and self-assurance as compared to subjects with high personality characteristics of poise, ascendency and self-assurance in a threatening situation.

B. Subjects who exhibit the same personality characteristics as the above will be more persuasible under threatening conditions than under conditions of non-threat.

$H_2$: Characteristic II:

A. There will be no significant difference in persuasibility with subjects who exhibit low personality characteristics of socialization, maturity, and responsibility as compared to subjects with high personality characteristics of socialization, maturity, and responsibility in a threatening situation.

B. Subjects who exhibit the same personality characteristics as the above will be more persuasible under threatening conditions than under conditions of non-threat.

$H_3$: Characteristic III:

A. There will be no significant difference in persuasibility with subjects who exhibit low personality characteristics of achievement potential and intellectual efficiency as compared to subjects with high personality characteristics of achievement potential and intellectual efficiency in a threatening situation.
B. Subjects who exhibit the same personality characteristics as the above will be more persuadible under threatening conditions than under conditions of non-threat.

H4: Characteristic IV:

A. There will be no significant difference in persuasibility with subjects who exhibit low personality characteristics of intellectual and interest modes as compared to subjects with high personality characteristics of intellectual and interest modes in a threatening situation.

B. Subjects who exhibit the same personality characteristics as the above will be more persuadible under threatening conditions than under conditions of non-threat.

The specific personality characteristics inherent under each hypothesis are as follows:

Personality traits of H1 (i.e., poise, ascendance, and self-assurance) include:

1. Dominance (Do)
2. Capacity for Status (Cs)
3. Sociability (Sy)
4. Social Presence (Sp)
5. Self-acceptance (Sa)
6. Sense of well being (Wb)

Personality traits of H2 (i.e., socialization, maturity, and responsibility) include:

1. Responsibility (Re)
2. Socialization (So)
3. Self-control (Sc)
4. Tolerance (To)
5. Good Impression (Gi)
6. Communality (Cm)
Personality traits of $H_3$ (i.e., achievement, potential and intellectual efficiency) include:

1. Achievement via conformance ($Ac$)
2. Achievement via independence ($Ai$)
3. Intellectual efficiency ($Ie$)

Finally, personality traits of $H_4$ (i.e., intellectual and interest modes) include:

1. Psychological-mindedness ($Py$)
2. Flexibility ($Fx$)
3. Femininity ($Fe$)

(A detailed explanation of each of the above specific personality traits underlying the characteristics of the hypotheses will be found in Appendix A.)

This chapter has attempted to give the reader background in the differences and similarities of anxiety and fear with prior research in the areas of threat appeals, fear and personality, and personality and persuasibility. Finally, this chapter presented the problem, significance, and hypotheses of the present study. The next section will present the procedures employed for the testing of the hypotheses.
CHAPTER II
EXPERIMENTAL PROCEDURES

The purpose of this chapter is to describe the procedures employed for (1) the development of a valid and reliable measuring instrument, and (2) the actual experimentation.

Since the experimental hypotheses rested on the assumption that fear would be created by the experimental manipulation, a series of pilot studies, a pre-test, and a content validity study were conducted. However, in order for the reader to have some form of reference to interpret why the pre-test and subsequent studies were administered, a short explanation at this time of the experiment is necessary.

Basically, the experiment sought to create fear by "failing" each subject on an important classroom test. Once this psychological state was established, a series of persuasive arguments were administered, which were designed to yield some form of attitude change in the subjects.

Subjects used for all experimentation included male and female undergraduate students at the University of Montana.
enrolled in either Communication 111 or Psychology 110 classes.* No restrictions were placed on the subjects regarding such variables as sex or age.

The next sections will describe the reasons for the particular pilot studies and the procedures employed for each.

**Pre-Test: (Test Weight)**

**Background**

Since this study utilized fear of failure on an important classroom test, some measure of test importance had to be acquired. The experimenter felt that the best available criterion measure of an important test would be the weight the particular test held toward the final grade. It would seem logical that a student would place more value on a test that counted 30 per cent towards his final grade than a test that counted only 5 per cent towards his final grade. Consequently, if a subject received a failing grade on a test that counted a significant amount towards his final grade he might be expected to experience some form of fear. Therefore, it seemed necessary to ascertain what level, from

---

*Communication 111 and Psychology 110 classes are not restricted to major students. Communication 111 is a requirement of three professional schools and ten departmental programs within the College of Arts & Sciences. Psychology 110 is part of the group requirements for all entering students. Neither of the courses are restricted to freshman as the coding might suggest. Generally, the enrollment of the classes is slightly over half upper division enrollees. Therefore, both Psychology 110 and Communication 111 are considered general classes, occupied by students of different departments and ages.*
one per cent to 100 per cent, students personally felt would be a significant level of influence upon their final grade. The mean from this pre-test would be the minimum value needed for the manipulation of the experimental group.

Procedure

During Winter Quarter, 1970, 86 undergraduate subjects enrolled in Psychology 110 and Communication 111 classes were asked by the instructors to complete a questionnaire during class. (See Appendix B) The questionnaire was designed to yield the value subjects felt a test needed to affect their final grade.

Results

An analysis of the questionnaire values yielded a mean value of 27.6 per cent. The range was 0 – 80 and the mode was 33. This may be interpreted as meaning that most subjects felt if a test counted 27.6 per cent it would significantly affect their final grade. Therefore, the experimenter concluded if subjects were given failing grades on an exam that accounted for approximately 25 – 30 per cent of the final grade, many subjects might experience some form of fear.

This pre-test was designed to find a criterion measure (test weight) by which subjects could be experimentally manipulated. The next pilot study was designed to test the experimental instrumentation.

Pilot Study I (Instrumentation)

Background

Once the weight of the test for the experimental manipulation
had been established, it was necessary to conduct a "dry run" of the proposed experimental method to (1) check for a desired effect, and (2) reveal any problems with the experimentation.

Procedures

During Winter Quarter, 1970, 14 subjects enrolled in a Communication 111 course underwent an experimental manipulation designed to create the desired fear effect. The experimental operation consisted of three dependent manipulations: (1) indoctrination, (2) experimentation, and (3) measurement.

The subjects were told the first day in class that their final test would significantly influence their final grade. On three subsequent occasions, subjects were reminded by verbal cues by the instructor as to the importance of their final exam. These cues were in association with subjects' assignments relating to their final test.

The experimental manipulation was created by handing back their final test (IBM answer sheet) with two grades on it. One grade was their's, the second was the class mean. The subjects' grade was a failing grade and the class mean was equal to a C minus. The answer sheet also had a prior assignment stapled to the top to guard against the subjects seeing each others grades.

Immediately after handing back the exams, questions were deferred until a graduate student in Communication was given time to administer an anxiety test. The specific test used was a test for anxiety developed in 1951 by Janet Taylor, referred to as the Taylor Manifest Anxiety Scale (TMAS) (See Appendix C).
After administration of the anxiety test, subjects were given their actual grades and told that the manipulations were done for a research project, and nothing more.

Results

The results of Pilot Study I may be divided into two parts: (1) desired effect, and (2) problems.

At the time the experimenter deemed the problems with the experimental procedure so significant as to nullify any results gained by the TMAS. However, an analysis of the TMAS scores showed a mean value of 22.0769, or slightly under chance. Therefore, it was concluded that: (1) either no anxiety took place, (2) the TMAS could not measure the type of anxiety that was present, or (3) both.

Since there was numerous problems associated with the experimental situation, at the time, it was concluded that no anxiety was present. Two of the problems associated with the pilot experiment were (1) subjects talking over their grades among themselves, and (2) subjects asking their instructor about the failing grades all being the same.

Conclusions

It was concluded that the problems associated with the experimental methodology could be divided into two areas: (1) subjects seeing each others grades, and (2) subjects talking among themselves.

To control against subjects seeing each others grades, it
was concluded that: (1) if the subjects were spaced farther apart there would be less chance of subjects seeing each others grades, (2) if the failing grades were not the same, but varied among the D- and F ranges there would be less suspicion and less looking around, (3) if the above refinements were put into operation there would be less chance of talking, and (4) if an older, more distinguished, "professional-type" individual was brought in to administer the experimental measurement, there would be less chance of the problems reoccurring. All subsequent studies incorporated each of the above refinements.

This pilot study pointed out several methodological problems. The next pilot study was designed to test the validity of the anxiety measuring instrument.

**Pilot Study II: (Pre-Post Test Anxiety)**

**Background**

After Pilot Study I had taken place, it was concluded that problems associated with the experimental method nullified any meaningful results to be gained by the TMAS. One of the alternative conclusions seemed to be that perhaps the TMAS did not measure the possible results of the experimental method. In fact, there has been some criticism of the TMAS within the experimental field which states that the TMAS is too transparent for a college population to yield meaningful results (Mills and Hannum, 1959). It was, therefore, concluded that it would be valuable to check the ability of the measuring instrument to measure the results of the experimental manipulation.
There was also some consideration that perhaps the experimental manipulation was not needed. Perhaps there was more anxiety present before receiving the test than after.

Therefore, with the above considerations, a second pilot study was designed to answer two questions: (1) was the TMAS actually measuring what might result from the experimental manipulations? and (2) was there more anxiety present in the subjects before receiving test results or after receiving test results?

Procedure

Early Spring Quarter, 1970, the entire population of Communication 111 classes (seven sections) were told that they would receive a "Predictive Speech Efficiency Test" (See Appendix D). The test, they were told, was designed to give them a very good indication of what their final grades in Communication 111 would be.

On two subsequent occasions, two sections, meeting at the same time, were reminded about: (1) the impending exam, and (2) the exam's importance. One strong reminder came just before the exam. (See Appendix E) After taking the exam, subjects were told that the results would be given back two class periods later. Subjects were reminded seriously about that day being the last official day to drop classes.

On the day before the exams were returned, both classes were told that a Communication professor was interested in the characteristics of Communication 111 students and would give them a test the next class period, i.e., the day on which the exam scores would be returned.
On the day the exams were given back, one class was administered the TMAS before the speech predictive efficiency test results were handed back. After taking the TMAS, subjects were debriefed.

The second group of students was given the TMAS by a professor after receiving their test scores. Extreme caution was exercised to limit the subjects from seeing each others grades and from subjects interaction (See Appendix E for a record of the dialogue). By spacing the subjects apart and varying the failing grades, the problems experienced in Pilot Study I were minimized. After taking the TMAS, and subsequent debriefing, subjects were asked to write a short paragraph explaining their reaction to receiving the failing grade.

**Results**

The mean values of the TMAS for the two groups compared were: (1) 23.42, n=12 for the pre-group, and (2) 22.83, n=12 for the post-group. Both scores are slightly under chance. An independent t-test between the pre and post groups showed no significant difference. Therefore, it was concluded that no significant difference existed between the subjects' anxiety level, as measured by the TMAS, before test results were handed back as compared to after test results were handed back.

However, after content analysis procedures analyzed the written reports of the subjects' feelings during the manipulation, some interesting contradictions to the possible chance scores
of the TMAS were indicated by the post-group (See Appendix F). Comments such as, "I began to perspire," "my stomach was upset," or "I was really worried," began to appear opposite some low scores on the TMAS in the content categories.

Conclusions

The most obvious conclusion to Pilot Study II would be that the TMAS appears to be an inadequate instrument to measure the psychological state of subjects while manipulated by the experimental treatment. Self-reports, analyzed by content analysis, might be a more sensitive procedure. The self-reports clearly indicate contradiction to the scores of the TMAS. The next study attempted to ascertain validity to the experimental method by another technique--systematic observation.

