

8-11-1958

# A Determiner of the Centrality of a Trait in Forming Impressions of Others

Joseph G. Hill

Follow this and additional works at: [https://digitalrepository.unm.edu/psy\\_etds](https://digitalrepository.unm.edu/psy_etds)

 Part of the [Psychology Commons](#)

---

## Recommended Citation

Hill, Joseph G.. "A Determiner of the Centrality of a Trait in Forming Impressions of Others." (1958).  
[https://digitalrepository.unm.edu/psy\\_etds/193](https://digitalrepository.unm.edu/psy_etds/193)

This Thesis is brought to you for free and open access by the Electronic Theses and Dissertations at UNM Digital Repository. It has been accepted for inclusion in Psychology ETDs by an authorized administrator of UNM Digital Repository. For more information, please contact [disc@unm.edu](mailto:disc@unm.edu).



UNIVERSITY OF NEW MEXICO-UNIVERSITY LIBRARIES



A14429 084870

378.789

Un30hi

1959

cop. 2



IDENTIFICATION OF THE  
CENTRAL PART OF THE  
HILL



THE LIBRARY  
UNIVERSITY OF NEW MEXICO



Call No.

Accession  
Number

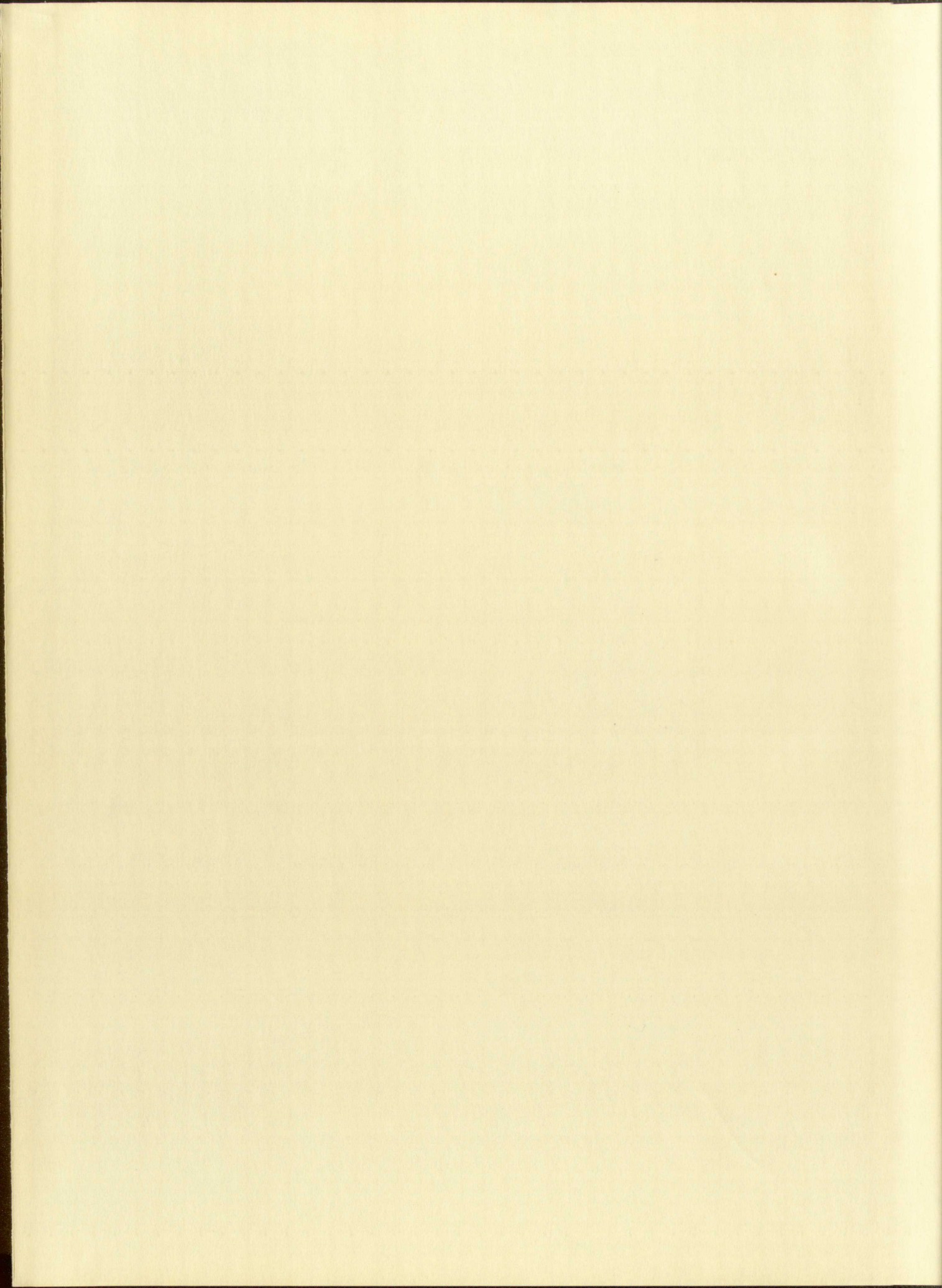
378.789  
Un30hi  
1959  
cop. 2

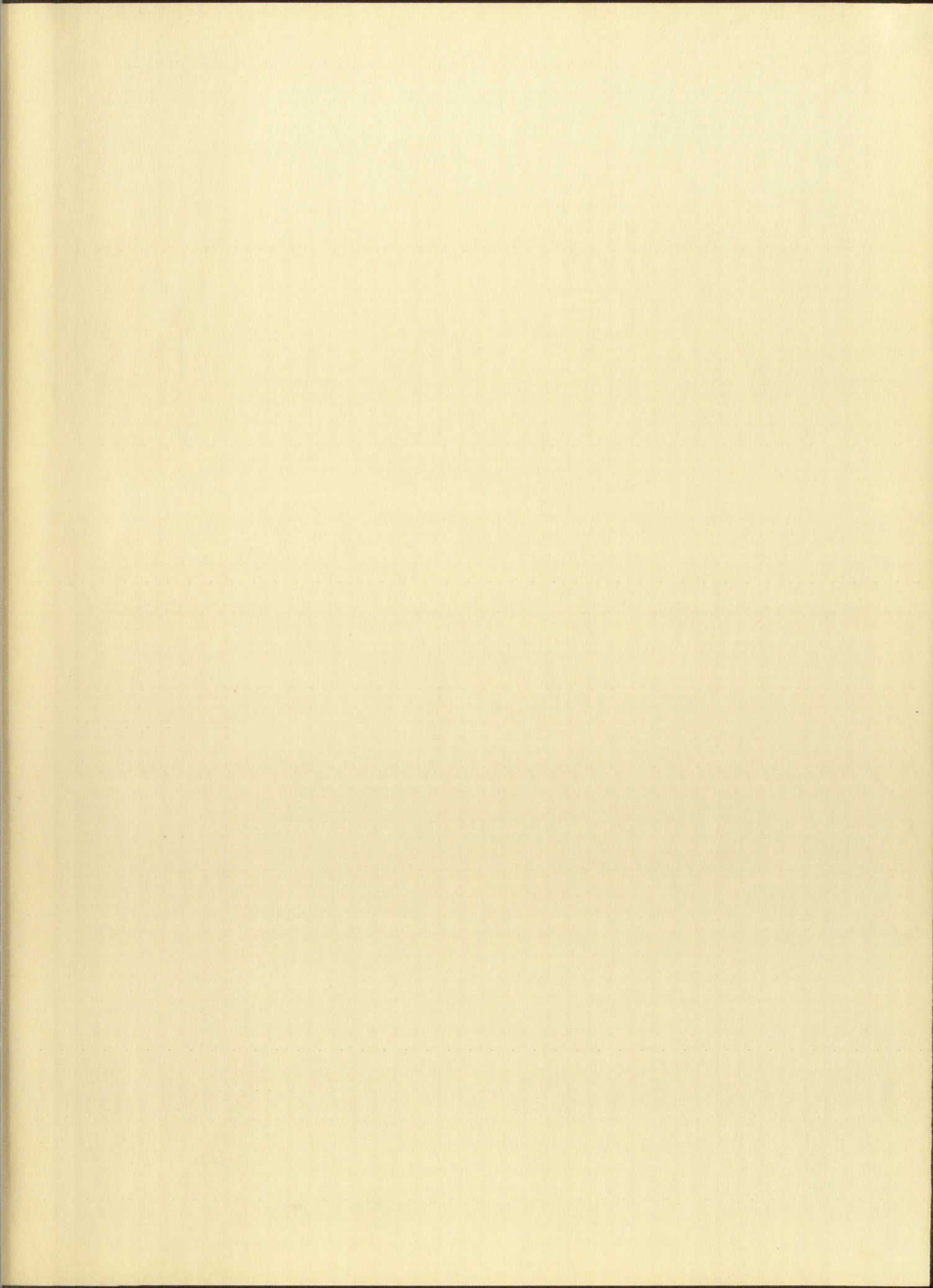
237977



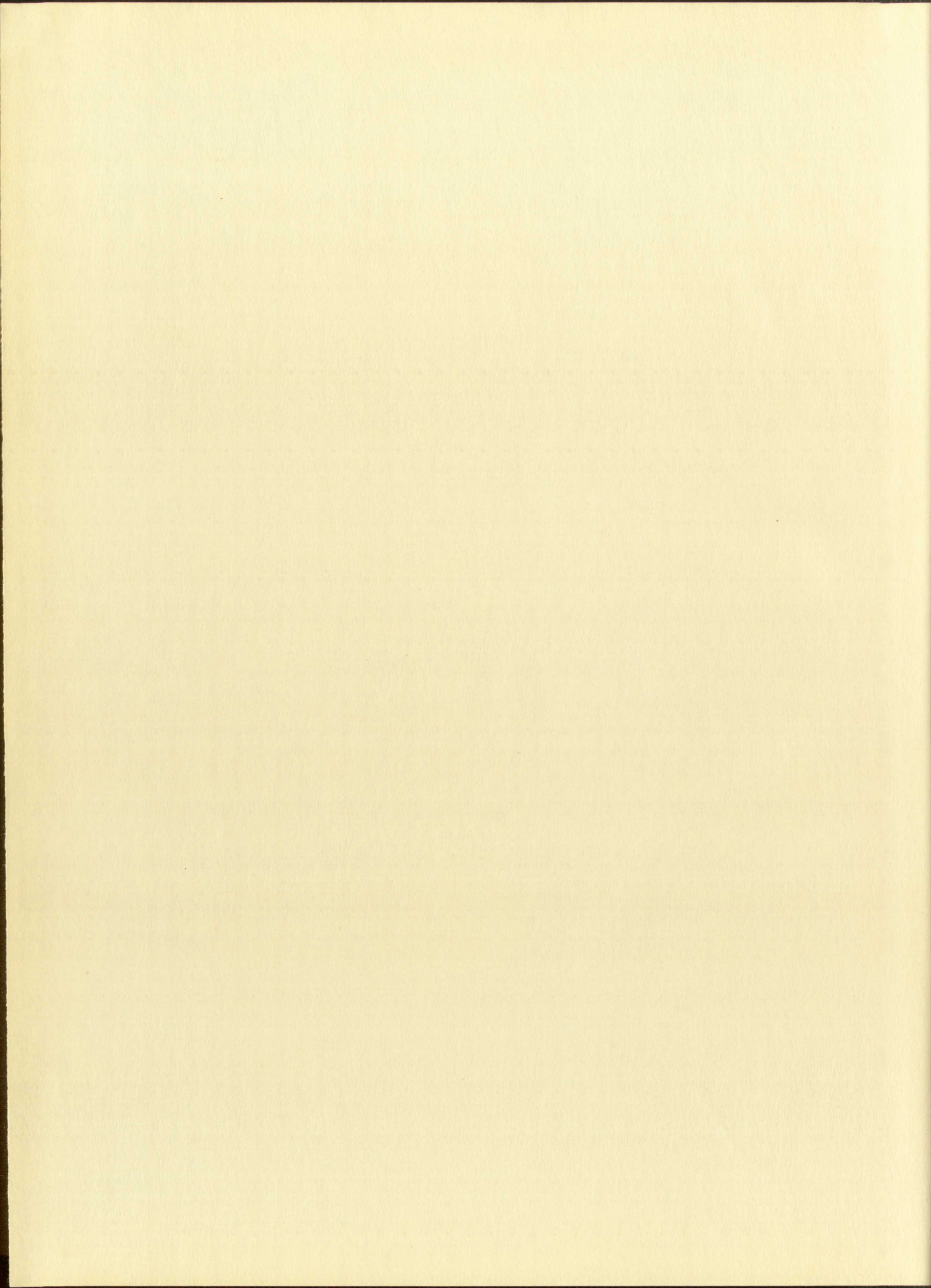














Wenatchee  
Erasable Bond  
25% COTTON FIBER



Warrant  
Enables Board  
SOUTH BOSTON FIBER



UNIVERSITY OF NEW MEXICO LIBRARY

MANUSCRIPT THESES

Unpublished theses submitted for the Master's and Doctor's degrees and deposited in the University of New Mexico Library are open for inspection, but are to be used only with due regard to the rights of the authors. Bibliographical references may be noted, but passages may be copied only with the permission of the authors, and proper credit must be given in subsequent written or published work. Extensive copying or publication of the thesis in whole or in part requires also the consent of the Dean of the Graduate School of the University of New Mexico.

This thesis by .....Joseph G. Hill.....  
has been used by the following persons, whose signatures attest their acceptance of the above restrictions.

A Library which borrows this thesis for use by its patrons is expected to secure the signature of each user.

NAME AND ADDRESS

DATE

William Weber Dept. 4-4-62



MANUSCRIPT LIBRARY

Unpublished manuscripts in the Manuscript Library are  
not to be loaned, but are to be used only for reference in  
the library. The author, his agent, or his publisher, or  
any other person, shall not be held responsible for any  
loss, damage, or destruction of the manuscript or for any  
other loss or injury to the manuscript. The University of  
New Mexico shall not be held responsible for any loss or  
injury to the manuscript.

This book is the property of the University of New Mexico  
and is loaned to you for your use only. It is not to be  
loaned to any other person, nor is it to be used for  
any other purpose. The University of New Mexico shall  
not be held responsible for any loss or injury to the  
book.

NAME AND ADDRESS \_\_\_\_\_  
DATE \_\_\_\_\_



A Determiner of the Centrality of a Trait  
in Forming Impressions of Others

---

A Thesis  
Presented to  
the Faculty of the Department of Psychology  
The University of New Mexico

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

---

by  
Joseph G. Hill  
August 1958





A Department of the  
Institute of

the Faculty of the  
The University of

In the  
of the

MILLERS PAIRS  
ERASE  
COTTON CONTENT



This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of the University of New Mexico in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

E. C. Casletter  
DEAN

DATE

August 11, 1958

Thesis committee

David T. Benedict  
CHAIRMAN

G. M. Peterson

Ralph Shuman



This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of the University of New Mexico in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

[Signature]  
NAME

August 11, 1928  
DATE

Thesis committee

[Signature]  
CHAIRMAN

[Signature]

[Signature]



378.789  
Un30 hi  
1959  
cop. 2

TABLE OF CONTENTS

SECTION . . . . .	PAGE
INTRODUCTION. . . . .	1
THE WORK OF ASCH. . . . .	7
THE PROBLEM . . . . .	12
Hypotheses . . . . .	13
METHOD. . . . .	13
Research Design. . . . .	13
Method of Pilot Study. . . . .	14
Results of Pilot Study . . . . .	14
Conclusions from Pilot Study . . . . .	15
Determining the Sociability of Subjects. . . . .	15
Procedure. . . . .	17
Instructions . . . . .	19
Scoring. . . . .	21
RESULTS . . . . .	21
DISCUSSION. . . . .	36
Limitations of Findings. . . . .	36
Implications . . . . .	39
SUMMARY . . . . .	39
REFERENCES. . . . .	43



378.787  
24306  
1957  
off

TABLE OF CONTENTS

SECTION . . . . .

INTRODUCTION . . . . .

THE WORK OF ASCH . . . . .

THE PROBLEM . . . . .

Hypotheses . . . . .

METHOD . . . . .

Research Design . . . . .

Method of Pilot Study . . . . .

Results of Pilot Study . . . . .

Conclusions from Pilot Study . . . . .

Determining the Feasibility of Experiment . . . . .

Procedure . . . . .

Instructions . . . . .

Scoring . . . . .

RESULTS . . . . .

DISCUSSION . . . . .

Limitations of Findings . . . . .

Implications . . . . .

SUMMARY . . . . .

REFERENCES . . . . .

COLLON CONTENT  
EZEVA SE  
LITERS PARTS



LIST OF TABLES

TABLE	PAGE
1. Asch's Check List of Traits . . . . .	9
2. Percentages of Subjects Attributing Traits under Six Different Experimental Conditions . . . . .	10
3. Revised Trait Check List Used in the Main Experiment	16
4. Distribution of Sociability Scores on the Gordon Per- sonal Profile of 232 Subjects . . . . .	18
5. Numbers of Subjects in the High-, Middle-, and Low- Sociability Groups Attributing Traits under the Sociable and Unsociable Conditions, with Diffe- rence Scores . . . . .	22
6. Two-way Analysis of Variance on the Difference Sco- res in Table 5 . . . . .	28
7. The Average Difference Scores for All Subjects, for each Trait, in Order of Magnitude . . . . .	29
8. Mean Number of All Subjects Attributing Traits under the Sociable and Unsociable Conditions . .	35



LIST OF TABLES

1.	Asch's Check List of Traits . . . . .	9
2.	Percentages of Subjects Attributing Traits under Six Different Experimental Conditions . . . . .	10
3.	Revised Trait Check List Used in the Main Experiment . . . . .	10
4.	Distribution of Sociability Scores on the Gordon Per- sonal Profile of 232 Subjects . . . . .	10
5.	Numbers of Subjects in the High, Middle, and Low Sociability Groups Attributing Traits under the Sociable and Unsociable Conditions, with Dif- ference Scores . . . . .	22
6.	Two-way Analysis of Variance on the Difference Scores as in Table 5 . . . . .	23
7.	The Average Difference Scores for All Subjects, for each Trait, in Order of Magnitude . . . . .	29
8.	Mean Number of All Subjects Attributing Traits under the Sociable and Unsociable Conditions . . . . .	35



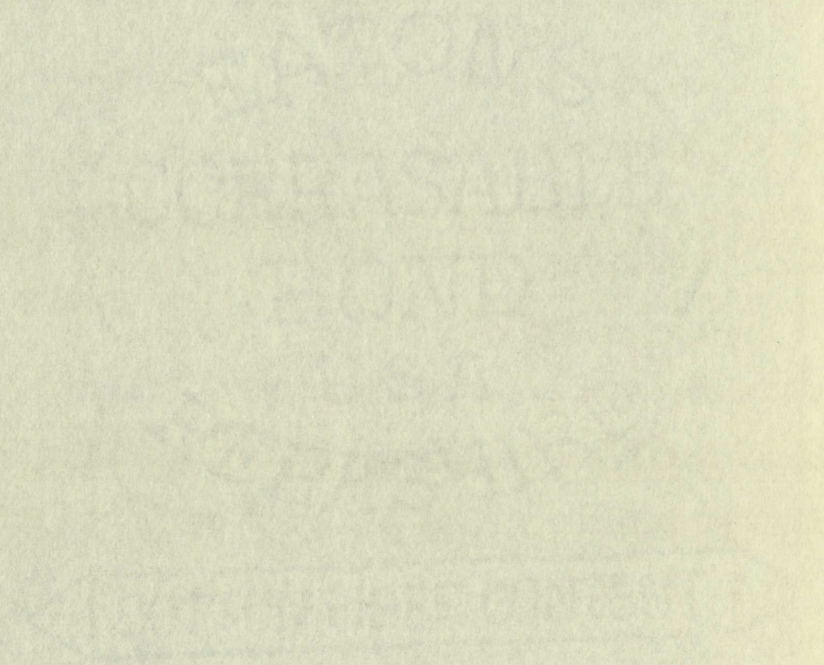
## LIST OF FIGURES

FIGURE	PAGE
1. The three main possible outcomes of the experiment	20
2. The mean difference scores for all subjects on the 20 traits, arranged in order of magnitude . . . .	30
3. The mean difference scores for the high-, middle-, and low-sociability groups . . . . .	32
4. The mean number of high-, middle-, and low-socia- bility subjects attributing traits under the sociable and unsociable conditions . . . . .	34
5. The mean number of all subjects attributing traits under the sociable and unsociable conditions . .	37



FIGURE

1. The three main possible responses of the participants
2. The mean difference scores for all subjects in the
3. The mean difference scores for the high, middle, and low
4. The mean number of high-, middle-, and low-ability
5. The mean number of all subjects in the high-, middle-, and low-ability





EXEMPT  
MILITARY SERVICE

A Determiner of the Centrality of a Trait  
in Forming Impressions of Others

Joseph G. Hill

University of New Mexico

Introduction

This paper will present experimental findings in connection with a certain aspect of the perception of others. A survey of the literature, to be presented in this section, will lead up to a formal statement of the problem.

Literature dealing with the perception of others may be classified into four general categories with subsections as follows.

Characteristics of the Judge

The Ability to Judge Others as a Personality Trait. According to Taft (28) the cornerstones of the ability to judge others are (1) appropriate judgmental norms (judge and subject background similarity), (2) judging ability (general and social intelligence), and (3) motivation (to make accurate judgments), which is probably the most important. By means of an experiment Adams (1) arrived at the paradoxical finding that the one who is the most interested in others understands himself best and that the one who is most interested in himself best understands others. Estes (6) gave more concrete information: judges who have strong interests in either the dramatic or graphic arts are more successful than those whose dominant interests are in the



A Determiner of the Centrality of a Trait  
in Forming Impressions of Others  
Joseph G. Hill  
University of New Mexico

Introduction

This paper will present experimental findings in connection with a certain aspect of the perception of others. A survey of the literature, to be presented in this section, will lead up to a formal statement of the problem.

Literature dealing with the perception of others may be classified into four general categories with subsections as follows.