Content Validation Study

Background

The second pilot study gave a good indication that the experimental treatment was creating the desired fear effect. However, the experimenter felt that it was possible to provide additional measurement of the fear variable, by another technique. The technique selected was observation. This section will describe the procedures employed to gain content validity* for the actual experimental treatment used (See General Procedures) by observational methods.

*For a detailed analysis and description of content validity, see Kerlinger, 1964, pp. 445-447.
There are several means of observing heightened anxiety or a fear state. Certain physiological tests may be used, or subjective reports may be utilized, (See Pilot Study II, p 27). Finally, certain overt verbal or non-verbal behaviors may be analyzed. The procedures employed in this section deal with non-verbal behaviors associated with fear or heightened anxiety. The behaviors associated with fear in this validation study were confined to certain facial expressions and certain motor activities of the body.

The face, according to Harrison (1964), may be divided into certain communicative components such as the mouth, eyes, and eyelids. These facial features and the muscles controlling them may combine to communicate certain psychological moods using the above facial features represented by pictomorphs.

A pictomorph is "the minimal unit, or pattern of one or more pictanes [a basic pict such as a dot, circle or line] which can't be broken up without destroying or drastically altering the meaning," (Harrison, 1964). Harrison used picts to create facial expressions. Two groups of facial pictomorphs, which include certain characteristics of fear, are pictomorphs associated with worry and anger.* The facial characteristics associated with fear are most likely:

*Maher, (1966) and Ax, (1951) discuss the idea that the covert manifestations of anger are closely related to anxiety; each include certain physiological manifestations of the other. Therefore, certain overt reactions of fear could include the covert manifestations of both heightened anxiety and fear.
1. medially upturned eye brows, (\(\uparrow\uparrow\) )
2. medially downturned eyebrows, (\(\downarrow\downarrow\) )
3. straight mouth, (\(--\) )
4. down curved mouth, (\(\_\_\) )

These four characteristics may be combined with one another and may be combined with indications of eyes:

1. the dot, (\(\cdot\cdot\) )
2. open, (\(\bigcirc\bigcirc\) )
3. half closed, (\(\bigcirc\bigcirc\) )
4. closed, (\(\_\_\) )

Harrison found eight possible combinations of the above characteristics that indicated either anger or worry, which for the purposes of this study constituted indications of fear. The eight facial combinations appear in Figure 1.

Fig. 1.—Facial Expressions Reflective of Fear.
The second means of identifying fear in this pilot study incorporated certain hyperactive motor activities associated with the upper half of the body. Any hyperactive motor activity associated with the limbs, appendages, or muscles of the body could be an indication of the psychological state of fear (Maher, 1956). Such activities might include:

1. wiping of the brow or forehead.
2. touching the cheek or face.
3. chewing the fingers or fingernails.
4. covering the mouth.
5. moving the head rapidly from side to side.
6. moving the body from side to side.
7. moving the eyes rapidly.
8. moving the fingers or thumbs rapidly.
9. any extra hyperactivity (such as twitching).

The above nine motor activity characteristics plus the eight facial expressions were used for the following procedures of the validation study.

Procedures

During Spring Quarter, 1970, a Communication 111 section, consisting of 14 subjects, was selected for the validation experiment. The class met conveniently behind a one-way mirror which provided adequate opportunity for unobtrusive measurement. The procedures utilizing these subjects were divided into three separate phases: (1) technical, (2) observational, and (3) experimental.

The technical phase was composed of (1) the indoctrination of the subjects as to the importance of the final test, and (2) the experimental manipulation designed to create the fear effect.
On the first day of class, Spring, 1970, students in all sections of Communication 111 were warned of the importance of every exam given in Communication 111. On the second day, the experimental section was warned by the instructor that their final exam would count 30 per cent of their final grade. To fail, they were told, would probably result in the reduction of their grade by at least one full grade point. On two subsequent occasions in conjunction with assignments dealing with the final exam, subjects were again reminded of the importance of their final exam.

On the day before the final examination subjects were told that a "market research firm" had asked to use Communication 111 classes as part of a consumer survey. The instructor informed the classes that they would participate the day the exams were returned. The test, subjects were told, would be handed back following the research interview.

The experimental manipulation of the subjects to produce the fear effect was similar to Pilot Study II. The chief differences were the addition of a market researcher (MR) and the omission of the TMAS. The MR was a male graduate student, age 27. The subjects received their papers with failing grades and the breakdown sheet containing the scores stapled to the test top. It must be noted that great care was taken to have the subjects separated, thus reducing talking. The script of dialogue for this procedure may be found in Appendix G, but for the purpose of clarity, the separation and manipulation procedures
are outlined below:

1. Instructor and MR come into room.
2. Instructor introduced MR.
3. MR spaced students apart.
4. MR was conveniently called out of the room by a professor for "business purposes."
5. Instructor handed back exam with failing grade.
7. MR conducted survey.
8. Subjects debriefed.

The reader will note that the MR was called out of the room giving instructor time to hand back the test the students thought would be handed back after the MR survey. Note also that the MR came back into the room shortly after the instructor began returning the exams. The MR's presence successfully reduced talking within the room.

The remainder of the MR's survey is not relevant to the content validation experiment. A discussion of it will, therefore, be deferred until the general procedures section of the main experiment.

The second phase of the validation study consisted of two separate video-taped observations through a one-way mirror. A Sony video camera (model DXC - 2000 A) with a telephoto "zoom" lens was used for both observations. The first video taped observation took place during the middle of Spring Quarter, 1970. Each subject in the class was video-taped separately for one and one-half minutes during a "typical" classroom day. The second video-taped observation took place during the experimental manipulation. As soon as the subjects
instructor began handing back the falsified exams, each subject was video-taped separately for one minute.

The completion of the video-taping concluded this section's participation in the experiment. The third phase of the experiment utilized the video-tape data, but was an entirely separate operational procedure for the validation study.

Late Spring Quarter, 1970, 20 volunteer observers from Psychology 110 classes were asked to participate in an observation-perception study. The observational study may be divided into four components: (1) informative lecture, (2) division of the observers into two groups, (3) instructions, and (4) observation.

Before the observational study began, the observers were lectured on fear and fear symptoms, which was designed to provide them with the necessary information (See Appendix H). Next, the observers were told that half of them would be looking at facial expressions and the other half would look for motor activity (See Appendixes I and J). The experimenter, after providing half of the observers with pictomorp booklets and the other half with motor activity booklets, gave them instructions for the observation experiment. In essence, the instructor told the observers to watch two separate sections of the video-tape for certain signs of fear. Each subject, upon seeing a symptom of fear on the tape, was to say "Stop". When an individual said "Stop", two things happened: (1) the video-tape was stopped, and (2) other observers were asked to mark on their papers what
they thought the observer who said, "Stop", saw. All observers were instructed to be particularly cautious and not mark anything down if they did not think they observed a manifestation of fear.

Results

The results of the observational study were tallied and appear in Table 1 on page 36. The letters A through H are representative of the pictomorphs in Appendix J. The numbers in the table headings, one through nine, reflect the motor activities in Appendix K. Each of the numbers within the four squares are tallies of the characteristic of each subject checked. Only clusters of tallies in groups of three or more were counted for the statistical analysis that follows. Clusters of three tallies reflect the opinion that three out of 10 of the observers saw that a given subject (on the video-tape) exhibited a certain characteristic. The experimenter decided subjectively that agreements of three out of 10 in observations of any characteristic by judges would constitute some "pooled perception" or reliability of measures.*

A dependent measure t-test was performed on both sets of data. Both observations indicated a significant difference beyond .10 level of significance. It was, therefore, concluded that the experimental manipulation created the desired fear effect, as measured by the observational study. The complete content

*The probability that three out of 10 observers for each group would agree on a judgment simply by chance was found by binomial probability to be less than .10.
validation study suggested that fear was created by the experimental manipulation, thereby adding validity to treatment manipulation inherent within the main experimental procedures which follow.

**TABLE 1.**

**PRE-POST TALLY OF OBSERVATIONAL STUDY (FOR FEAR)**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Facial Characteristics</th>
<th>Motor Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Pre (Normal)</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>S1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>S2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>S10</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

| Post (Fear) | 4 | 1 | 1 | 2 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S1          | 4 | 1 | 1 | 2 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S2          | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S3          | 3 | 2 | 3 | 1 | 1 |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S4          | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S5          | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S6          | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S7          | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S8          | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S9          | 1 | 1 | 1 | 1 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| S10         | 4 | 1 | 1 | 2 |   |   |   |   | 3 | 4 | 5 | 1 |   |   |   |   |   |
| Total       | 29 |   |   |   |   |   |   |   | 78 |   |   |   |   |   |   |   |   |
General Procedures

Background

The results of the content study (last section), indicated that the experimental manipulation created the desired fear effect. By creating similar circumstances on a separate group (Psychology 110 section) Spring Quarter, 1970, it may be fairly safe to assume that results generated by the content study may be generalized to the experimental group during the main experiment.

It is the purpose of this section to describe the procedures employed for the main experiment. These procedures may be divided into two phases.

The first phase was composed of three "conditioning exercises." These exercises included: (1) administration of the California Psychological Inventory, (2) indoctrination of the subjects as to the importance of the test, and (3) forewarning of a "market researcher."

The second phase included: (1) the experimental manipulation and, (2) the market research attitude change survey.

Procedure: Phase One (Programming)

Phase one of the general procedures used similar techniques of the content validity study. The major differences were: (1) the number of verbal warnings about the importance of the exam, (2) increasing the weight of the test from 30 per cent to 33 1/3 per cent of the final grade (because of course requirements).

The first part of Phase I consisted of the administration
of the C. P. I. On the fourth class day, Spring Quarter, 1970, seventy-eight subjects enrolled in the three sections of Psychology 110 were asked to complete the C. P. I. The C. P. I. was administered by the author, who was introduced as a graduate student interested in the characteristics of Psychology 110 students. The C. P. I. 's actual purpose was to assess the independent variable, personality, of potential experimental and control subjects. After the administration of the C. P. I. subjects were thanked and told that they would receive the results later in the quarter.

The second exercise of Phase I, conditioning, began the first day Psychology 110 classes met; all Psychology 110 students were warned that they would be given only three exams. Each exam counted 33 1/3 per cent of their final grade. The students were reminded that if they failed any one exam, they could probably expect their grade to drop at least a full grade point. The second cue came immediately before administration of the second exam. The second cue reminded them to do well as the exam counted 33 1/3 per cent of their final grade. The final conditioning cue was given on the day the exams were handed back (See Appendix H).

The final exercise of Phase I included the announcement of a market researcher. Subjects were told the day before the second exam that a marketing research firm had asked to use the psychology classes as part of a consumer survey. The individual instructors then informed the classes that they would participate the day the test would be returned. The test, subjects were told, would be handed back following the research study.
Therefore, three conditioning exercises were executed before the actual experiment (Phase II). First of all, a personality inventory was administered to each subject. Second, the subjects were indoctrinated as to the importance of their final test. Finally, subjects were informed that a market researcher would "interview" them on the day the second tests were to be handed back.

Procedure: Phase II (Experimentation)

The actual experimentation was divided into two separate divisions. One division was designed to create the fear state and the second, designed to persuade the audience to change a held attitude. The procedures employed to integrate the two were identical to those used in Pilot Study III (See Appendix G).

The fear state was created by handing back the personal tests of the experimental subjects with (1) a failing grade on the test and, (2) a sheet containing a break down of the scores, and a class mean that was passing, C+, stapled to the top of the test.