Characteristics of the Judge

The Ability to Judge Others as a Personality Trait. According to Talt (28) the characteristics of the ability to judge others are (1) appropriate judgmental norms (judge and subject backgrounds similarity), (2) judging ability (general and social intelligence), and (3) motivation (to make accurate judgments), which is probably the most important. By means of an experiment Adams (1) arrived at the paradoxical finding that the one who is the most interested in others understands himself best and that the one who is most interested in himself best understands others. Estes (6) gave more concrete information: Judges who have strong interests in either the dramatic or graphic arts are more successful than those whose dominant interests are in the



sciences and philosophy. He noted that some traits are conspicuously well-judged, namely (1) inhibition-impulsion, (2) apathy-intensity, (3) placidity-emotionality, and (4) ascendancy-submission.

The Influence of the Personality of the Judge on the Process of Perceiving Others. Fensterheim and Tresselt (7) investigated the influence of the individual's value system on his perception of another person. The hypothesis that the perceiver's own major values will be projected in his perception of liked pictures was confirmed. In this connection, Scodel and Mussen (24), using the F-scale, found that the high-scoring authoritarian subjects do not perceive the low-scoring subjects as having F-scores significantly different from their own, whereas the low-scoring subjects do ascribe to the high-scoring subjects F-scores that are significantly higher than their own.

Evidence can be cited which holds a warning against overestimating the influence of the personality of the judge. Tresselt and Becker (30) contended that personality is not a primary selective force in judgments of people. Rather the judgmental process is affected primarily by previous habit training in such a way that both a scale of judgment and a method of attack are transferred. It is interesting to note that Pastore (21), nine years ago, held that the now generally accepted postulate that needs determine perception might be correct but had not been proven so in previous experiments. Related to this point, Precker (22) found that perception of other people's values is not entirely a matter of projection,



sciences and philosophy. He noted that some traits are con-  
spicuously well-judged, namely (1) inhibition-impulsion,  
(2) equality-intensity, (3) placidity-emotionality, and (4)  
ascendancy-submission.

The influence of the Personality of the Judge on the Process  
of Perceiving Others. Forstermann and Tresselt (17) investigated  
the influence of the individual's value system on his percep-  
tion of another person. The hypothesis is that the perceiver's  
own major values will be projected in his perception of liked  
pictures was confirmed. In this connection, Seibel and Massen  
(24), using the F-scale, found that the high-scoring authori-  
tarian subjects do not perceive the low-scoring subjects as  
having F-scores significantly different from their own, whereas  
the low-scoring subjects do ascribe to the high-scoring subjects  
F-scores that are significantly higher than their own.

Evidence can be cited which holds a warning against over-  
estimating the influence of the personality of the Judge.  
Tresselt and Becker (30) contended that personality is not a  
primary selective force in judgments of people. Rather the  
judgmental process is affected primarily by previous habit  
training in such a way that both a scale of judgment and a method  
of attack are transferred. It is interesting to note that  
Pastore (21), nine years ago, held that the now generally  
accepted postulate that needs determine perception might be  
correct but had not been proven so in previous experiments.  
Related to this point, Frenker (22) found that perception of  
other people's values is not entirely a matter of projection.



although he considered the influence of anxiety upon perception to be fairly well established.

Accuracy and Interobserver Reliability. Kornhauser (15) presented interesting evidence on inter-judge reliability in the judgment of traits of college students. He had different instructors rate college students on seven traits. For a group of 20 graduating seniors fairly well known to the raters the average correlations of five pairs of raters were: .53 for industry, .47 for cooperativeness, .47 for moral trustworthiness, .44 for intelligence, .42 for accuracy, .29 for initiative, and .26 for leadership ability. Kornhauser pointed out that the agreement between judges was greater when the trait was more clearly related to academic performance.

Gage (8) was concerned with explicit forecasting of strangers' interests from expressive behavior. She found that the predictive accuracy was greater than one would expect by chance, and that the ability of the judges to predict the strangers' responses was consistent from one stranger to the next and from one bit of expressive behavior to the next. Gage concluded that in this situation the social perception of the judges was more a function of their internal frames of reference than of the specific external stimuli.

#### Characteristics of the Judged Person

Although the attributes of the judged persons would seem to be major variables to be investigated in connection with the process of social perception, literature on this topic is rare.

Rice (23), in an experiment in which he used pictures of



although he considered the influence of anxiety upon perception to be fairly well established.

Accuracy and Observer Reliability. Kornhauser (15)

presented interesting evidence on inter-judge reliability in the judgment of traits of college students. He had different instructors rate college students on seven traits. For a group of 50 graduating seniors fairly well known to the raters the average correlations of five pairs of raters were: .33 for industry, .47 for cooperativeness, .37 for moral conscientiousness, .44 for intelligence, .43 for accuracy, .29 for initiative, and .26 for leadership ability. Kornhauser pointed out that the agreement between judges was greater when the trait was more clearly related to academic performance.

Gage (8) was concerned with explicit forecasting of strangers' interests from expressive behavior. She found that the predictive accuracy was greater than one would expect by chance, and that the ability of the judges to predict the strangers' responses was consistent from one stranger to the next and from one day to expressive behavior to the next. Gage concluded that in this situation the social perception of the judges was more a function of their internal frames of reference than of the specific external stimuli.

Characteristics of the Judged Person

Although the attributes of the judged persons would seem to be major variables to be investigated in connection with the process of social perception, literature on this topic is rare. Rice (2), in an experiment in which he used pictures of



prominent people, showed that the rating of intelligence and craftiness from photographs is influenced by the knowledge of the social status of the portrayed person.

Secord and Muthard (25) had 140 college students rate 24 photographs of young women on a series of physiognomic and personality attributes. Their evidence suggested the following conclusion. Certain combinations of physiognomic traits were significantly related to certain patterns of personality impressions.

Stritch and Secord (27) found that artist-produced changes in the pictures of persons to be rated markedly affected the perception of physiognomic characteristics which had not been altered by the artist.

Thornton (29) had subjects judge six personality traits of pictured persons who were wearing glasses. He found that the persons were rated more intelligent, more industrious, more honest and more dependable with glasses than without.

However, when these same persons appeared in person they were judged more intelligent and more industrious with glasses than without, but probably not more honest.

#### Interrelationships between Judge and Judged

Interpersonal Attitudes. Lakin (17) found a "substantial" positive relationship between attitudes towards oneself and attitudes towards others.

McKenna, Hofstaetter and O'Connor (19) conducted an experiment in which they explored the bases for attractions between two people. The congruence between various concepts of the self and



prominent people, showed that the ratings were significantly  
different from photographs of individuals by the subjects of  
the social status of the portrayed person.

Second and Mitter (22) and the latter's associates (23)  
photographs of young women in a series of experiments and  
socially attributed. Their findings suggested the following  
conclusion. Certain combinations of facial features were  
significantly related to certain patterns of personality  
traits.

Stitch and Second (24) found that subjects' responses to  
the pictures of persons to be rated were significantly different  
from of physiognomic characteristics which had not been  
by the artist.

Thornton (25) had subjects judge the personality traits of  
pictured persons who were wearing glasses or had facial  
persons were rated with intelligence, more industrious, more honest  
and more dependable with glasses than without.

However, when these same subjects were asked to judge  
judged more intelligent and more industrious with glasses than  
without, but probably not more honest and dependable.  
Interpersonal Attraction between Faces and Objects

Interpersonal Attraction. Little (17) found a significant  
positive relationship between stimulus elements and  
attitudes towards others.

McKenzie, Holmstedt and O'Connor (18) conducted an experiment  
in which they explored the nature of interpersonal attraction between  
people. The connection between various components of the stimulus



of two friends was investigated in a sample of 90 female college students. Some of their main findings follow: (1) A rise in the congruence between the self-concept and the concept of the friend is accompanied by an increase in the congruence between the self concept and the ideal self-concept. (2) The resemblance between the subject's personality pictures of her friends and the subject's ideal self-concept is greater than the resemblance between the subject's personality pictures of her friends and the subject's self-concept. (3) There is less resemblance between the personality pictures of the two friends than there is between either of these and the subject's ideal self.

Bieri (4) reports experimental confirmation of the hypothesis that in a constructive interaction situation one's perception of another will change in the direction of increased similarity to oneself.

Ichheiser (12) further emphasizes the importance of the self concept in social processes and suggests that the image which a person holds regarding another may be the result, or it may be the cause of his attitudes towards the other.

Rationalization in and Accuracy of Social Perception. Haire and Grunes (11) conducted an experiment on the processes producing an organized perception of another personality. They set out to prove again, as Asch (2) had done before them, that the meaning of a bit of information about another person is partly a function of its relation to other items. They constructed a short list of traits and facts concerning a factory worker including the trait name "intelligent". The subjects were asked to describe



# EZRA WISE WITERS BATES

of two friends was investigated in a number of studies. Some of their main findings follow. (1) The congruence between the self-concept and the concept of the friend is accompanied by an increase in the congruence between the self-concept and the ideal self-concept. (2) The congruence between the subject's personality picture of his friend and his self-concept is greater than the congruence between the subject's personality picture of his friend and the subject's self-concept. (3) There is less congruence between the personality picture of the two friends than there is between either of these and the subject's ideal self.

Bieri (4) reports experimental confirmation of the hypothesis that in a constructive interaction situation one's perception of another will change in the direction of harmony resulting to oneself.

Ichelsoer (5) further supports the hypothesis of the relationship in social processes and suggests that the image which a person holds regarding another may be the result of the change in his attitudes towards that other.

Rationalization in an Act of Social Perception.  
and Gurnes (6) conducted an experiment on the process of rationalization in an organized perception of another personality. They found that as Aesch (7) had shown before that the meaning of a bit of information about another person is really a function of its relation to other facts. They considered a number of traits and facts concerning a factory worker indicating the trait name "intelligent". The subjects were asked to describe



the working man. The attribute "intelligent" did not fit with the factory worker. Two main lines of approach were taken by the subjects in integrating this attribute with the rest of the description: (a) Distortion, which involved explaining away the basic conflict by joining the intelligence with some item which the subject himself supplied. (b) Denial of the attribute "intelligent".

Gage (9) obtained the following experimental finding in connection with accuracy of social perception. If two individuals have positive mutual feelings toward each other, their impressions of each other are more likely to be accurate.

The Halo Effect. Kornhauser and McMurray (16) experimentally proved the existence of the tendency to ascribe all good and all bad qualities to an individual because of certain favorable or unfavorable general impressions. They had their subjects rate a group of salesmen on intelligence and selling ability and obtained an average correlation between component estimates of selling ability and intelligence of .87 while the true correlation coefficient was -.48.

The Lenient Tendency in Rating. Kneeland's (14) results illustrate this phenomenon. Although he made special efforts to have the midpoints of his scale describe true, average performance, his subjects, shoppers and executives, rated sales people on various items well above the midpoints of the scale.

The Honi Phenomenon. Wittreich (31) did an experiment on person perception where the observer described both his marital partner and a stranger as he watched them in the Ames' distorted



the working man. The criticism "doubtful" about the  
the factory worker. The main lines of research were  
subjects in interesting cases. In some with the  
description: (a) Situation, with (b) description of  
basic conflict by joining the individual with the  
the subject himself. (c) Social situation. (d) Social  
"Intelligence".

Gage (9) obtained the following experimental results in con-  
tion with accuracy of social perception. In two instances there  
positive mutual feelings toward each other, their perception of  
each other are more likely to be accurate.

The Halo Effect. Researcher and country (10) experimentally  
proved the existence of the tendency to attribute all good and all  
bad qualities to an individual because of certain favorable or  
unfavorable general impressions. They had their subjects rate a  
group of salesmen on intelligence and selling ability and obtained  
an average correlation between component estimates of selling  
ability and intelligence of .57 while the correlation coefficient  
efficient was .46.

The Lenient Tendency in Rating. Woodworth's (11) results  
illustrate this phenomenon. Although he had watched people in  
have the midpoint of his scale descriptive for a certain person-  
ance, his subjects, observers and experimenters, rated sales people  
on various items well above the midpoint of the scale.  
The Horn Phenomenon. Woodworth (12) did an experiment on  
person perception when the observer described both the target  
partner and a stranger he had watched in the room, at the same



room. The marital partner was consistently seen as significantly less distorted than the stranger, although all but one of the subjects had been married less than one year.

#### The Work of Asch

Two of Asch's experiments dealing with forming impressions of others, and some of the literature and research they generated will now be described in some detail, as this work is the immediate background of the present writer's experiment.

Asch (2) proposed that not all of a person's traits are of equal importance in the formation of our impression of him. The following experiment by Asch, which is part of a longer series of experiments dealing with different aspects of the process of forming an impression, supports this assertion. Under experimental condition A 90 subjects were given the following instructions: "I shall read to you a number of characteristics that belong to a particular person. Please listen to them carefully and try to form an impression of the kind of person described. You will later be asked to give a brief characterization of the person in just a few sentences. I will read the list slowly and will repeat it once." They were then read the following list of traits:

intelligent-skillful-industrious-warm-determined-practical-cautious.  
After an interval of five seconds the list was repeated. Following the reading each subject wrote a brief sketch.

Under Condition B a different group of 76 subjects, after being given the same instructions as had been given under Condition A, was read the following list of traits:



# EXPERIMENTAL

The initial portion of the experiment was conducted in a room. The material was presented in a way that was less distorted than the original. Although all subjects had been trained less than one year.

## The results of the experiment

Two of Asch's experiments dealing with the perception of others, and some of the literature and research that will now be described in some detail, as this work is the backbone of the present study's methodology.

Asch (2) proposed that not all of a person's traits are of equal importance in the formation of an impression of him. The following experiment by Asch, which is one of the most famous experiments dealing with different aspects of the process of forming an impression, supports this assertion. In this experiment, 99 subjects were given the following instructions: "I shall read to you a number of characteristics that belong to a particular person. Please listen to them carefully and try to form an impression of the kind of person described. You will later be asked to give a verbal description of the person in just a few sentences. I will read the list slowly and will repeat it once. They were then read the following list of traits:

- intelligent-skillful-imaginative-warm-likable-assertive
- After an interval of five seconds the list was repeated, and the reading each subject wrote a brief description.
- Under Condition B a different group of 99 subjects, who had been given the same instructions as had the first group, were given the following list of traits:

traits:  
intelligent-skillful-imaginative-warm-likable-assertive  
After an interval of five seconds the list was repeated, and the reading each subject wrote a brief description.  
Under Condition B a different group of 99 subjects, who had been given the same instructions as had the first group, were given the following list of traits:



intelligent-skillful-industrious-cold-determined-practical-cautious.  
The list was repeated and brief sketches were written.

To obtain quantified results, Asch had constructed a list of traits, which is reproduced in Table 1. From each pair of terms in this list the subject was instructed to select the one that was most in accordance with the impression he had formed. Asch noted that two outcomes were possible. The impressions formed by groups A and B might be identical except that one had the added quality of "warm," the other of "cold". Another possible outcome might be that the single differentiating quality imparted a general positive or negative direction to the general impression. That neither of these possibilities materialized may be seen in Table 2, columns 1 and 2 of which were taken from Asch (2). For the sake of brevity of presentation results are stated for the more desirable term in each trait-pair, hereafter referred to as the "positive" term. The reader may determine the percentage of choices for the other term in each pair by subtracting the given from 100. To illustrate, under condition A 91% of the subjects chose the designation "generous;" the remaining 9% selected the designation "ungenerous". From his data, (columns 1 and 2 of Table 2), Asch concluded the following. (1) There are marked differences between the percentages of subjects choosing traits under the two conditions. For example, under condition A, where the person was described as "warm," 91% of the subjects called him "generous". However, under condition B, where the person was described as "cold," only 8% of the subjects called him "generous". (2) Not all qualities or traits are deflected by



SECRET

intelligent-ability-instrument...  
 The list was repeated with a...  
 To obtain...  
 traits, which is reproduced in Table 2...  
 in this list the subject was...  
 was most in accordance with...  
 noted that two outcomes were...  
 groups A and B might be...  
 quality of "warm," the other...  
 might be that the single...  
 positive or negative...  
 neither of these...  
 Table 2, columns 1 and 2...  
 the sake of brevity...  
 more desirable term...  
 the "positive" term...  
 choice for the other...  
 from 100. To illustrate...  
 chose the designation...  
 designation "generous"...  
 Table 2). Asch concluded...  
 differences between...  
 under the two conditions...  
 the person was described...  
 him "generous". However...  
 was described as "cold"...  
 "generous". (2) Not all...



Table 1

## Asch's (2) Check List of Traits

- |                   |                 |
|-------------------|-----------------|
| 1. generous       | - ungenerous    |
| 2. shrewd         | - wise          |
| 3. unhappy        | - happy         |
| 4. irritable      | - good-natured  |
| 5. humorous       | - humorless     |
| 6. sociable       | - unsociable    |
| 7. popular        | - unpopular     |
| 8. unreliable     | - reliable      |
| 9. important      | - insignificant |
| 10. ruthless      | - humane        |
| 11. good-looking  | - unattractive  |
| 12. persistent    | - unstable      |
| 13. frivolous     | - serious       |
| 14. restrained    | - talkative     |
| 15. self-centered | - altruistic    |
| 16. imaginative   | - hard-headed   |
| 17. strong        | - weak          |
| 18. dishonest     | - honest        |



Table 1 (continued)

- 1. generous - generous
- 2. selfish - selfish
- 3. simple - simple
- 4. intricate - intricate
- 5. nervous - nervous
- 6. stable - stable
- 7. popular - popular
- 8. unreliable - unreliable
- 9. important - important
- 10. possible - possible
- 11. good-looking - good-looking
- 12. persistent - persistent
- 13. lively - lively
- 14. restricted - restricted
- 15. self-confident - self-confident
- 16. inselusive - inselusive
- 17. error - error
- 18. dishonest - dishonest

WINTERSTADT  
 EZEKIEL  
 CONTON DONNELL



Percentages of Subjects Attributing Traits under Six  
Different Experimental Conditions

	Exp. I - Asch(2)		Pilot - Hill		Exp. II - Asch(2)	
	(1) Warm (N=90)	(2) Cold (N=76)	(3) Sociable (N=20)	(4) Unsociable (N=20)	(5) Polite (N=20)	(6) Blunt (N=26)
1. generous	91	8	75	50	56	58
2. wise	65	25	55	40	30	50
3. happy	90	34	80	44	90	34
4. good-natured	94	17	80	32	87	56
5. humorous	77	13	70	21	71	48
6. sociable	91	38	-	-	83	68
7. popular	84	28	95	10	94	56
8. reliable	94	99	100	90	95	100
9. important	88	99	90	65	94	96
10. humane	86	31	60	89	59	77
11. good-looking	77	69	85	53	93	79
12. persistent	100	97	100	90	100	100
13. serious	100	99	100	100	100	100
14. restrained	77	89	65	89	82	77
15. altruistic	69	18	61	30	29	46
16. imaginative	51	19	75	55	33	31
17. strong	98	95	95	89	100	100
18. honest	98	94	85	95	87	100
Means	85.0	54.0	80.65	61.29	76.83	72.61

Note: T tests between means of columns 1 and 2, 3 and 4, 5 and 6 were computed by the present writer.

<sup>a</sup>Value of  $\underline{t}$  for columns 1 & 2 was 4.11, significant at the .01 level  
<sup>b</sup>Value of  $\underline{t}$  for columns 3 & 4 was 2.85, significant at the .01 level  
<sup>c</sup>Value of  $\underline{t}$  for columns 5 & 6 was 0.91, insignificant (P = .40)



Table 1

Percentages of Subjects Attributing Different Explanatory Factors

Factor	Warm Cold (N=20)		Warm Warm (N=20)		Warm Cold (N=20)		Mean
	(1)	(2)	(3)	(4)	(5)	(6)	
1. Generous	91	8	72	28	91	9	
2. Wise	62	38	91	9	91	9	
3. Happy	90	10	91	9	91	9	
4. Good-natured	91	9	90	10	91	9	
5. Humorous	77	23	91	9	91	9	
6. Sociable	91	9	-	-	91	9	
7. Popular	61	39	92	8	91	9	
8. Reliable	91	9	92	8	91	9	
9. Important	88	12	92	8	91	9	
10. Humane	86	14	91	9	91	9	
11. Good-looking	77	23	91	9	91	9	
12. Persistent	100	0	100	0	100	0	
13. Serious	100	0	100	0	100	0	
14. Restrained	77	23	91	9	91	9	
15. Altruistic	69	31	91	9	91	9	
16. Imaginative	51	49	91	9	91	9	
17. Strong	98	2	92	8	91	9	
18. Honest	98	2	92	8	91	9	
Mean	82.0	18.0	91.5	8.5	91.5	8.5	

Note: T tests between mean of column 1 and 2, 3 and 4, 5 and 6 were computed by the present author.

Value of  $t$  for column 1 & 2 was 1.1, significant at .30 level.  
 Value of  $t$  for column 3 & 4 was 2.2, significant at .05 level.  
 Value of  $t$  for column 5 & 6 was 0.1, not significant.



the transition from "warm" to "cold". For example, 100% of the subjects under condition A and 99% of the subjects under condition B called the person "serious".

In summary, it may be seen that some, but not all, traits are affected by the "warm-cold" variable.

The second experiment performed by Asch involved the same procedure as the first one, except that in the initial series of traits describing the hypothetical person "warm" was replaced by "polite" and "cold" by "blunt". As may be seen from Table 2, columns 5 and 6, there were no extreme differences between the percentages of subjects attributing positive traits under the two experimental conditions. Asch concluded that "polite" and "blunt" are not "central" qualities like "warm" and "cold," i.e., they did not produce striking differences in the manner in which the traits were checked by the two groups.

In summary, these two experiments by Asch show that some traits, specifically "warm" and "cold," when given as preinformation about a person, markedly influence the attribution of other traits to that same person, while other traits, such as "polite" and "blunt" do not have this effect.