The instructor stated that he was generally satisfied with the test results, but preferred to defer any questions until after the market researcher interviewed them. The subjects were asked to place their test completely off the top of their desks to avoid the possibility of distraction.

The second division of Phase II consisted of the Market Research Attitude Change Survey (hereafter referred to as MRASC)
(Bullock, 1969). MRACS was designed to find out whether or not subjects under conditions of fear would be more persuasible than subjects not in a fear state.*

The market researcher (MR) was male, age 27. It should be emphasized that the researcher was introduced as a representative of a fictitious survey company, Market Research Incorporated of __________, Washington. The instructor asked the students to give the researcher their undivided attention and that there be no talking.

The MR then conducted the MRACS study as follows:

a. "Good morning. As part of a regional marketing research study, it is our job here in Missoula to conduct consumer tests of various products for regional and national manufacturers. This morning we will be testing a rather specialized product, but first let me pass out the test booklets.... Please read the first page, and be sure to fill in the blanks. (See Appendix K).

b. (After allowing students time to read page one of the booklet)
"Now, please turn to the second page of your booklet, (Appendix L) where you will notice evaluating scales for the consumer products. I will pass two nylon stockings through the class, and ask that you examine them briefly and then pass them on. Then we want you to mark each of the scales according to the instructions at the top of the page. Please do not spend too much time examining the stockings, since we do not have much time."

*Not all subjects who had taken the C. P. I. originally were able to take the MRACS section of the experiment. Those subjects (34) not in attendance were excluded from any of the above procedures and subsequent analysis.
c. "Please listen closely please; this is important. You might be thinking at this time, that some products, such as nylon stockings might be better known to women than to men. This is true, but even in matters of predominantly male or female interest, consumer surveys have proven to be far more accurate predictors when mixed male-female audiences are used. In this particular test, the men in the audience are asked to overlook the nature of the subject matter and attempt to identify as much as possible with the problems to be solved and the decisions to be made."

d. "The two stocking brands—L and A—that you are examining are from manufacturers who, because of the surface similarity of their products in this new design, have submitted them to the consumer research study before placing them on the open market."

e. (After form one of test booklet has been completed and turned under)
"As you can see from folding the page back, we will be sampling your opinion more than once. (Same as Appendix L). I will read two brief statements supporting each of the brands of stockings. After I have read each separate statement you will complete a form. Here is the statement in support of Brand L, please listen closely, and then mark your opinions." (See Appendix H, message 1)

f. Now that you have completed the second form, it should be turned underneath. I will now read the second and last statement; this one supports Brand A ..." (See Appendix H, message 2).

At the conclusion of the experiment the booklets containing the desired data were collected.

Immediately, thereafter, subjects were debriefed, and the experiment was explained to them in as much detail as was possible (the purpose, reasons and expectations). Finally, they were given their correct test scores.
During the next two hours the MRs went to the control groups and administered the MRACS study, but without the experimental manipulation. Immediately, thereafter, the author also debriefed them as to their part in the experiment.

Since the above procedures expressed in Phase I and Phase II were somewhat complex, Figure 2 explains how the general procedures were integrated and used:

<table>
<thead>
<tr>
<th>Experimental Subjects</th>
<th>Control Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Cue #1: Told tests counted 33 1/3%
Took C. P. I.
Cue #2: Reminded of test importance
Told of MR
Took 2nd midterm course exam
Cue #3: Reminded of test importance
Received failing grades
Received normal grades
MR study
Debriefed

Fig. 2.—General Procedures

All data collected from the C. P. I. and MRACS study as described in this section on general procedures were subject to statistical and descriptive analyses. This next chapter will present the results of the analyses.
CHAPTER III

RESULTS

The purpose of this chapter is to present the results of statistical and descriptive analyses which are relevant to the hypotheses under study. It will be remembered that the purpose of this study was to assess what personality factors, if any, were associated with persuadable individuals while under the influence of fear. Therefore, the specific objectives involved were to: (1) measure the personalities of potential subjects, (2) match subjects on the basis of obtained personality scores (personality profiles), and (3) measure subjects’ persuasibility during a fear state. For the purposes of clarity in presenting the results of data related to the above objectives, this chapter will be subdivided into three phases: (1) analysis of the market research data, (2) matching of the subjects by personality profiles, and (3) statistical tests of the hypotheses.

Analysis of Market Research Data

The research design required the MR to present a set of persuasive messages to three groups. One group was an experimental group consisting of 37 subjects. The other two groups were control groups consisting of a total of 27 subjects. The basic statistical design of the MR experiment is portrayed in Figure 3.
Where $X$ refers to the experimental fear manipulations:

- $0_1, 4, 7$ refers to the MR's pre-test measurement
- $0_2, 5, 8$ refers to the MR's second test measurement
- $0_3, 6, 9$ refers to the MR's third test measurement
- $X_1, 3, 5$ refers to the MR's first message
- $X_2, 4, 6$ refers to the MR's second message

As Figure 3 indicates, there were three measurements, a pre-test and two post-tests. Each test yielded a mean attitude score. The differences between each mean were treated as the amount of persuasibility (or attitude shift) that took place. In other words, if an individual's mean values appeared as in Figure 4, no persuasion was assumed to have taken place.
However, if the score appeared as in Figure 5, the individual would have a persuasibility shift of $3 + 6 + 3 = 12$, or the total difference between $0_1$ and $0_2$, $0_2$ and $0_3$, and $0_1$ and $0_3$.*

\[
\bar{X} = \begin{array}{ccc}
0_1 & 0_2 & 0_3 \\
0 & -3 & +3
\end{array}
\]

Fig. 5.—Scores on market research pre and post measurements where high persuasion took place.

In other words, the mean shifts were based on a total measurement of persuasion existing across the pre-test to the second and third measurements.

The total mean shift values for the experimental and control subjects were analyzed by independent $t$-tests. The results indicated no significant difference between the experimental and control groups ($p > .10$).

**Matching of Subjects**

The previous section indicated no significant difference in the amount of persuasibility by independent analysis between subjects of the experimental and control groups. However, the experimental hypothesis rested on the assumption that the subjects

*The score appears on the scales in Appendix L which were scaled from $-3$ to $+3$. The system rested on the assumption of maximum variance. Thus, all data codification remained constant.*
of the experimental and control groups could be matched and compared by the independent variable of personality. This section will provide an explanation of how subjects were matched by similarity of personality profiles.

The C. P. I is made up of eighteen personality traits (see Chapter I, p. 18). A score for each trait is obtained for each subject. Naturally, all subjects have varying degrees of given personality traits. For example, one person may have a very high dominance score, and another may have a low dominance score. The farther apart each individual is on each score, the more dissimilar he is from another given individual. The objective of profile matching is to pair two individuals with very similar scores across all measured personality traits.

The statistical formula designed to match subjects' profiles was a difference statistic \( d^2 \) presented by Cronbach and Gleason (1953). The formula follows:

\[
\sum_{1}^{k} d^2 = \sum_{1}^{k} (X - x)^2 \\
\sum_{1}^{k} s_{1e} s_{1c}
\]

Where:
- \( X_{s_{1e}} \) = the personality trait score of the experimental subject.
- \( X_{s_{1c}} \) = the personality trait score of the control subjects.
- \( \sum_{1}^{k} \) = the summation of traits, one through eighteen.

The mechanics of the \( d^2 \) statistic include: (1) the comparison of personality-trait scores for each experimental subject with
those of each control subject, and (2) the total summation of each trait between each experimental and each control subject into one difference score.

Data germane to profile matching were subjected to computer analysis. A 1120 computer at the University of Montana was used for the computation of a Fortran program designed to provide difference scores for each subject. The results were presented in a matrix of difference scores between each experimental subject and each control subject. Subjects were matched by hand. Subjects with the lowest difference scores were considered the most closely matched. (Examples of subjects with matched scores ranging from a $d^2$ of 170 to a $d^2$ of 640 may be found in Appendix N.) Any difference score larger than 640 was not considered matched because the variance between each score visually appeared too large. Each experimental subject and each control subject were mutually exclusive. That is, once a subject was paired to another subject, neither subject could be paired with any remaining subjects. The result of the matching process yielded twenty paired subjects yielding a reduction in the sample of six subjects.

The subjects were then divided into either groups exhibiting high or low scores on the characteristics of the C. P. I.* by adding each trait score separately across both

---

*The eighteen personality traits of the C. P. I. were grouped by the test constructor into four general characteristics: (1) poise, ascendency, and self-assurance, (2) socialization, maturity and personability, (3) achievement potential and intellectual efficiency, and (4) intellectual and interest modes.
both experimental and control subjects to get eighteen means representative of each personality characteristic. Next, each mean of each separate category was averaged to obtain four separate mean characteristics (See Figure 6).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality trait means</td>
<td>$X_1, X_2, X_3, X_4, X_5, X_6$</td>
<td>$X_7 \ldots X_{12}$</td>
<td>$X_{13} \ldots X_{15}$</td>
<td>$X_{16} \ldots X_{18}$</td>
</tr>
<tr>
<td>Characteristic mean</td>
<td>$\bar{X}_I$</td>
<td>$\bar{X}_{II}$</td>
<td>$\bar{X}_{III}$</td>
<td>$\bar{X}_{IV}$</td>
</tr>
</tbody>
</table>

Fig. 6.—Meshing of Personality Means

The same process was repeated individually with each subject. If the subject's mean value for a particular personality characteristic was higher than the group mean for that characteristic, he was said to be in the high category. If the individual's mean was lower than the group mean, he was in the low category. For example, the group mean value of Characteristic I was 25. If the score for one subject was 25 or above, he was exhibiting a high characteristic of poise, ascendency, and self-assurance. It is important to note that some pairs of subjects shifted from high categories for one trait to low categories of another. Therefore, all subsequent analysis of hypotheses were made on separate groups per category (See Appendix 0 for tabled data).

Statistical Tests of the Hypotheses

The last section introduced and explained the statistical matching of C. P. I. data of subjects into a limited number of
matched pairs. This section described the specific statistical
tests of the hypotheses for data from the twenty paired subjects.
The statistical tests used in this chapter were (1) dependent t-tests, (2) a two-factor mixed design repeated measure analysis of variance, and (3) an independent t-test.

A related measure t-test was used to investigate whether or not there existed any significant overall difference between persuasibility of matched experimental and control subjects. The mean persuasive shifts for matched subjects appear in the following table on page 50.

A related measure t-test indicated a significant difference in persuasibility beyond the .01 level of significance. In other words, the data indicate that the experimental group, when matched to control subjects on the basis of personality scores, were more persuasible. Therefore, personality, viewed as an important intervening variable, lends itself to empirical treatment by matching subjects' personality scores. The remainder of this chapter will describe the specific personality characteristics which supported the overall affect of increased persuasibility during a fear state.
### TABLE 2

**RELATED t ANALYSIS OF MEAN SHIFTS BETWEEN EXPERIMENTAL AND CONTROL SUBJECTS**

<table>
<thead>
<tr>
<th>Experimental Subjects</th>
<th>Persuasive Shift</th>
<th>Control Subjects</th>
<th>Persuasive Shift</th>
<th>Difference Between Experimental and Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex1</td>
<td>4.02</td>
<td>C1</td>
<td>.75</td>
<td>3.27</td>
</tr>
<tr>
<td>Ex2</td>
<td>2.50</td>
<td>C2</td>
<td>1.26</td>
<td>1.25</td>
</tr>
<tr>
<td>Ex3</td>
<td>5.68</td>
<td>C3</td>
<td>.76</td>
<td>4.92</td>
</tr>
<tr>
<td>Ex4</td>
<td>5.75</td>
<td>C4</td>
<td>1.805</td>
<td>3.95</td>
</tr>
<tr>
<td>Ex5</td>
<td>3.35</td>
<td>C5</td>
<td>.999</td>
<td>2.35</td>
</tr>
<tr>
<td>Ex6</td>
<td>3.25</td>
<td>C6</td>
<td>4.98</td>
<td>-1.73</td>
</tr>
<tr>
<td>Ex7</td>
<td>2.25</td>
<td>C7</td>
<td>2.00</td>
<td>1.75</td>
</tr>
<tr>
<td>Ex8</td>
<td>4.75</td>
<td>C8</td>
<td>1.00</td>
<td>3.75</td>
</tr>
<tr>
<td>Ex9</td>
<td>4.50</td>
<td>C9</td>
<td>1.32</td>
<td>3.18</td>
</tr>
<tr>
<td>Ex10</td>
<td>2.74</td>
<td>C10</td>
<td>2.50</td>
<td>-.24</td>
</tr>
<tr>
<td>Ex11</td>
<td>1.60</td>
<td>C11</td>
<td>.24</td>
<td>1.36</td>
</tr>
<tr>
<td>Ex12</td>
<td>4.06</td>
<td>C12</td>
<td>1.2</td>
<td>2.82</td>
</tr>
<tr>
<td>Ex13</td>
<td>1.5</td>
<td>C13</td>
<td>2.5</td>
<td>-1.00</td>
</tr>
<tr>
<td>Ex14</td>
<td>3.27</td>
<td>C14</td>
<td>2.25</td>
<td>1.02</td>
</tr>
<tr>
<td>Ex15</td>
<td>1.76</td>
<td>C15</td>
<td>2.26</td>
<td>-.50</td>
</tr>
<tr>
<td>Ex16</td>
<td>1.50</td>
<td>C16</td>
<td>0.00</td>
<td>1.50</td>
</tr>
<tr>
<td>Ex17</td>
<td>3.00</td>
<td>C17</td>
<td>2.26</td>
<td>.74</td>
</tr>
<tr>
<td>Ex18</td>
<td>2.00</td>
<td>C18</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Ex19</td>
<td>2.76</td>
<td>C19</td>
<td>.75</td>
<td>2.01</td>
</tr>
<tr>
<td>Ex20</td>
<td>10.26</td>
<td>C20</td>
<td>2.00</td>
<td>8.26</td>
</tr>
</tbody>
</table>

\[
\bar{x} = 3.42331 \quad \bar{x} = 1.5917 \quad \Sigma d = 36.8082
\]

\[
S_{Dx} = 5.337 \quad t = 3.4316 \quad df = 19 \quad p < .01
\]
A series of two-factor mixed design repeated measure analysis of variance (ANOVA) were used to test each specific hypotheses. The hypotheses for each personality characteristic will be presented, followed by the appropriate data analysis.

The hypotheses for Characteristics I of the C. P. I. were:

\( H_1: \) A. There will be no significant difference in persuasibility with subjects who exhibit low personality characteristics of poise, ascendency and self assurance as compared to subjects with high personality characteristics of poise, ascendency and self assurance in a threatening situation.

\( H_2: \) B. Subjects who exhibit the same personality characteristics as the above will be more persuasible under threatening conditions than under conditions of non-threat.

The data for analysis of \( H_1 \) and \( H_2 \) appear in Table 3.

**TABLE 3**

HIGH AND LOW GROUP PERSUASIVE SHIFT SCORE OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC I

<table>
<thead>
<tr>
<th>Experimental Subject</th>
<th>Persuasive Shift</th>
<th>Control Subject</th>
<th>Persuasive Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (H) Personality Characteristic I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex1</td>
<td>10.26</td>
<td>C1</td>
<td>2.00</td>
</tr>
<tr>
<td>Ex2</td>
<td>2.76</td>
<td>C2</td>
<td>.25</td>
</tr>
<tr>
<td>Ex3</td>
<td>1.60</td>
<td>C3</td>
<td>.24</td>
</tr>
<tr>
<td>Ex4</td>
<td>4.50</td>
<td>C4</td>
<td>1.32</td>
</tr>
<tr>
<td>Ex5</td>
<td>4.75</td>
<td>C5</td>
<td>1.00</td>
</tr>
<tr>
<td>Ex6</td>
<td>.25</td>
<td>C6</td>
<td>2.00</td>
</tr>
<tr>
<td>Ex7</td>
<td>3.25</td>
<td>C7</td>
<td>4.98</td>
</tr>
<tr>
<td>Ex8</td>
<td>5.68</td>
<td>C8</td>
<td>.76</td>
</tr>
<tr>
<td>Low (L) Personality Characteristic I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex9</td>
<td>2.50</td>
<td>C9</td>
<td>1.26</td>
</tr>
<tr>
<td>Ex10</td>
<td>3.00</td>
<td>C10</td>
<td>2.26</td>
</tr>
<tr>
<td>Ex11</td>
<td>2.00</td>
<td>C11</td>
<td>1.00</td>
</tr>
<tr>
<td>Ex12</td>
<td>1.50</td>
<td>C12</td>
<td>2.25</td>
</tr>
<tr>
<td>Ex13</td>
<td>1.76</td>
<td>C13</td>
<td>2.26</td>
</tr>
<tr>
<td>Ex14</td>
<td>1.50</td>
<td>C14</td>
<td>0.00</td>
</tr>
</tbody>
</table>
The data that appears in Table 3 were analyzed by a repeated measure ANOVA. The results appear in Table 4.

### TABLE 4

**ANOVA SUMMARY FOR HYPOTHESES 1 AND 2**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>ms</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>122.5896</td>
<td>27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Ss</td>
<td>54.1088</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conditions (H vs. L)</td>
<td>8.0105</td>
<td>1</td>
<td>8.0105</td>
<td>2.2590</td>
<td>&lt;.20</td>
</tr>
<tr>
<td>Error</td>
<td>46.0983</td>
<td>13</td>
<td>3.546</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Ss</td>
<td>68.4808</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trials (Ex vs. C)</td>
<td>20.2130</td>
<td>1</td>
<td>20.2130</td>
<td>10.5375</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Trials x Conditions</td>
<td>27.1676</td>
<td>1</td>
<td>27.1676</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>21.1002</td>
<td>11</td>
<td>1.9182</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Therefore, there appears to be some indication ($p < .20$) that subjects exhibiting high characteristics of poise, ascendency and self-assurance are more persuadible during threatening situations than are subjects who have a low characteristic of poise, ascendency and self-assurance. Final resolution of the status of $H_1$ will be discussed shortly. Also, subjects of personality Characteristic I are more persuadible under threatening conditions than under conditions of non-threat ($p < .01$). Therefore, $H_2$ was accepted.

A subsequent independent $t$-test was conducted to investigate whether or not the addition of the remaining six experimental
subjects* of low personality Characteristic I would make any statistical difference on $H_1$. The data for analysis which include all the scores of experimental subjects analyzed under $H_1$ appear in Table 5.

### TABLE 5

**MEAN SHIFTS OF EXPERIMENTAL SUBJECTS FOR INDEPENDENT $t$ ANALYSIS OF $H_1$**

<table>
<thead>
<tr>
<th>High Experimental Persuasive Shifts</th>
<th>Low Experimental Subjects</th>
<th>Persuasive Shifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex₁ 10.26</td>
<td>Ex₁₃ 2.50</td>
<td></td>
</tr>
<tr>
<td>Ex₂ 2.76</td>
<td>Ex₁₄ 3.00</td>
<td></td>
</tr>
<tr>
<td>Ex₃ 1.60</td>
<td>Ex₁₅ 2.00</td>
<td></td>
</tr>
<tr>
<td>Ex₄ 4.50</td>
<td>Ex₁₆ 1.50</td>
<td></td>
</tr>
<tr>
<td>Ex₅ 4.75</td>
<td>Ex₁₇ 1.76</td>
<td></td>
</tr>
<tr>
<td>Ex₆ .25</td>
<td>Ex₁₈ 1.50</td>
<td></td>
</tr>
<tr>
<td>Ex₇ 3.25</td>
<td>Ex₁₉ 2.74</td>
<td></td>
</tr>
<tr>
<td>Ex₈ 5.68</td>
<td>Ex₂₀ 5.75</td>
<td></td>
</tr>
<tr>
<td>Ex₉ 4.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex₁₀ 3.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex₁₁ 4.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex₁₂ 3.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$\Sigma = 47.87$  $\Sigma = 20.75$

$SD = .9583$  $t = 1.4561$  $df = 18$  $P < .10$

*Not all experimental and control subjects when matched fell completely in either high or low categories of a particular personality score. For example, one experimental subject may have had a mean score of 26 for Characteristic I. However, his control correlate may have had a score of 24, or below the mean of 25. If this occurred, the pair was excluded from analysis of the particular personality characteristic of the group being measured. (The final number of subjects appears in each table.)
As Table 5 reveals, a $t$-test indicated a significant difference between high experimental subjects and low experimental subjects ($p < .10$). Therefore, $H_1$ was rejected. It appears that subjects high in poise, ascendency, and self assurance were more persuasible under threatening conditions, or a fear state, than were subjects low in poise, ascendency, and self assurance.

The hypotheses for Characteristic II of the C. P. I. were:

$H_3$: A. There will be no significant difference in persuasibility with subjects who exhibit low personality characteristics of socialization, maturity, and responsibility as compared to subjects with high personality characteristics of socialization, maturity, and responsibility in a threatening situation.

$H_4$: B. Subjects who exhibit the same personality characteristics as the above will be more persuasible under threatening conditions than under conditions of non-threat.

The data for analysis of $H_3$ and $H_4$ appear in Table 6.

The data that appear in Table 6 were analyzed by a repeated measure ANOVA. The results appear in Table 7.
TABLE 6
HIGH AND LOW GROUP PERSUASIVE SHIFT SCORES OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC II

<table>
<thead>
<tr>
<th>Subject</th>
<th>Persuasive</th>
<th>Control</th>
<th>Persuasive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shift</td>
<td></td>
<td>Shift</td>
</tr>
<tr>
<td>Ex₁</td>
<td>4.75</td>
<td>C₁</td>
<td>1.00</td>
</tr>
<tr>
<td>Ex₂</td>
<td>4.02</td>
<td>C₂</td>
<td>.75</td>
</tr>
<tr>
<td>Ex₃</td>
<td>10.26</td>
<td>C₃</td>
<td>2.00</td>
</tr>
<tr>
<td>Ex₄</td>
<td>4.50</td>
<td>C₄</td>
<td>1.32</td>
</tr>
<tr>
<td>Ex₅</td>
<td>5.75</td>
<td>C₅</td>
<td>1.80</td>
</tr>
<tr>
<td>Ex₆</td>
<td>1.50</td>
<td>C₆</td>
<td>0.00</td>
</tr>
<tr>
<td>Ex₇</td>
<td>1.76</td>
<td>C₇</td>
<td>2.26</td>
</tr>
<tr>
<td>Ex₈</td>
<td>3.25</td>
<td>C₈</td>
<td>2.25</td>
</tr>
<tr>
<td>Ex₉</td>
<td>2.50</td>
<td>C₉</td>
<td>1.26</td>
</tr>
<tr>
<td>Ex₁₀</td>
<td>2.74</td>
<td>C₁₀</td>
<td>2.50</td>
</tr>
<tr>
<td>Ex₁₁</td>
<td>1.60</td>
<td>C₁₁</td>
<td>.24</td>
</tr>
<tr>
<td>Ex₁₂</td>
<td>5.68</td>
<td>C₁₂</td>
<td>.76</td>
</tr>
<tr>
<td>Ex₁₃</td>
<td>.25</td>
<td>C₁₃</td>
<td>2.00</td>
</tr>
<tr>
<td>Ex₁₄</td>
<td>4.02</td>
<td>C₁₄</td>
<td>1.20</td>
</tr>
<tr>
<td>Ex₁₅</td>
<td>3.25</td>
<td>C₁₅</td>
<td>4.98</td>
</tr>
<tr>
<td>Ex₁₆</td>
<td>3.35</td>
<td>C₁₆</td>
<td>.999</td>
</tr>
<tr>
<td>Ex₁₇</td>
<td>2.00</td>
<td>C₁₇</td>
<td>1.00</td>
</tr>
</tbody>
</table>