Luchins (18) repeated one of Asch's experiments, using the list of trait names and the set of instructions employed by Asch. Luchins reported results which differed from those which Asch had found, and wrote a critique of Asch's work. His main criticism concerned Asch's experimental design, which was considered to be too unlike real life to be of any value. Further comments will be made on Luchins' critique in the discussion section.



the transition from "warm" to "cold" for example, 100% of the  
subjects under condition A and 97% of the subjects under  
condition B called the person "warm".  
In summary, it may be seen that, at least in the  
affected by the "warm-cold" variable.  
The second experiment performed by each involved the same  
procedure as the first one, except that in the initial  
traits describing the hypothetical person "warm" was replaced by  
"polite" and "cold" by "bitch". In no way do conditions A and B  
columns 2 and 3, there were no extreme differences between the  
percentages of subjects attributing the traits under the  
two experimental conditions. As may be seen, the "polite" and  
"bitch" are not "central" qualities like "warm" and "cold", and  
they did not produce striking differences in the terms in which  
the traits were described by the two groups.  
In summary, these two experiments have shown that, in general,  
specifically "warm" and "cold", and that "polite" and "bitch"  
a person, markedly influence the attribution of other traits  
that same person, while other central traits do not have this effect.  
Luchins (18) repeated one of Asch's experiments, and used a  
list of trait names and the set of instructions of the first experiment.  
Luchins reported results which differed from those which Asch  
had found, and wrote a critique of Asch's work. The main criticism  
concerned Asch's experiment itself, which was considered  
to be too unlike real life as to be valid. Luchins' experiment  
will be made on Luchins' criteria in the discussion section.



Kelley (13) answered Luchins' main criticism of Asch by conducting a life-like experiment in which a group of students met a strange instructor in a classroom. Before meeting the instructor one half of the students were given information sheets on which the teacher was described as "cold;" to the other half he was described as "warm". Next, subjects and instructor participated in a discussion, after which the subjects were asked to write a sketch of the teacher and to rate him on a set of 15 rating scales. The results were very similar to those of Asch and it was concluded that such "central" qualities as warmth and coldness can greatly influence the total impression of a personality.

Mensh and Wishner (20) have repeated a number of Asch's experiments, including the present ones, with variations in the sex and geographic distribution of subjects. Their data also substantiated Asch's very closely.

#### The Problem

The present problem grew directly out of Asch's demonstration that some traits, such as "warm" and "cold," are "central," i.e., they markedly influence the choice of other fitting qualities when the central trait is given as preinformation about a person. At the same time, other traits, like "polite" and "blunt," are apparently "peripheral," i.e., they do not play an important part in the choice of other fitting qualities.

The purpose of this study was threefold: (a) To shed light on the factors determining the centrality of a trait; (b) to determine if a trait-dimension other than "warm-cold" proves to



... answered ... (13) ...  
conducting a life-like experiment ...  
met a strange instructor in a ...  
instructor one half of the ...  
on which the teacher was ...  
he was described as "warm" ...  
discussed in a discussion ...  
to write a sketch of the ...  
rating scales. The results ...  
and it was concluded that ...  
colleges can greatly influence ...  
ity.

... and Winner (20) have ...  
ments, including the ...  
and geographic distribution ...  
established Asch's very ...

The present ...  
The present problem ...  
that some traits, such as ...  
they markedly influence ...  
when the control trait is ...  
At the same time, other ...  
apparently "participate" ...  
part in the choice of ...  
The purpose of this study ...  
on the factors determining ...  
determine if a trait-dimension ...



central; (c) to provide for sharper quantification than was present in Asch's study, including a quantified measure of centrality.

### Hypotheses

The present study hypothesizes that differences in the strength of a central trait in the raters themselves will be accompanied by differential centrality when they are judging others. The formal hypothesis thus becomes: The centrality of a trait is a function of the strength of that trait in the rater. As tested with groups of subjects who differ in the extent to which they possess the central trait, the null hypothesis is that such groups will not differ with respect to the centrality of that trait.

### Method

#### Research Design

The experimental design called for (a) the location of an objectively measurable trait, high in centrality; (b) the measurement of this trait in a large number of subjects, who could thus be classified as high, average, and low with respect to that trait; (c) the administration of the Asch procedure to these groups, experimentally varying the new central trait; (d) the determination of group differences in centrality, if any.

As no objective measure of "warm-cold" was available, a pilot study was performed to determine if the trait dimension "sociable-unsociable," a measure of which is available in the Gordon Personal Profile (10), is sufficiently high in centrality.







### Method of Pilot Study

Asch's method of determining centrality, as described in the Introduction, was used, with the following exceptions: (1) When preinformation about the hypothetical person was given, the trait "warm" was replaced by "sociable," and "cold" by "unsociable". (2) The trait pair, sociable-unsociable, was left out of the check list of traits used after the preinformation episode. A group of 40 psychology students was randomly split into two halves. One half was given:

intelligent-skillful-industrious-sociable-determined-practical-cautious.

The other half was given preinformation indicating that the hypothetical person was:

intelligent-skillful-industrious-unsociable-determined-practical-cautious.

### Results of Pilot Study

Reference is made to Table 2, page 10, in which the findings of the pilot study are presented in columns 3 and 4. For example, 75% of the subjects to whom the hypothetical person had been described as sociable called this person generous. Only 50% of the subjects who had been told that the person was unsociable called him generous. A t test was run on each of the three sets of results, represented by the six columns in Table 2, in order to compare the degrees of centrality quantitatively. As is evident from Table 2, the P value for the warm-cold variable was .01, for the polite-blunt variable .40, and for the sociable-unsociable variable .02.



Method of Pilot Study

Asch's method of determining conformity, as described in the Introduction, was used, with the following modification: (1) When preliminary information about the hypothetical person was given, the trait "warm" was replaced by "sociable," and "cold" by "antisocial." (2) The trait pair, sociable-antisocial, was selected from the check list of traits used since the preliminary information. A group of 40 psychology students was randomly split into two halves. One half was given:

Intelligent-skillful-industrious-ambitious-energetic-cautious.

The other half was given preliminary information that the hypothetical person was:

Intelligent-skillful-industrious-ambitious-energetic-cautious.

Results of Pilot Study

Reference is made to Table 2, page 11, in which the results of the pilot study are presented in columns 1 and 2. For example, 75% of the subjects whom the hypothetical person had been described as sociable called this person generous. Only 25% of the subjects who had been told that the person was antisocial called him generous. A  $t$ -test was run on each of the three sets of results, represented by the six columns in Table 2, in order to compare the degree of conformity qualitatively. As in a  $t$ -test from Table 2, the  $F$  value for the warm-cold variable was .01, and for the polite-impolite variable .02.



### Conclusions from Pilot Study

It was concluded that sociable and unsociable are central traits, i.e., when given as preinformation about a hypothetical person, these traits markedly influence the choice of other qualities fitting the person.

Trait-pairs 2, 9, and 13 were thought not to warrant further use, on the following grounds. Shrewd and wise were not thought to be opposites. Important and insignificant refer more to a social judgment rather than to traits possessed by the individual. Serious and frivolous did not yield any difference between the two groups in the pilot study and only one difference point in Asch's "warm-cold" experiment.

This left 14 traits in the list. In order to provide a wider range, six new trait-pairs were selected from the sketches written by the subjects in the pilot study. The resulting check list is reproduced in Table 3, the last six items of which are the new traits.

### Determining the Sociability of Subjects

Members of two general psychology classes served as subjects, one class with 144 students and the other with 88, to all of whom the Gordon Personal Profile (10) was administered. This test yields scores for ascendancy, responsibility, emotional stability, and sociability. Since the four sections of the profile are highly integrated the whole test was administered and scores determined not only for sociability but also for the other three traits in order to provide for an accuracy check on the scoring of the sociability scale.



It was concluded that social desirability was a significant factor in the results, i.e., when given as a response to a question about a person, these traits usually reflected the social desirability of the person.

Trait-pairs 5, 9, and 10 were found to be related to the use, on the following grounds. First, and without any reason to be expected, important and important traits were found to be related rather than to traits measured by the individual.

Second and third, the two groups in the pilot study and the two groups in Asch's "warm-cold" experiment.

This list of traits in the list of new trait-pairs was written by the subjects in the pilot study. The resulting list is reproduced in Table 2, the list of traits which are the new traits.

Determining the Sociality of Traits

Members of two general psychology classes were selected one class with high students and the other with low students when the Gordon Personal Profile (19) was administered. Test yields scores for masculinity, femininity, stability, and sociality. Since the low scores of the profile are highly indicative of the traits that were measured and scores determined not only for sociality but also for other three traits in order to provide for a comparison. The scoring of the sociality scale.



Table 3

## Revised Trait Check List Used in the Main Experiment

1. generous - ungenerous
2. unhappy - happy
3. irritable - good-natured
4. humorous - humorless
5. popular - unpopular
6. unreliable - reliable
7. ruthless - humane
8. good-looking - unattractive
9. persistent - unstable
10. restrained - talkative
11. self-centered - altruistic
12. imaginative - hard-headed
13. strong - weak
14. honest - dishonest
15. timid - bold
16. immature - mature
17. relaxed - tense
18. indecisive - decisive
19. broad-minded - narrow-minded
20. insecure - secure



Table 1  
Revised Trait Check List for the 1950s

- |                     |   |               |
|---------------------|---|---------------|
| 1. generous         | - | selfish       |
| 2. unselfish        | - | selfish       |
| 3. trusting         | - | distrusting   |
| 4. humorous         | - | serious       |
| 5. popular          | - | unpopular     |
| 6. unselfish        | - | selfish       |
| 7. realistic        | - | idealistic    |
| 8. good-looking     | - | ugly          |
| 9. generous         | - | selfish       |
| 10. restrained      | - | impulsive     |
| 11. self-controlled | - | impulsive     |
| 12. imaginative     | - | practical     |
| 13. serious         | - | playful       |
| 14. honest          | - | dishonest     |
| 15. kind            | - | unkind        |
| 16. thoughtful      | - | careless      |
| 17. relaxed         | - | stressed      |
| 18. decisive        | - | indecisive    |
| 19. broad-minded    | - | narrow-minded |
| 20. masculine       | - | feminine      |

MILLERS  
EZEKIEL  
COTTON



The sociability scores of the 232 subjects were arranged in order from the highest to the lowest, as may be seen in Table 4. The whole group of subjects was then divided into three groups as follows: (a) A high-sociability group of 77 subjects, representing the upper third with scores ranging from 73 to 99; (b) a middle-sociability group of 78 subjects with scores ranging from 40 to 73; (c) a low-sociability group of 77 subjects with scores ranging from 0 to 37.

#### Procedure

Subjects. Since the subjects in the General Psychology lecture classes also attended the General Psychology laboratory classes, the rest of the experiment was conducted in the latter classes, of which there were ten, with an average of 23 subjects per class. The use of the two experimental conditions, describing the hypothetical person as sociable or unsociable, was varied in such a way that one half of the group scoring high on the sociability scale heard the person described as sociable; the other half as unsociable. The same method was followed for the group scoring middle and low on the sociability scale.

Although there might be a number of possible outcomes the writer considered the following three to be the most likely ones: (1) the high-sociability group might produce the greatest centrality, the group average in sociability might show an average centrality, and the group low on the sociability scale a low centrality. (2) Another possibility would be like the first one described except that the group low in sociability would make the trait as central as the high-sociability group. (3) All three



The sociability scores of the subjects were arranged in order from the highest to the lowest, as may be seen in Table I. The whole group of subjects was then divided into three groups as follows: (a) A high-sociability group of 17 subjects representing the upper third with scores ranging from 75 to 90; (b) a middle-sociability group of 17 subjects with scores ranging from 60 to 75; (c) a low-sociability group of 17 subjects with scores ranging from 45 to 60.