TABLE 7
ANOVA SUMMARY FOR HYPOTHESES 3 AND 4

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>ms</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>140.0383</td>
<td>33</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Between Ss</td>
<td>54.8302</td>
<td>16</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Conditions (H vs. L)</td>
<td>2.6842</td>
<td>1</td>
<td>2.6842</td>
<td>.7722</td>
<td>-</td>
</tr>
<tr>
<td>Error</td>
<td>52.1460</td>
<td>15</td>
<td>3.4761</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Ss</td>
<td>85.2081</td>
<td>17</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trials (Ex vs. C)</td>
<td>35.7319</td>
<td>1</td>
<td>35.7319</td>
<td>12.3854</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>Trials x Conditions</td>
<td>6.2014</td>
<td>1</td>
<td>6.2014</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Error</td>
<td>43.2748</td>
<td>15</td>
<td>2.8850</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The results indicate that $H_3$ can not be rejected. No significant difference appeared in persuasibility of high Characteristic II vs low Characteristic II. Therefore, $H_3$ could not be rejected.

The results also indicate that subjects with characteristics of socialization, maturity, and responsibility were more persuasible under conditions of threat ($p < .005$) than under conditions of non-threat, ($H_4$). Therefore, $H_4$ was accepted.

The hypotheses of Characteristic III of the C. P. I. were:

$H_5$: A. There will be no significant difference in persuasibility with subjects who exhibited low personality characteristics of intellectual and interest modes as compared to subjects with high personality characteristics of intellectual and interest modes in a threatening situation.

$H_6$: B. Subjects who exhibit the same personality characteristics as the above will be more persuasible under threatening conditions than under conditions of non-threat.

The data for analysis of $H_5$ and $H_6$ appears in Table 8.

**TABLE 8**

**HIGH AND LOW GROUP PERSUASIVE SHIFT SCORES OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC III**

<table>
<thead>
<tr>
<th>Experimental Persuasive Shift</th>
<th>Control Persuasive Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td></td>
</tr>
<tr>
<td>Ex1</td>
<td>10.26</td>
</tr>
<tr>
<td>Ex2</td>
<td>2.76</td>
</tr>
<tr>
<td>High (H)</td>
<td>Ex3</td>
</tr>
<tr>
<td>Personality Characteristic III</td>
<td>Ex4</td>
</tr>
<tr>
<td>Ex5</td>
<td>5.75</td>
</tr>
<tr>
<td>Ex6</td>
<td>1.76</td>
</tr>
<tr>
<td>Ex7</td>
<td>1.50</td>
</tr>
<tr>
<td>C1</td>
<td>2.00</td>
</tr>
<tr>
<td>C2</td>
<td>.75</td>
</tr>
<tr>
<td>C3</td>
<td>1.32</td>
</tr>
<tr>
<td>C4</td>
<td>.76</td>
</tr>
<tr>
<td>C5</td>
<td>1.80</td>
</tr>
<tr>
<td>C6</td>
<td>2.26</td>
</tr>
<tr>
<td>C7</td>
<td>0.00</td>
</tr>
</tbody>
</table>
The data that appear in table 8 were analyzed by a repeated measure ANOVA. The results appear in Table 9.

TABLE 9
ANOVA SUMMARY FOR HYPOTHESES 7 AND 8

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>ms</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>127.6278</td>
<td>29</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Between Ss</td>
<td>44.8536</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Conditions (H vs. L)</td>
<td>2.0107</td>
<td>1</td>
<td>2.0107</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Error</td>
<td>42.8429</td>
<td>13</td>
<td>3.2956</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Ss</td>
<td>82.7742</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trials (Ex vs. C)</td>
<td>18.2130</td>
<td>1</td>
<td>18.2130</td>
<td>7.7843</td>
<td>&lt;.025</td>
</tr>
<tr>
<td>Trials x Conditions</td>
<td>34.1447</td>
<td>1</td>
<td>34.1447</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Error</td>
<td>30.4165</td>
<td>13</td>
<td>2.3397</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The results indicate that $H_5$ can not be rejected. That is, no difference appears in persuasibility of subjects high in intellectual and interest modes as compared with subjects with characteristics of low intellectual and interest modes. The sixth hypothesis was also supported. That is, subjects were more persuasible during threatening conditions ($p < .025$) than non-threatening conditions. Therefore, $H_6$ was accepted.

The hypotheses for Characteristic IV of the C.P.I. were:

$H_7$: A. There will be no significant difference in persuasibility with subjects who exhibit low personality characteristics of achievement potential and intellectual efficiency as compared to subjects with high personality characteristics of achievement potential and intellectual efficiency in a threatening situation.

$H_8$: B. Subjects who exhibit the same personality characteristics as the above will be more persuasible under threatening conditions than under conditions of non-threat.

The data for analysis of $H_7$ and $H_8$ appear in Table 10.
TABLE 10
HIGH AND LOW GROUP PERSUASIVE SHIFT SCORES OF EXPERIMENTAL AND CONTROL SUBJECTS FOR CHARACTERISTIC IV

<table>
<thead>
<tr>
<th>Experimental Persuasive Subject</th>
<th>Persuasive Shift</th>
<th>Control Persuasive Subject</th>
<th>Persuasive Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex_1</td>
<td>1.60</td>
<td>C_1</td>
<td>.24</td>
</tr>
<tr>
<td>Ex_2</td>
<td>4.75</td>
<td>C_2</td>
<td>1.00</td>
</tr>
<tr>
<td>High (H) Personality Characteristic IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex_3</td>
<td>3.25</td>
<td>C_3</td>
<td>4.98</td>
</tr>
<tr>
<td>Ex_4</td>
<td>4.02</td>
<td>C_4</td>
<td>.75</td>
</tr>
<tr>
<td>Ex_5</td>
<td>2.00</td>
<td>C_5</td>
<td>1.00</td>
</tr>
<tr>
<td>Ex_6</td>
<td>10.26</td>
<td>C_6</td>
<td>2.00</td>
</tr>
<tr>
<td>Ex_7</td>
<td>4.50</td>
<td>C_7</td>
<td>1.32</td>
</tr>
<tr>
<td>Ex_8</td>
<td>5.62</td>
<td>C_8</td>
<td>.76</td>
</tr>
<tr>
<td>Ex_9</td>
<td>5.75</td>
<td>C_9</td>
<td>1.80</td>
</tr>
<tr>
<td>Ex_10</td>
<td>1.50</td>
<td>C_10</td>
<td>0.00</td>
</tr>
</tbody>
</table>

| Low (L) Personality Characteristic IV |                |                              |                 |
| Ex_1_1                           | 2.50            | C_1_1                       | 1.26            |
| Ex_1_2                           | 1.50            | C_1_2                       | 2.50            |
| Ex_1_3                           | 3.35            | C_1_3                       | .999            |
| Ex_1_4                           | 2.74            | C_1_4                       | 2.50            |
| Ex_1_5                           | 4.02            | C_1_5                       | 1.20            |
| Ex_1_6                           | 3.00            | C_1_6                       | 2.26            |
| Ex_1_7                           | 2.16            | C_1_7                       | .75             |
| Ex_1_8                           | 1.76            | C_1_8                       | 2.26            |
| Ex_1_9                           | 3.25            | C_1_9                       | 2.25            |

The data that appear in Table 11 were analyzed by a repeated measure ANOVA. The results appear in Table 11.

TABLE 11
ANOVA SUMMARY FOR HYPOTHESES 7 AND 8

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>ms</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>138,7465</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Ss</td>
<td>52,5872</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conditions (H vs. L)</td>
<td>3,2423</td>
<td>1</td>
<td>3,2423</td>
<td>1.2484</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>49,3449</td>
<td>17</td>
<td>2,5971</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Ss</td>
<td>86,1593</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trials (Ex vs. C)</td>
<td>38,6027</td>
<td>1</td>
<td>38,6027</td>
<td>17.5172</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Trials x Conditions</td>
<td>12,2590</td>
<td>1</td>
<td>12,2590</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>35,2981</td>
<td>16</td>
<td>2,2037</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results indicate that $H_7$ can not be rejected. No difference appears in persuasibility of subjects with high Characteristic IV and those of low Characteristic IV. Therefore, $H_7$ was not rejected. The results also indicate that individuals of achievement potential and intellectual efficiency were more persuasible under conditions of threat ($p < .001$) than under conditions of no threat. ($H_8$) Therefore, $H_8$ is accepted.

General conclusions and implications based on these results will be discussed in Chapter IV.
CHAPTER IV
CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to investigate whether: (1) subjects scoring high in particular personality characteristics measured by the California Psychological Inventory (C. P. I.) would be more persuasible during a manipulated fear state than subjects scoring low in those personality characteristics, and (2) subjects would be more persuasible during a manipulated fear state than during a non-fear state.

Personality scores, operationalized as representing independent variation during the experiment, served as a basis for matching experimental and control subjects. Indices of fear constituted dependent variation during the experiment.

A fear state was created artificially by giving experimental subjects failing grades on an important examination which counted 33 1/3 per cent of their final grade in a university course. Validity of the experimental manipulation was ascertained during a series of pilot studies. Content analysis of subjects self-reports and observational techniques employing video-tape apparatus, the major validity estimation procedures, indicated that the fear state was created. During the manipulated fear condition, an associate, introduced as a market researcher, presented a persuasive message designed to generate attitude change. A
series of semantic differential scales were used to measure attitude change.

 Statistical analyses on data from the "market research study" indicated that subjects who scored high in the personality characteristic of poise, ascendency and self-assurance were more persuasible than subjects who scored low on the particular characteristic during the fear state. None of the remaining personality characteristics were associated statistically with increased persuasibility during the manipulated fear condition: (1) socialization, maturity, and responsibility, (2) achievement potential and intellectual efficiency, and (3) intellectual and interest modes. Data analyses, after subjects were matched on the basis of C. P. I. scores, revealed that experimental subjects were more persuasible when exposed to the manipulated fear condition than control subjects exposed to the non-fear condition.

 While Chapter III presented the statistical results and decisions involving each hypothesis, this chapter will develop certain general conclusions and discuss the implications of this study. For purposes of depth and clarity, the conclusions will parallel hypotheses concerned with: (1) high and low personality characteristics and persuasibility during conditions of threat, \((H_1, H_3, H_5, H_7)\), and (2) persuasibility during a fear state, \((H_2, H_4, H_6, H_8)\).
General Conclusions

As noted on page 53, $H_1$ was rejected ($p < .10$). It was concluded that subjects who exhibited high characteristics of poise, ascendency, and self-assurance were more persuasible during conditions of threat than subjects who exhibited low characteristics of poise, ascendency, and self-assurance. Therefore, individuals high in certain traits such as (1) dominance, (2) capacity for status, (3) sociability, (4) social presence, (5) self-acceptance, and (6) sense of well being are more persuasible during a fear state, than subjects with low scores in the above traits.