#### Procedures

Subjects. Since the subjects in the General Psychology classes also attended the General Psychology Laboratory classes, the test of the experiment was conducted in one latter class, of which there were ten, with an average of 27 subjects per class. The use of the two experimental conditions, describing the hypothetical person as sociable or unsociable, was varied in such a way that one half of the group described him as the sociability scale heard the person described as sociable, the other half as unsociable. The same names were chosen for the group scoring middle and low on the sociability scale.

Although there might be a number of possible methods the writer considered the following method as the most suitable: (1) The high-sociability group might describe the person as sociable, the group average in sociability might show an average centrality, and the group low on the sociability scale might describe the person as unsociable. (2) Another possibility would be to describe except that the group low in sociability would describe the trait as central as the high-sociability group. (3) All three



Table 4

Distribution of Sociability Scores on the Gordon Personal Profile of 232 Subjects

Percentile Score	f	cf	Percentile Score	f	cf
99+	1	1	43	4	150
99	1	2	40	5	155
98	2	4	37	2	157
97	3	7	35	7	164
95	13	20	31	4	168
93	3	23	30	9	177
92	6	29	28	1	178
91	7	36	26	5	183
89	1	37	22	5	188
88	11	48	19	3	191
84	11	59	16	4	195
79	8	67	15	4	199
74	7	74	13	8	207
73	12	86	11	5	212
68	6	92	10	2	214
66	9	101	9	4	218
62	5	106	7	3	221
59	11	117	6	2	223
56	4	121	4	2	225
53	9	130	2	2	227
49	7	137	1	2	229
46	9	146	0	3	232



Distribution of Percentiles of Scores on the Trolite of 252 Subjects

Percentile Score	Number of Subjects	Percentile
99+	1	1
99	2	1
98	4	2
97	7	3
96	13	13
95	21	3
94	28	6
93	36	7
92	48	11
91	62	11
90	81	8
89	101	7
88	121	12
87	141	6
86	161	9
85	181	2
84	201	11
83	221	4
82	241	9
81	261	7
80	281	9

MILLERS  
 E-Z-E-R-A-S-E  
 COTTON CO. TEST



groups would make the trait equally central. Fig. 1 graphically portrays these three possible outcomes.

Instructions. "I shall read to you a number of characteristics that belong to a particular person. Please listen to them carefully and try to form an impression of the person described. You will later be asked to give a brief characterization of the person in just a few sentences. I will read the list slowly and will repeat it once. Are there any questions?" The subjects were not allowed to write down the characteristics of the described person. Each of the six subgroups heard read a series of character qualities, identical except for one term. The lists follow:

intelligent-skillful-industrious-sociable-determined-practical-cautious.

intelligent-skillful-industrious-unsociable-determined-practical-cautious.

One half of each of the three main groups heard the person described as sociable; the other half, as unsociable. After an interval of five seconds the same list was read again. Following this reading the subjects were instructed to write a brief description of the person in just a few sentences. Approximately five minutes later the sketches were collected and these instructions given: "I will now hand out lists to you on which you will find a number of pairs of opposite traits. Please underline the one trait in each pair which best fits the impression you have formed of the person described to you." When the lists were collected,



COLLON CONTENT

EXERVA

WITHBALLE

groups would make the first...  
 portrays these three possible...  
 instructions. The subject...  
 that belong to a particular...  
 fully and try to form an...  
 You will later be asked to give a...  
 person in just a few sentences...  
 will repeat it once. The...  
 were not allowed to write down...  
 scribed person. Each of the...  
 of character qualities, physical...  
 follow:  
 intelligent-skillful-industrious-socially...  
 cautious.  
 intelligent-skillful-industrious-socially...  
 cautious.  
 One half of each of the three...  
 as sociable; the other half...  
 of five seconds the same list...  
 reading the subjects were...  
 tion of the person in just a...  
 minutes later the answers...  
 given: "I will now read out...  
 a number of pairs of...  
 trait in each pair which...  
 of the person described as..."



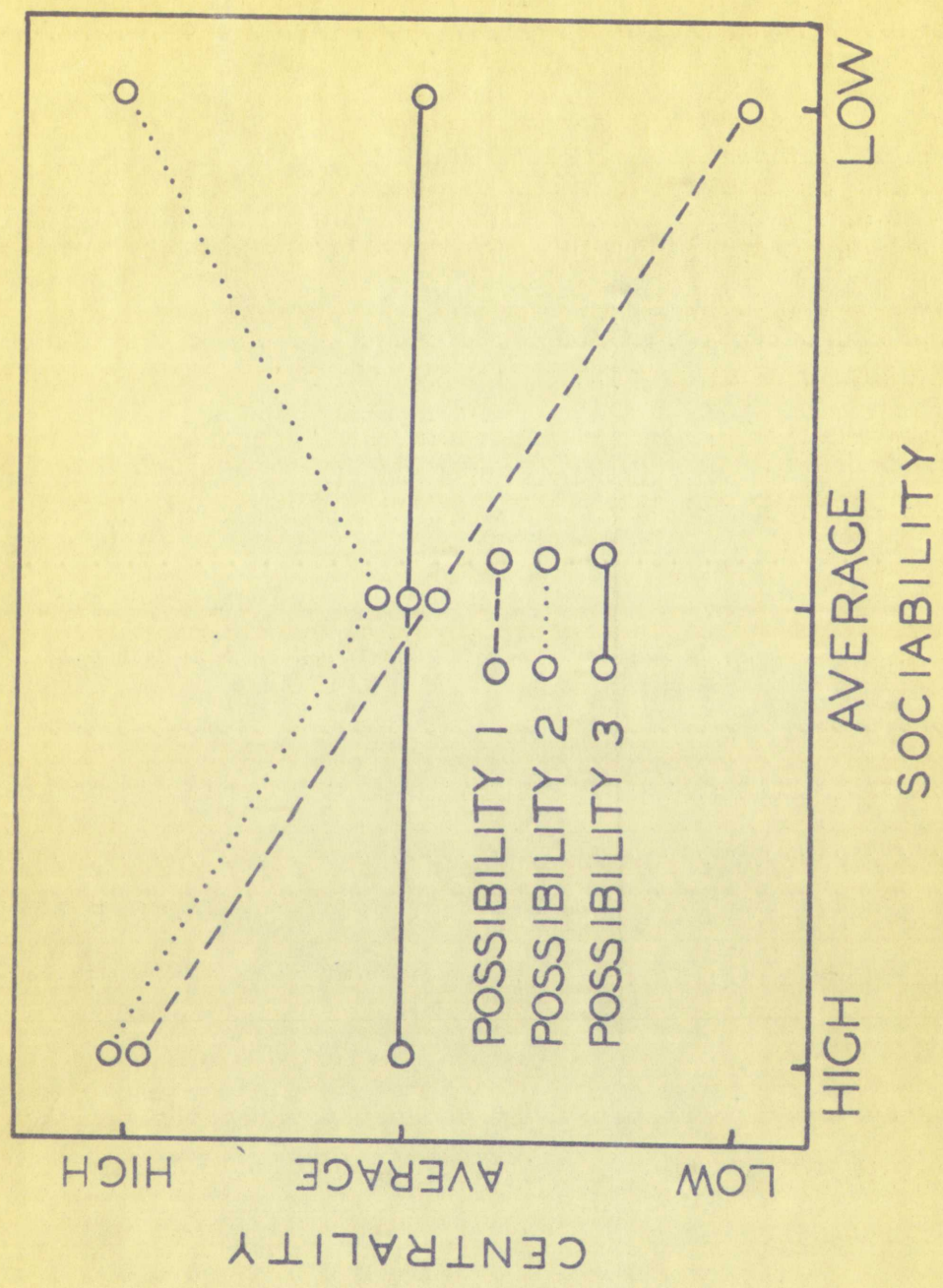
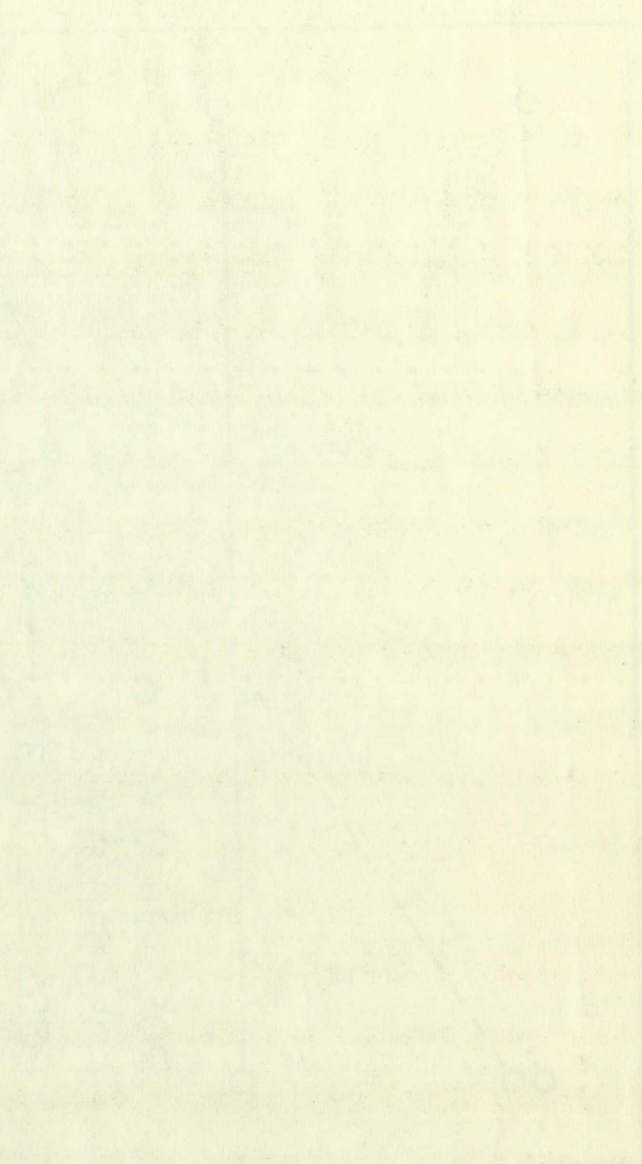


Fig. 1. The three main possible outcomes of the experiment.





EDGE HIGH



each one was checked to make sure that one trait out of each pair had been underlined.

Scoring. Because of student absences in the lecture classes, where the writer tested for sociability, and in the laboratory classes, where the experiment proper was performed, the final number of subjects in each of the three main groups was 68, i.e., 34 under the sociable condition and 34 under the unsociable condition. All trait check lists were divided into six stacks of 34 each, representing the high-sociability group under the sociable and unsociable conditions, the middle sociability-group under the two conditions, and the low sociability group under the two conditions. The number of subjects in each group of 34 subjects checking each positive trait was counted.

#### Results

The scoring results are summarized in Table 5, which shows the numbers of subjects in the three groups attributing the positive term in each trait-pair under the two experimental conditions.

The results are stated for the positive term in each pair of traits. The reader may determine the number of subjects attributing the other term in each pair by subtracting the given figure from 34, the number of Ss under each experimental condition.

To appraise the results statistically, difference scores were used. A difference score was the difference between the numbers of subjects attributing the positive term in each trait-pair under the sociable and unsociable experimental conditions.

Striking differences of impression are evidenced by the difference scores for trait 1, generous; trait 2, happy; trait 3,



each one was checked to see that the trial pair had been underlined.

Scoring. Because of student behavior in the laboratory where the writer tested for sociability, and in the laboratory classes, where the experiment proper was conducted, the final number of subjects in each of the three main groups was 24. Under the sociable condition and a control unsociable condition. All trail pairs were divided into two groups of 12 each, representing the high-sociability and low-sociability and unsociable conditions, the ability sociability groups under the two conditions, and the low sociability group under the two conditions. The number of subjects in each group of 12 subjects checking each positive trail was recorded.

Results

The scoring results are summarized in Table 1, which shows the numbers of subjects in the three groups attributing the positive term in each trail-pair under the two experimental conditions.

The results are stated for the positive term in each trail-pair. The reader may determine the number of subjects attributing the other term in each pair by subtracting the figures from 12, the number of subjects in each experimental condition.

To appraise the results statistically, a difference score was used. A difference score was the difference between the number of subjects attributing the positive term in each trail-pair under the sociable and unsociable experimental conditions.

Striking differences of responses are evidenced by the difference scores for trail 1, the first trail in each condition.



Table 5

Numbers of Subjects in the High-, Middle-, and Low-Sociability Groups Attributing Traits under the Sociable and Unsociable Conditions, with Difference Scores

Traits	High		(3) D	Middle			Low		(9) D
	(1) Soc (N=34)	(2) Uns (N=34)		(4) Soc (N=34)	(5) Uns (N=34)	(6) D	(7) Soc (N=34)	(8) Uns (N=34)	
1. Generous	33	5	28	32	6	26	32	15	17
2. Happy	32	6	26	31	6	25	32	22	10
3. Good-natured	32	5	27	33	9	24	31	15	16
4. Humorous	31	4	27	30	5	25	30	3	27
5. Popular	33	3	30	32	4	28	33	6	27
6. Reliable	34	33	1	34	33	1	33	34	1
7. Humane	31	10	21	32	17	15	30	27	3
8. Good-looking	32	4	28	30	10	20	30	15	15
9. Persistent	34	30	4	34	31	3	34	34	0
10. Talkative	32	9	23	33	15	18	32	20	12
11. Altruistic	31	4	27	19	13	6	20	14	6
12. Imaginative	29	6	23	25	13	12	27	22	25
13. Strong	34	28	6	32	25	7	30	26	4
14. Honest	33	34	1	34	34	0	33	34	1
15. Bold	30	5	25	32	11	21	29	21	8
16. Mature	34	10	24	33	30	3	32	32	0
17. Relaxed	32	6	26	27	9	18	24	10	14
18. Decisive	34	29	5	32	31	1	31	34	3
19. Broad-minded	33	5	28	31	19	12	31	21	10
20. Secure	33	10	23	29	19	10	31	27	4
Totals	647	246	403	615	340	275	605	432	183
Means	32.35	12.3	20.15	30.75	17.0	13.75	30.25	21.6	9.15



Numbers of Subjects in the High, Middle, and Low-Scoring  
 Groups According to the Trait and the Trait  
 Unstable Correlation, with the Trait

Trait	(1) Sec Tra	(2) High Tra	(3) Mid Tra	(4) Low Tra	(5) Total Tra
1. Generous	33	2	20	20	75
2. Happy	32	6	20	20	78
3. Good-natured	32	2	20	20	74
4. Humorous	32	4	20	20	76
5. Popular	33	4	20	20	77
6. Reliable	31	33	20	20	104
7. Humane	31	13	20	20	84
8. Good-looking	32	4	20	20	76
9. Persistent	31	30	20	20	101
10. Talkative	32	9	20	20	81
11. Assertive	31	4	20	20	75
12. Imaginative	29	4	20	20	73
13. Strong	31	29	20	20	100
14. Honest	33	31	20	20	104
15. Bold	30	2	20	20	72
16. Mature	31	10	20	20	81
17. Relaxed	32	6	20	20	78
18. Decisive	31	29	20	20	100
19. Broad-minded	33	2	20	20	75
20. Secure	33	10	20	20	83
Totals	647	133	400	400	1580
Means	32.35	6.65	20.00	20.00	79.00



good-natured; trait 4, humorous; trait 5, popular; trait 7, humane; trait 8, good-looking; trait 10, talkative; trait 11, altruistic; trait 12, imaginative; trait 15, bold; trait 16, mature; trait 17, relaxed; trait 19, broad-minded; and trait 20, secure.

Certain other traits, however, did not show such marked differences. These were trait number 6, reliable; number 9, persistent; number 13, strong; number 14, honest; number 18, decisive.

In the case of trait number 1, generous, Table 5 shows that the vast majority of subjects, e.g., 33 in the high-sociability group under the sociable condition, called the person generous. Yet only a small minority, namely 5, in the same group perceived the person as generous when told beforehand that the person was unsociable.

For trait 6, Table 5 shows that practically all subjects chose the designation reliable, regardless of preinformation describing the person as sociable or unsociable. The first major finding may be summarized as follows:

(1) Description of the hypothetical person as sociable or unsociable influenced the manner in which the majority, but not all, of the traits were checked. This confirms Asch's (2) results.

This trend, quantified in Table 5, was confirmed by the sketches which each subject wrote. A few representative examples will be given. Two examples from the high-sociability group follow:

(a) "The person described is intelligent, skillful, industrious



good-natured; trait 11, humorous; trait 12, glib; trait 13, human; trait 14, good-looking; trait 15, conservative; trait 16, altruistic; trait 17, tactful; trait 18, kind; trait 19, mature; trait 20, polite; trait 21, friendly; trait 22, good-natured; and trait 23, secure.

Certain other traits, however, did not show such differences. These were trait number 6, reliable; number 7, persistent; number 13, strong; number 14, modest; number 15, decisive.

In the case of trait number 1, generous, Table 2 shows that the vast majority of subjects, 85.33 in the high-education group under the sociable condition, called the person generous. Yet only a small minority, namely 7.14 in the same group, called the person as generous when told explicitly that the person was unsociable.

For trait 5, Table 2 shows that practically all subjects chose the designation reliable, regardless of the education condition. The person as sociable or unsociable. The above results may be summarized as follows:

- (1) Description of the hypothetical person as sociable or unsociable influenced the manner in which the majority, but not all, of the traits were checked. This contrasted with the

results. This trend, described in Table 2, is similar to the results which each subject chose. Two examples from the high-education group are given. (a) The person described as liberal, tactful, friendly, and



and determined; therefore, he does well in his work. He is practical; and therefore, he probably does not squander his earnings but spends his money well. Even though he is intelligent and industrious, he is also sociable, which implies that he gets along with others. All in all, he is a well-rounded person."

The subject who wrote this was a female, in the high-sociability group under the sociable condition. When checking traits she called the person generous, happy, good-natured, humorous, popular, reliable, humane, good-looking, persistent, talkative, altruistic, imaginative, strong, honest, bold, mature, tense, decisive, broad-minded and secure.

(b) "This seems to be a description of a hard-headed business man or woman whose work means everything to him or her. This person spends most of his time in the office, but occasionally comes home to get some sleep. His friends are few, but he has many business associates who look up to him as an intelligent business man or woman as I have stated."

The subject was a female, in the high-sociability group, under the unsociable condition. She checked the following traits: ungenerous, happy, irritable, humorless, unpopular, reliable, humane, unattractive, persistent, talkative, self-centered, imaginative, strong, honest, bold, mature, relaxed, decisive, broad-minded and secure.

The following two examples are from the middle-sociability group, under the two conditions:

(c) "This person is ambitious and determined to bring himself



and determined; therefore, he does well in his work. He is practical; and therefore, he probably does not squander his earnings but spends his money well. Even though he is intelligent and industrious, he is also sociable, which implies that he gets along with others. All in all, he is a well-rounded person."

The subject who wrote this was a female. In the high-sociality group under the sociable condition. When checking traits she called the person generous, happy, good-natured, humorous, popular, reliable, human, good-looking, persistent, talkative, artistic, strong, honest, bold, mature, sane, decisive, broad-minded and secure.

(b) This seems to be a description of a first-hand business man or woman whose work means everything to him or her. This person spends most of his time in the office, but occasionally comes home to get some sleep. His friends are few, but he has many business associates who look up to him as an intelligent business man or woman as I have stated."

The subject was a female, in the high-sociality group, under the unsociable condition. She checked the following traits: ungenerous, happy, irritable, business, unpopular, reliable, humane, unattractive, persistent, talkative, self-centered, imaginative, strong, honest, bold, mature, relaxed, decisive, broad-minded and secure.

The following two examples are from the middle-sociality group, under the two conditions:

(c) "This person is ambitious and determined to bring himself



to a higher level in society by use of all his natural resources. He will apply his skill and intelligence practically in a manner which will leave little room for criticism. He is cautious to the point of assurance in himself and his work, thus he goes ahead and attains his goal."

The subject was a male from the middle sociability group, under the sociable condition. Traits checked were: generous, happy, good-natured, humorous, popular, reliable, humane, good-looking, persistent, restrained, altruistic, imaginative, strong, honest, bold, mature, relaxed, decisive, broad-minded, secure.

(d) "The person would be a typical graduate assistant at a medium sized university. He would be unmarried. He would wear conservative clothing and tend to be close with the American dollar. He would have a goal set for a Doctor's degree and would sacrifice almost anything to get it. He might even end up being a professor. He might get side-tracked by the possibility of marrying the boss' daughter and become a research lab. boss in the old man's plant."

The subject was in the middle sociability group, a male and under the unsociable condition. The following traits were checked: ungenerous, unhappy, irritable, humorless, unpopular, reliable, ruthless, unattractive, persistent, restrained, self-centered, hard-headed, weak, honest, timid, mature, tense, decisive, narrow-minded, secure.

Finally, two examples will be given of subjects from the low-sociability group under the sociable and unsociable conditions.

(e) "The person is a good student in all subjects in his college

E Z E R A S E



to a higher level in society by use of all his natural resources. He will apply his skill and intelligence productively in a manner which will leave little room for criticism. At the point of assurance in himself and his work, this person should and attain his goal."

The subject was a male from the middle social class, middle income, the social condition. Traits that are: confident, happy, good-natured, humorous, popular, friendly, popular, persistent, restrained, efficient, formalistic, strong, bold, mature, relaxed, decisive, good-willed, resourceful.

(d) "The person would be a typical product of a middle class medical sized university. He would be described as: conservative clothing and tend to be close with the family. He would have a goal set for a doctor's career. He would sacrifice almost anything to get it. He might even work as a professor. He might get side-tracked by the possibility of marrying the boss' daughter and become a respected man. From the old man's point."

The subject was in the middle social class, middle income, under the unsocial condition. The following traits were checked: ungenerous, unhappy, distrustful, formalistic, suspicious, reliable, ruthless, unattractive, persistent, restrained, centered, hard-headed, weak, honest, kind, warm, narrow-minded, secure.

Finally, two examples will be given of subjects from the social class group under the social and economic conditions. (e) "The person is a good student with a high degree of intelligence."

EXERCISE



but not a deep thinker in any of them. He is a typical product of American education. He has a broad, general knowledge of many things but knows no one subject in great detail. He is conservative in his outlook on life, reflecting the accepted views of his social group. He will probably go into his father's business, make it more prosperous than ever, marry an acceptable wife, and, to be true, live happily ever after."