Other characteristics such as (1) socialization, maturity, and responsibility ($H_3$), (2) achievement potential and intellectual efficiency ($H_5$), and (3) intellectual and interest modes ($H_7$), showed no difference in the amount of persuasibility during a fear state between high and low characteristic subjects. (For specific traits inherent within each of the above characteristics, see page 19, Chapter I.)

Therefore, of the hypotheses concerned with high and low personality characteristics and persuasibility during a fear state, only Characteristic I (poise, ascendency, and self-assurance) showed any difference in the amount of persuasibility that took place.

Hypotheses $H_2$, $H_4$, $H_6$, and $H_8$, were concerned with the amount of persuasibility that took place between an experimental fear state and a control normal classroom state. As noted earlier
(pages 52, 56, 58, 60 respectively) hypotheses $H_2$, $H_4$, $H_6$, and $H_8$ were accepted. Therefore it is concluded that all experimental subjects, with respect to each of the four C. P. I. characteristics, were more persuadable during conditions of threat than under conditions of non-threat.

**Implications**

Of the possible implications of this study, three important considerations stand out. The first concerns itself with the independent variable of personality. The second is concerned with the persuasibility during a fear state of individuals high in poise, ascendency, and self-assurance. The third concerns the increased persuasibility of subjects during threatening conditions.

**Personality As An Independent Variable**

The experimenter reported that an independent $t$-test was employed early in the statistical analysis on both experimental and control subjects. The results of the independent $t$-test indicated no significant difference in persuasibility of subjects under a fear state as opposed to subjects under normal classroom conditions. However, when personality was operationalized as an independent variable and subjects were matched according to their personality similarities, a subsequent dependent measure $t$-test indicated that the experimental manipulation constituted a difference in the amount of persuasibility which occurred. The dependent $t$-test indicated that subjects under a fear state were
more persuasible than subjects under normal classroom conditions.

The most obvious reason for the discrepancy is the independent variable of personality. With an independent statistical test, personality was tested as a random variable. As a random variable, personality was part of experimental error. Once personality was "factored out", personality became an independent variable. By treating a random variable as an independent variable, its effect as an extraneous variable is removed from its effect as part of error of random variability. As such, precision due to lack of a large error term is increased. With personality as an independent variable, subjects could be matched, and a dependent t-test could be utilized. While both independent and dependent t-tests are of the same power-efficiency (100 per cent), the dependent t-test requires less variance than an independent t-test between pre-post measurements. This is because the error term is smaller and the experimental variance is larger. As experimental error becomes smaller, uncertainty due to chance diminishes. Therefore, the random variability of using paired subjects from one measuring period to the next was much less than the variability introduced by measuring and comparing different subjects without taking into account the independent variation associated with personality. This reduction of a random variable to an independent variable was enough to make the data which was insignificant by independent analysis, significant by dependent analysis. Therefore, it is concluded that personality is a key independent variable that needs to be taken into consideration within any small
sample experiment.

Perhaps personality is not the only intervening or random variable. Perhaps there are other random variables such as age or sex. Research dealing with other random variables is needed, of course, and would make excellent subsequent studies. The author does not mean to imply that such variables are necessarily less important than personality. This experiment only sought to discover whether one random variable, personality, is a major variable to be considered during a small-sample experiment in communicology. The data and subsequent results indicate that personality makes a difference in terms of data analysis between an insignificant study and a significant study.

Persuasibility During a Fear State

As noted earlier, individuals high in poise, ascendency, and self-assurance were more persuasible than subjects low in poise, ascendency, and self-assurance. The reason for such a result could be inherent within the particular personality characteristic and their relation to the individual's concept of self or ego.

All personality traits deal with inner-psychological states of individuals that are manifested overtly. The traits of Characteristic I differ from the traits of the other three characteristics primarily because they are more concerned with the individual rather than the individual and his relation to others. While two of the traits inherent within Characteristic I,
sociability and social pressure, communicate an idea of a relation-
ship of the self to others, the primary emphasis of both seems to
be manifestations such as individuals temperament and self-con-
fidence. The subsequent traits of Characteristic I are more
concerned with: (1) a sense of personal worth, (2) personal
qualities and attributes leading to status, (3) sense of respon-
sibility and persistence, and (4) freedom from self-doubt and
disillusionment.

If these traits of Characteristic I are correlated with
the individual's concept of self or ego, one reason individuals
high in Characteristic I are persuaded during threat may be
explained in terms of ego-defense mechanisms.

A concept of self or ego may be thought of as a psychological
sphere. The psychological sphere is a cognitive "image" which
may operate as a vehicle for all personality characteristics and
traits. Some individuals may have a strong ego system; others
may not. If personality is the major overt indication of this
covert psychological sphere, it seems logical to assume that in-
dividuals high in certain personalities may have a stronger self-
concept or psychological sphere. The psychological sphere also
may be analogically presented as a sort of "shell." This shell
has varying degrees of hardness. If the shell is quite hard, it
is also brittle, and may chip under certain conditions of stress.
Perhaps the conditions created by the experimental manipulation
in this study were enough to chip the shells of certain individuals.
Perhaps when the individual perceived himself failing an important test, certain defense mechanisms, normally built up, against persuasibility broke down. Perhaps in this state the individual became more persuasible because his inner-psychological defense mechanism was more concerned with repairing the damaged ego shell than "defending" against a persuasive message. Therefore, the ego-defense mechanisms of the individuals were not as strong as they might have been. As such, individuals in this psychological state were able to be influenced more by a persuasive message than individuals with weaker concepts of self.

Research studies tend to support the inferential idea of a correlation between the self, a psychological state, and persuasibility. As noted earlier, studies by Dabbs and Leventhal, (1966), Leventhal and Trembly, (1968), and Kornzweig, (1968) suggest that individuals with high self-esteem are more persuasible by threatening messages than individuals with low self-esteem.

Dynamic field theory also lends itself to the inherent idea of the maintenance of a psychological shell or sphere. The word "dynamic" usually conveys the idea of forces affecting change. Change not only requires the introduction of a stimulus, but also the overcoming of resistance presented by the state of equilibrium represented by the self (Lewin, 1947). The stimulus of this experiment was the persuasive message. The state of equilibrium was represented by the personality of the subject.
Fear offered the device to overcome normal resistance to change. This experiment represented the idea that individuals with a strong state of equilibrium, when disrupted, became vulnerable to the formation of an externally-guided change in equilibrium. Of course, the above is not to say that the subjects lost their normal equilibrium completely; this experiment most likely did not produce a dynamic reaction of such magnitude. This experiment only demonstrates that a fractional chipping of the sense of equilibrium, represented by Characteristic I, enabled the persuader to affect change in the receivers. This change was most manifest in subjects high in the ego-related Characteristic I of poise, ascendency, and self-assurance.

Effect of the Fear State

The final implication of this chapter is concerned with the increased persuasibility of subjects during threatening conditions. The data indicated subjects were more persuasible during threatening conditions than under conditions of non-threat. As noted earlier, Simonson and Lundy (1966), found that "fear" facilitated the acceptance of persuasive messages. They explained their results in terms of a distraction influence exerted by the threatening condition. It seems logical to conclude that fear probably was a distraction variable that broke down normal resistance to persuasion. However, the data generated within this experiment indicated that personality does not necessarily interact with the distraction influence exerted by fear; in all cases
subjects of each personality characteristic were more persuaded during conditions of threat than under conditions of non-threat. Therefore, it seems plausible that the distraction principle postulated by Simonson and Lundy would be an adequate explanation of the results incurred by this experiment.

In conclusion, this experiment demonstrated: (1) personality is possibly a key random variable that should be taken into consideration for any small-sample experiment in communicology, (2) individuals high in characteristics of poise, ascendency, and self-assurance are more persuasible during conditions of threat, than subjects low in characteristics of poise, ascendency, and self-assurance, and (3) subjects are more persuasible during conditions of threat than under conditions of non-threat.
LIST OF REFERENCES
LIST OF REFERENCES

Ax, A. F., "The Physiological Differentiation Between Fear and Anger in Humans." Psychosomatic Medicine, XV (1953), 433-442.


Bulloch, Kent, "An Examination of the Characteristics of Sex Differences as a Variable of Receiver Persuasibility." Paper presented to Dr. Boren's Communication 541 Class at the University of Montana, Missoula, Montana, December, 1969.


---


---


---


### Class I. Measures of Poise, Ascendancy, Self-Assurance and Interpersonal Adequacy

**High Scores**
- Aggressive, confident, persistent, and planful; as being persuasive and verbally fluent; as self-reliant and independent; and as having leadership potential and initiative.
- Ambitious, active, forceful, insightful, resourceful, and versatile; as being ascendant and self-seeking; effective in communication; and as having personal scope and breadth of interests.
- Outgoing, enterprising, and ingenious; as being competitive and forward; and as original and fluent in thought.
- Clever, enthusiastic, imaginative, quick, informal, spontaneous, and talkative; as being active and vigorous; and as having an expressive, ebullient nature.
- Intelligent, outspoken, sharp-witted, demanding, aggressive, and self-centered; as being persuasive and verbally fluent; and as possessing self-confidence and self-assurance.
- Energetic, enterprising, alert, ambitious, and versatile; as being productive and active; and as valuing work and effort for its own sake.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do (dominance)</td>
<td>To assess factors of leadership ability, dominance, persistence, and social initiative.</td>
</tr>
<tr>
<td>2. Cs (capacity for status)</td>
<td>To serve as an index of an individual's capacity for status (not his actual or achieved status). The scale attempts to measure the personal qualities and attributes which underlie and lead to status.</td>
</tr>
<tr>
<td>3. Sy (sociability)</td>
<td>To identify persons of outgoing, sociable, participative temperament.</td>
</tr>
<tr>
<td>4. Sp (social presence)</td>
<td>To assess factors such as poise, spontaneity, and self-confidence in personal and social interaction.</td>
</tr>
<tr>
<td>5. Sa (self-acceptance)</td>
<td>To assess factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action.</td>
</tr>
<tr>
<td>6. Wb (sense of well-being)</td>
<td>To identify persons who minimize their worries and complaints, and who are relatively free from self-doubt and disillusionment.</td>
</tr>
</tbody>
</table>

### Class II. Measures of Socialization, Maturity, Responsibility, and Intrapersonal Structuring of Values

**High Scores**
- Planful, responsible, thorough, progressive, capable, dignified, and independent; as being conscientious and dependable; resourceful and efficient; and as being alert to ethical and moral issues.
- Serious, honest, industrious, moderate, obliging, sincere, and steady; as being conscientious and responsible; and as being self-denying and conforming.
- Calm, patient, practical, slow, self-denying, inhibited, thoughtful, and deliberate; as being strict and thorough in their own work and in their expectations for others; and as being honest and conscientious.
- Enterprising, informal, quick, tolerant, clear-thinking, and resourceful; as being intellectually able and verbally fluent; and as having breadth and varied interests.
- Co-operative, enterprising, outgoing, sociable, warm, and helpful; as being concerned with making a good impression; and as being diligent and persistent.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Re (responsibility)</td>
<td>To identify persons of conscientious, responsible, and dependable disposition and temperament.</td>
</tr>
<tr>
<td>8. So (socialization)</td>
<td>To indicate the degree of social maturity, integrity, and rectitude which the individual has attained.</td>
</tr>
<tr>
<td>10. To (tolerance)</td>
<td>To identify persons with permissive, accepting, and non-judgmental social beliefs and attitude.</td>
</tr>
<tr>
<td>11. Gi (good impression)</td>
<td>To identify persons capable of creating a favorable impression, and who are concerned about how others react to them.</td>
</tr>
</tbody>
</table>
### Class II. Measures of Socialization, Maturity, Responsibility, and Intrapersonal Structuring of Values

Dependable, moderate, tactful, reliable, sincere, patient, steady, and realistic; as being honest and conscientious; and as having common sense and good judgment.

12. Cm (communality) To indicate the degree to which an individual's reactions and responses correspond to the modal ("common") pattern established for the inventory.

Impatient, changeable, complicated, imaginative, disorderly, nervous, restless, and confused; as being guileful and deceitful; insensitive and forgetful; and as having internal conflicts and problems.

### Class III. Measures of Achievement Potential and Intellectual Efficiency

Capable, co-operative, efficient, organized, responsible, stable, and sincere; as being persistent and industrious; and as valuing intellectual activity and intellectual achievement.

13. Ac (achievement via conformance) To identify those factors of interest and motivation which facilitate achievement in any setting where conformance is a positive behavior.

Coarse, stubborn, aloof, awkward, insecure, and opinionated; as easily disorganized under stress or pressures to conform; and as pessimistic about their occupational futures.

Mature, forceful, strong, dominant,demanding, and foresighted; as being independent and self-reliant; and as having superior intellectual ability and judgment.

14. Ai (achievement via independence) To identify those factors of interest and motivation which facilitate achievement in any setting where autonomy and independence are positive behaviors.

Inhibited, anxious, cautious, dissatisfied, dull, and wary; as being submissive and compliant before authority; and as lacking in self-insight and self-understanding.

Efficient, clear-thinking, capable, intelligent, progressive, planful, thorough, and resourceful; as being alert and well-informed; and as placing a high value on cognitive and intellectual matters.

15. Ie (intellectual efficiency) To indicate the degree of personal and intellectual efficiency which the individual has attained.

Cautious, confused, easygoing, defensive, shallow, and unambitious; as being conventional and stereotyped in thinking; as being highly concerned with personal pleasure and diversion.

### Class IV. Measures of Intellectual and Interest Modes

Observant, spontaneous, quick, perceptive, talkative, resourceful, and changeable; as being verbally fluent and socially ascendant; and as being rebellious toward rules, restrictions, and constraints.

16. Py (psychological-mindedness) To measure the degree to which the individual is interested in, and responsive to, the inner needs, motives, and experiences of others.

Apathetic, peaceable, serious, cautious, and unassuming; as being slow and deliberate in tempo; and as being overly conforming and conventional.

Insightful, informal, adventurous, confident, humorous, rebellious, idealistic, assertive, and egotistic; as being sarcastic and cynical; and as highly concerned with personal pleasure and diversion.

17. Fx (flexibility) To indicate the degree of flexibility and adaptability of a person's thinking and social behavior.

Deliberate, cautious, worrying, industrious, guarded, mannerly, methodical, and rigid; as being formal and pedantic in thought; and as being overly deferential to authority, custom, and tradition.

Appreciative, patient, helpful, gentle, moderate, persevering, and sincere; as being respectful and accepting of others; and as behaving in a conscientious and sympathetic way.

18. Fe (femininity) To assess the masculinity or femininity of interests. (High scores indicate more feminine interests, low scores more masculine.)

Outgoing, hard-headed, ambitious, masculine, active, robust, and restless; as being manipulative and opportunistic in dealing with others; blunt and direct in thinking and action; and impatient with delay, indecision, and reflection.
Appendix B

Test Weight Questionnaire

This is a question that in no way will affect the grade you receive in this class.

Certain graduate students and faculty members are interested in your honest evaluation of a certain aspect of testing procedures at the University of Montana.

On the scale below you will notice percentages from 5 per cent to 100 per cent. You will also notice blanks opposite each percentile. Please answer the following question by placing a "x" in the appropriate blank opposite the percentile.

The Question:

In your opinion, how much weight should the final examination have on your final grade?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Blank</th>
<th>Percentage</th>
<th>Blank</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td></td>
<td>.50%</td>
<td></td>
</tr>
<tr>
<td>95%</td>
<td></td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>90%</td>
<td></td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>85%</td>
<td></td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>75%</td>
<td></td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>70%</td>
<td></td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>65%</td>
<td></td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>55%</td>
<td></td>
<td>5%</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

Taylor Manifest Anxiety Scale

The statements in this booklet represent experiences, ways of doing things, or beliefs or preferences that are true of some people but are not true of others. You are to read each statement and decide whether or not it is true with respect to yourself. If it is true or mostly true, underline the letter T opposite the statement you are answering. If the statement is not usually true or is not true at all, blacken, that is, underline the letter F opposite the statement you are answering. You must answer the statement as carefully and honestly as you can. There are no correct or wrong answers; we are interested in the way you work and in the things you believe.

Remember: Underline the letter T if the statement is true or mostly true; underline the letter F if the statement is false or mostly false. Be sure the letter you underline is in the row numbered the same as the item you are answering. Mark each item as you come to it; be sure to mark one answer for each item.

Here is an example: I would like to be an artist. T F

If you would like to be an artist, that is, if the statement is true as far as you are concerned, you would underline the letter T. If the statement is false, you would underline the letter F.

If you have any questions, please ask them now.

1. I like mechanics magazines. 1. T F
2. I have a good appetite. 2. T F
3. I wake up fresh and rested most mornings. 3. T F
4. I do not tire quickly. 4. T F
5. I am often sick to my stomach. 5. T F
6. I like to read newspaper articles on crime. 6. T F
7. I am about as nervous as other people. 7. T F
8. My daily life is full of things that keep me interested. 8. T F
9. I am about as able to work as I ever was. 9. T F
10. There seems to be a lump in my throat much of the time. 10. T F
11. I have very few headaches. 11. T F
12. I enjoy detective or mystery stories.  
13. I worry quite a bit over possible troubles.  
15. I am often afraid that I am going to blush.  
16. I have nightmares every few nights.  
17. My hands and feet are usually warm enough.  
18. I sweat very easily even on cold days.  
19. When embarrassed I often break out in a sweat which is very annoying.  
20. I do not often notice my heart pounding and I am seldom short of breath.  
21. I feel hungry almost all the time.  
22. Often my bowels don't move for several days at a time.  
23. I have a great deal of stomach trouble.  
24. At times I lose sleep over worry.  
25. My sleep is restless and disturbed.  
26. I often dream about things I don't like to tell other people.  
27. I am easily embarrassed.  
28. My feelings are hurt easier than most people.  
29. I often find myself worrying about something.  
30. I wish I could be as happy as others.  
31. I am usually calm and not easily upset.  
32. I cry easily.  
33. I feel anxious about something or someone almost all of the time.  
34. I am happy most of the time.  
35. It makes me nervous to have to wait.
36. At times I am so restless that I cannot sit in a chair for very long. 36. T F
37. Sometimes I become so excited that I find it hard to get to sleep. 37. T F
38. I have often felt that I faced so many difficulties I could not overcome them. 38. T F
39. At times I have been worried beyond reason about something that really did not matter. 39. T F
40. I do not have as many fears as my friends. 40. T F
41. I have been afraid of things or people that I know could not hurt me. 41. T F
42. I certainly feel useless at times. 42. T F
43. I find it hard to keep my mind on a task or job. 43. T F
44. I am more self-conscious than most people. 44. T F
45. I am the kind of person who takes things hard. 45. T F
46. I am a very nervous person. 46. T F
47. Life is often a strain for me. 47. T F
48. At times I think I am no good at all. 48. T F
49. I am not at all confident of myself. 49. T F
50. At times I feel that I am going to crack up. 50. T F
51. I don't like to face a difficulty or make an important decision. 51. T F
52. I am very confident of myself. 52. T F
APPENDIX D

The Cromwell-Oaks Predictive Speech Efficiency Test

Directions: The questions to follow are of a true-false variety. Answer the question by placing either a t for true or a f for false in the space provided.

1. To adapt yourself at first to participating in classroom discussion, you should remain silent if the subject of the discussion does not interest you.

2. The display of words for their own sake characterizes the "gibberer."

3. The most important rule to follow for effective participation in classroom discussion is to comment on every topic presented.

4. Fluency, poise, control of voice, and coordinated movements of the body mark a skillful speaker.

5. An extemporaneous speech is sometimes planned and often memorized.

6. Effective delivery depends solely on being natural and looking at the audience.

7. Public speaking is described as practical because it is practiced in society.

8. Vocalized labels are useful for ordering one's environment.

9. Self-references, internal conversations, and self-testing enable a person to manifest his self-identity.

10. Words probably make us what we are.

11. The pleasure associated with the activity and sensory vibrations of speaking is generally confined to infants and deaf children.

12. Children use pre-questions to probe their environment in detail.

13. "Social facilitation" refers to a speaker's manner.

14. Modern psychologists are fairly certain that man's reasoning faculty determines his beliefs and actions.

15. Words omit more information than they contain.
16. Knowledge gained from experimental studies is invariably reliable information about speech communication.

17. Beliefs and facts influence attitudes.

18. A successful speech must have a purpose that is precise and intelligible.

19. One's perception generally remains unaffected by a communication.

20. You can entertain an audience by changing their attitudes toward social issues.

21. Persuasion relies only on evidence and argumentation.

22. Communication is impossible when the audience has fixed beliefs.

23. Audience attitudes do not ordinarily change during a speaker's presentation.

24. Physical movement can serve as a transitional device between ideas in one's speech.

25. Conventional gestures are a sort of universal sign language.

26. Since bodily communication must be natural, it is unwise to practice gestures and movements.

27. Strictly speaking there is no such thing as a vocal communication.

28. Vocal climaxes may use either increased or decreased vocal power.

29. The didactic method of assembling the forms of support consists of stating the conclusion first, then presenting the proof, and finally restating your conclusion.

30. A systematic arrangement of your ideas benefits only the audience.

31. Subpoints should receive an emphasis that is equal to but not exceeding the emphasis given to a principal idea.

32. A rough draft outline can be used as a check on all materials before the final outline is finished.

33. Most people agree on the meanings of words such as "cheap" and "slow."
34. People differ in the degree to which they are sensitive to different types of imagery.

35. Use a summary ending for your speech when your purpose is to arouse enthusiasm or to deepen a feeling of respect.

36. Attention involves focusing a listener's mind on several elements of incoming stimuli.

37. In an informative speech, about one third of the available time should be devoted to the body of the speech.

38. The purpose of persuasive speaking is to gain understanding.

39. A persuasive speech must make a direct appeal to the listeners if it is to succeed.

40. Generally, people enjoy public recognition of their imitation and pride motives.

41. A speaker who wishes to secure good will must make a definite request for the approval of his audience.

42. Members of a discussion group must be reasonable about compromising their opinions.

43. A discussion leader usually has the right to control the direction and conclusion of a problem.

44. Communication research has developed methods of questioning that are useful in learning about the speaking process.

45. How we talk about a process probably conditions how we think about it.

46. The concept of process stresses the unidirectional nature of communication.

47. Within an act of communication, determining who the speaker and listeners are is an easy task.

48. If an audience is largely equalitarian, a well-reasoned message probably will have little persuasive impact.

49. Communication research will eventually establish the truth or falsity of value statements about the speaking process.

50. Communication research can assess the ethical and aesthetic views that people hold toward the speaking process.
APPENDIX E

Dialogue Proceeding Administration of TMAS

Instructor: Before I hand back your predictive speech efficiency exams, I would like you to give your attention to Dr. Baker who would like to talk to you.

Dr. Baker: Thank you. I am interested in certain characteristics of Communication 11 students, and would like to use this time to gain some further information. (motioning) Could you please space yourselves at least two seats apart at this time.

(enter messenger, another professor)

Messenger: Dr. Baker, could I please see you for a moment?

(exit Dr. Baker and messenger, short interlude)

(enter Dr. Baker)

Dr. Baker: Mr. , would you mind if I left for a few minutes, some business has come up that I must take care of.

Instructor: Sure Dr. Baker.

(exit Dr. Baker)

While Dr. Baker is gone, I'm going to hand back your predictive speech tests. Remember that the grade you receive on this test is indicative of the grade you will receive in this class. Also, remember that today is the last official day to drop class. (starts handing back speech tests)

(enter Dr. Baker)

Dr. Baker: Apologizes to Mr. . Asks students to place all material off their desks. He then administers the TMAS.
### Content Analysis Categories and Data

<table>
<thead>
<tr>
<th>Subjects</th>
<th>TMAS Score</th>
<th>Physical</th>
<th>Psychological</th>
</tr>
</thead>
<tbody>
<tr>
<td>S₁</td>
<td>37</td>
<td>What if I'm stupid.</td>
<td>two years H.S., wasted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I was in a class of</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>geniuses.</td>
</tr>
<tr>
<td>S₂</td>
<td>22</td>
<td>The test didn't worry me.</td>
<td>Immediately</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I didn't feel any anxiety.</td>
<td>felt resentful.</td>
</tr>
<tr>
<td>S₃</td>
<td>20</td>
<td>It gave me incentive.</td>
<td>My first reaction was</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>one of depression.</td>
</tr>
<tr>
<td>S₄</td>
<td>15</td>
<td>I was really worried.</td>
<td>I was a little</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>depressed.</td>
</tr>
<tr>
<td>S₅</td>
<td>32</td>
<td>I was very upset and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ashamed.</td>
<td></td>
</tr>
<tr>
<td>S₆</td>
<td>19</td>
<td>I began to perspire and</td>
<td>My immediate reaction was one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>my stomach was upset.</td>
<td>of embarrassment and extreme</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>disappointment.</td>
</tr>
<tr>
<td>S₇</td>
<td>23</td>
<td>My stomach was upset.</td>
<td>My embarrassment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>turned to anger.</td>
</tr>
<tr>
<td>S₈</td>
<td>26</td>
<td>Even a slight bit of shock</td>
<td>My main feeling was</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of doing so poorly.</td>
</tr>
<tr>
<td>S₉</td>
<td>15</td>
<td>My stomach dropped</td>
<td>It scared me!</td>
</tr>
<tr>
<td></td>
<td></td>
<td>about 3 feet.</td>
<td></td>
</tr>
<tr>
<td>S₁₀</td>
<td>14</td>
<td>I got what I thought I should have.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G

Dialogue Proceeding Administration of MTACS

Instructor: Before I hand back your Psychology exams, I would like you to give your attention to Mr. Poirot from Market Research, Inc. who would like to work with you.

Mr. Poirot: Thank you. I am interested in the evaluations college students hold to certain products. I would like to use you to gain some data. (motioning) Could you space yourselves at least two seats apart at this time.

(Messenger enters)

Messenger: Mr. Poirot, could I see you for a moment?

(Exit Poirot and Messenger) (Short interlude) (Enter Mr. Poirot)

Mr. Poirot: Mr. , would you mind if I left for a few minutes, some business has come up that I must take care of.

Instructor: Sure Mr. Poirot.

(Exit Mr. Poirot)

Instructor: I am going to hand back your tests. You will notice the normalized breakdown of the test scores on the first page. Please remember that these test scores reflect 1/3 of your entire grade. In general, however, I am fairly pleased with the overall results.

(Enter Mr. Poirot)

Mr. Poirot: (Apologized to Mr. ) Asks student to place all material off desks. --goes through persuasive messages. (See General Procedures page 49)
APPENDIX H

Outline of Lecture on Fear

I. When certain defense mechanisms to painful or threatening stimuli go into a human reaction mechanism, a certain pattern of responses occur as unconditioned reactions.
   A. When these reactions, develop in the presence of a stimulus which may be perceived as realistically threatening, fear rather than anxiety may be produced.
   B. Anxiety, although rather somewhat loosely defined, is generally used to refer to the same reaction pattern as fear when it is made in the presence of stimuli which are not intrinsically threatening. Anxiety, then, refers to the fear response when it is made to stimuli which elicit its physiological manifest reactions on the basis of past learning.
   C. Tonight we are here to look for some of the manifest reactions of a heightened anxiety or fear state. First, I will inform you as to the overt signs of anxiety and then we will view a videotape.

II. There are several means for measuring an anxiety or fear state; subjective reports may be utilized, or certain psychological tests may also be used.
   A. However, to measure overt anxiety or fear, certain overt, verbal, or non-verbal behaviors may be analyzed.
   B. Tonight, we will deal with certain non-verbal behaviors characteristic of fear or anxiety reactions. This activity will be confined to the face and facial expression and certain motor activities of the body.

I. First let us discuss certain face and facial expressions.
   a. I'm sure we all realize that the face is divided into certain components such as the mouth, nose, eyes, and eyelids. What you may or may not know, is that the facial features may communicate certain moods to observers. Tonight you will be observers and the mood to be communicated will be fear.
   b. You will notice from the pictomorphs certain characteristics of individuals who might exhibit characteristics of anxiousness or fearfulness. These characteristics include:
      1) medially upturned eye brows.
      2) medially downturned eyebrows.
      3) downcurved mouth.
      4) straight mouth.
   Notice, that these characteristics may be combined with one another and also four different sets of eyes. These characteristics include:
      1) the dot.
      2) open.
      3) half-closed.
      4) closed.
c. Now then, we have a total number of eight facial combinations. These faces will be referred to as letters from now on.

2. The second means of identification of fear includes certain motor activities.
   a. Motor activity includes several components:
      1. Any hyperactivity associated with the limbs or appendages of the body may be characteristic of the psychological state of anxiety.
      2. These include:
         a. wiping the forehead.
         b. touching the cheeks of the face.
         c. chewing finger or fingernails.
         d. covering the mouth.
         e. moving head from side to side.
         f. moving body from side to side.
         g. moving eyes rapidly.
         h. moving fingers rapidly
         i. any extra hyperactivity.
APPENDIX I

Facial Expression Reflective of Fear

A   B   C

D   E   F

G   H
APPENDIX J

Motor Activities Associated With Fear

1. Wiping the forehead.
2. Touching the cheeks of the face.
3. Chewing finger or fingernails.
4. Covering the mouth.
5. Moving head from side to side.
6. Moving body from side to side.
7. Moving eyes rapidly.
8. Moving fingers rapidly.
9. Any extra hyperactivity (explain if used).
EXPLANATION

Please Read Carefully

This is a survey to find out what opinions consumers have on developments from new product research. This is not a "test" or "examination." There are no "right" or "wrong" answers to these questions. They are just matters of personal opinion on which some people have one idea while other people have a different idea. What we want is just your own honest, personal opinion on these questions, given to the best of your knowledge and understanding.

Occupation ________________

Age (optional) ____________

Check appropriate square:

Male [ ] Female [ ]

TURN THIS PAGE UNDERNEATH WHEN COMPLETED ...

DO NOT LOOK BACK
APPENDIX L

Scales of MRACS

FORM NUMBER 1, 2, 3, **APPENDIX — Sample Questionnaire**

INSTRUCTIONS

Please rate the separate questions on the scales that follow. Note that there are seven steps on each scale.

A mark at one end of the scale means "extremely." A mark in the position second from the end means "quite." A check in the position third from the end means "slightly." A check in the middle position on any scale means that you are neutral or undecided or do not feel that the scale can be answered.

Only one position should be checked on any scale, but please check all scales. Place checks on the lines, not on the dividers.

Which stocking do you think has the better feel?
Brand L ___: ___: ___: ___: ___: ___: ___: Brand A

Which stocking do you think has the better weight?
Brand L ___: ___: ___: ___: ___: ___: ___: Brand A

Which stocking do you think has the better texture?
Brand L ___: ___: ___: ___: ___: ___: ___: Brand A

Which weave do you like better?
Brand L ___: ___: ___: ___: ___: ___: ___: Brand A

Which stocking would have the better fit?
Brand L ___: ___: ___: ___: ___: ___: ___: Brand A

Which stocking would be more durable?
Brand L ___: ___: ___: ___: ___: ___: ___: Brand A

Which stocking would be the better "buy" for the money?
Brand L ___: ___: ___: ___: ___: ___: ___: Brand A

How would you rate your general confidence in the decisions you have made in the above scales?
Confident ___: ___: ___: ___: ___: ___: ___: Not Confident

TURN THIS PAGE UNDERNEATH WHEN COMPLETED....DO NOT LOOK BACK
APPENDIX M

MRACS Messages

MESSAGE ONE

"Fibers are today one of the most important considerations when purchasing nylon stockings. This is why Brand L is such a breakthrough to the consumer. A product of recent industrial research, the fiber in Brand L is called Cantril and is a wrinkle-free crimp nylon that's designed to fit and feel better. Unlike the other brand, it is not as coarse nor as given to sagging. It will sell at slightly above today's stocking prices, yet the increase will be justified by its elegant appearance, fit and feel. The stocking represents the culmination of twenty years of research to find the most elegant look and feel of any stocking on the market."

Experimenter summarizes: "In summary then, Brand L is noted particularly for its fit and elegant feel ...."

MESSAGE TWO

"Brand A also represents the culmination of highly-innovative research within the nylon industry. The fiber in Brand A is called Agilar and is far more resistant to runs and snags than the other brand. This stocking design utilizes a unique new contour construction which promises to combine outstanding fit with high durability. Research, in fact, has shown Brand A is far more durable than any stocking on the market. This gain in durability is not at the expense of fit. The name Agilar also refers to another quality: the fiber's multi-directional stretch quality will provide greater freedom and agility of movement."

Experimenter summarizes: "In summary then, this brand, Brand A, is noted particularly for its fit and durability ...."
PROFILE SHEET FOR THE California Psychological Inventory:

Name ___________________________ Age _____ Date Tested ____________

Other Information ___________________________

\[ D^2 = 325 \]

Ex  20 19  20 41  24 35  23 31  26 24  16 25  25 21  41 18  13 12
C  27 13  25 34  24 36  24 27  28 15  27 23  22 22  35 17  14 18
PROFILE SHEET FOR THE California Psychological Inventory:

Name ___________________________ Age ___________________________

Date Tested ___________________________

Other Information ___________________________

\[ D^2 = 423 \]

Ex  21  12  33  34  26  22  32  18  16  19  23  21  22  19  10  11  13

C   26  22  23  33  19  29  22  30  13  13  12  23  22  18  36  12  16  9

Ex = ______________

C = ______________
## APPENDIX O

**Matched Subjects of High, Low Categories of C. P. I.**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Characteristic I</th>
<th>Characteristic II</th>
<th>Characteristic III</th>
<th>Characteristic IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Ex1, C1</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ex2, C2</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex3, C3</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ex4, C4</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex5, C5</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex6, C6</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex7, C7</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex8, C8</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex9, C9</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex10, C10</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex11, C11</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex12, C12</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex13, C13</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex14, C14</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex15, C15</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex16, C16</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex17, C17</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex18, C18</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex19, C19</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ex20, C20</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>