The subject was male out of the low-sociability group, under the sociable condition. Traits checked were the following: generous, happy, good-natured, humorous, popular, unreliable, humane, good-looking, persistent, talkative, self-centered, hard-headed, weak, honest, timid, mature, relaxed, decisive, broad-minded and secure.

(f) "This person has red hair and wears heavy black glasses. He is very athletic and is usually leader in everything he does. He always attempts to think his problems through to their most solvable form. He doesn't care about anyone who is different than or the same as himself. He occasionally shuts himself alone in a small room and ponders with himself."

The subject who wrote this sketch was in the low-sociability group, a male, and under the unsociable condition. He checked the following traits: ungenerous, unhappy, irritable, humorless, popular, reliable, ruthless, good-looking, persistent, restrained, self-centered, imaginative, strong, honest, bold, mature, tense, decisive, narrow-minded, and insecure.

It should be noted that a change in the sociable-unsociable variable did not affect the results indiscriminately. For



but not a deep thinker in any sense. He has a practical knowledge of American education. He has a practical knowledge of many things but knows no one except in a general way. He is conservative in his outlook on life, regarding the most views of his social group. He is somewhat of a business man, makes it more progressive than ever, but is not a business man, and, to be true, lives nearly every day. The subject was raised out of the in-visibility of the social condition. Traits of mind were the following: generous, happy, good-natured, honest, sensitive, humane, good-looking, practical, friendly, self-reliant, hard-headed, weak, honest, kind, warm, friendly, broad-minded and secure.

(1) "This person has red hair and wears heavy black glasses. He is very athletic and is usually wearing a dark suit. He always attempts to think his problems through in their own solution form. He doesn't care about anyone who is different than or the same as himself. He usually stands with his hands in a small room and converses with people."

The subject who spoke this was in the low-social class group, a male, and under the variable condition. The following traits were noted: practical, intelligent, popular, reliable, energetic, self-reliant, self-centered, imaginative, strong, warm, friendly, decisive, narrow-minded, and fast. It should be noted that a certain variable did not affect the results indicated.



instance, it did not establish a halo effect tending towards consistently desirable or undesirable evaluations. This contention was checked by a two-way analysis of variance computed on the difference scores in Table 5. This analysis, presented in Table 6, yielded a between-traits  $F$  of 9.89, ( $df$  9 and 38) significant beyond the .01 level. Apparently, not all trait-pairs in the trait check list were equally affected by manipulation of the sociable-unsociable variable. An illustration of this is contained in Table 7, which shows the traits arranged in order of magnitude of their average difference scores for all subjects regardless of their sociability. Fig. 2 presents a graphic portrayal of this.

The next aspect to be examined concerns the differences between the high-, middle-, and low-sociability groups with respect to the centrality of the trait of sociability, as measured by the difference scores presented in Table 5: 403 for the high-sociability group; 275 for the middle-sociability group; 183 for the low-sociability group. The two-way analysis of variance on these difference scores, presented in Table 6, yielded (between groups) an  $F$  of 27.81, ( $df = 2$  and 38) significant beyond the .01 level of confidence. This second major finding confirmed the experimental hypothesis and may be stated as follows:

(2) With three groups of subjects who themselves possess the central trait of sociability to varying extents this trait is found to be differentially central in these subjects' impressions of another person: the centrality of a trait is a function of



COLLON CONTENT

REVERSE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

TABLE

instance, it did not establish a basis of comparison with the

consistently desirable or undesirable

condition was checked by a two-way analysis of variance

on the difference scores in Table 1. The results are

in Table 2, which yielded a between-treatments F of 2.14, which is

significant beyond the .01 level. Apparently, the two treatments

pairs in the trait check list were equally effective in the

action of the sociable-unsociable variables. An illustration of

this is contained in Table 3, which shows the trait frequency

in order of magnitude of their average difference scores for all

subjects regardless of their sociability. The results are

graphic portrayal of this.

The next aspect to be examined concerned the difference between

the high-, middle-, and low-sociability groups with respect to

the centrality of the trait of sociability. An analysis of the

difference scores presented in Table 1 yielded the following

sociability group; 275 for the high-sociability group, 175

for the low-sociability group. The two-way analysis of variance

on these difference scores, presented in Table 2, yielded an

(between groups) an F of 27.01, which is significant beyond

yond the .01 level of confidence. This second value further

confirmed the experimental hypothesis and the results are

follows:

(2) With three groups of subjects and a descriptive measure of

central trait of sociability to varying degrees, the results

found to be differentially central in these subjects' responses

of another person; the centrality of a trait is a function of



Table 6

Two-way Analysis of Variance on the  
Difference Scores in Table 5

Source	df	Mean Square	F
Groups	2	610.40	27.81*
Traits	19	217.20	9.89*
G x T	38	21.95	
Total	59		

\*Significant beyond .01 level



Table 5  
Two-way Analysis of Variance on the  
Difference Scores in Table 2

Source	df	Mean Square	F
Groups	2	610.40	27.31*
Treats	19	217.20	9.69*
G x T	38	21.92	
Total	59		

\*Significant beyond .01 level



Table 7

The Average Difference Scores for All  
Subjects, for each Trait, in  
Order of Magnitude

Trait	Mean Difference
5. popular	28.33
4. humorous	26.33
1. generous	23.67
3. good-natured	22.33
8. good-looking	21.00
2. happy	20.33
17. relaxed	19.33
15. bold	18.00
10. restrained	17.67
19. broad-minded	16.67
12. imaginative	13.33
7. humane	13.00
11. altruistic	13.00
20. secure	12.33
16. mature	9.00
13. strong	5.67
18. decisive	3.00
9. persistent	2.33
6. reliable	1.00
14. honest	0.67



The Average Difference between the  
Solutions for each Day  
of the Year

Year	Value
1901	1.00
1902	1.00
1903	1.00
1904	1.00
1905	1.00
1906	1.00
1907	1.00
1908	1.00
1909	1.00
1910	1.00
1911	1.00
1912	1.00
1913	1.00
1914	1.00
1915	1.00
1916	1.00
1917	1.00
1918	1.00
1919	1.00
1920	1.00
1921	1.00
1922	1.00
1923	1.00
1924	1.00
1925	1.00
1926	1.00
1927	1.00
1928	1.00
1929	1.00
1930	1.00
1931	1.00
1932	1.00
1933	1.00
1934	1.00
1935	1.00
1936	1.00
1937	1.00
1938	1.00
1939	1.00
1940	1.00
1941	1.00
1942	1.00
1943	1.00
1944	1.00
1945	1.00
1946	1.00
1947	1.00
1948	1.00
1949	1.00
1950	1.00
1951	1.00
1952	1.00
1953	1.00
1954	1.00
1955	1.00
1956	1.00
1957	1.00
1958	1.00
1959	1.00
1960	1.00
1961	1.00
1962	1.00
1963	1.00
1964	1.00
1965	1.00
1966	1.00
1967	1.00
1968	1.00
1969	1.00
1970	1.00
1971	1.00
1972	1.00
1973	1.00
1974	1.00
1975	1.00
1976	1.00
1977	1.00
1978	1.00
1979	1.00
1980	1.00
1981	1.00
1982	1.00
1983	1.00
1984	1.00
1985	1.00
1986	1.00
1987	1.00
1988	1.00
1989	1.00
1990	1.00
1991	1.00
1992	1.00
1993	1.00
1994	1.00
1995	1.00
1996	1.00
1997	1.00
1998	1.00
1999	1.00
2000	1.00

MILLERS  
EZE  
COTTON



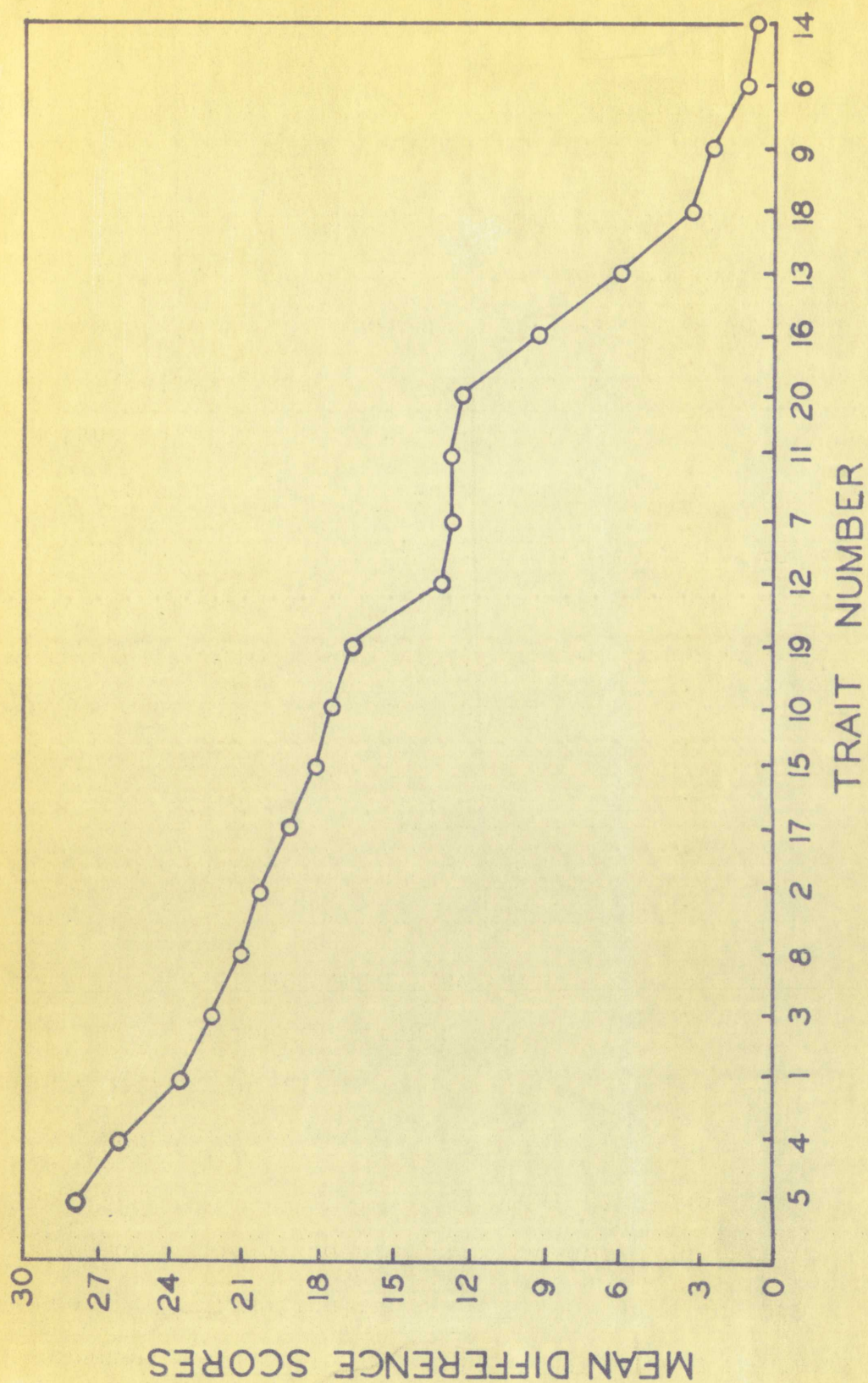
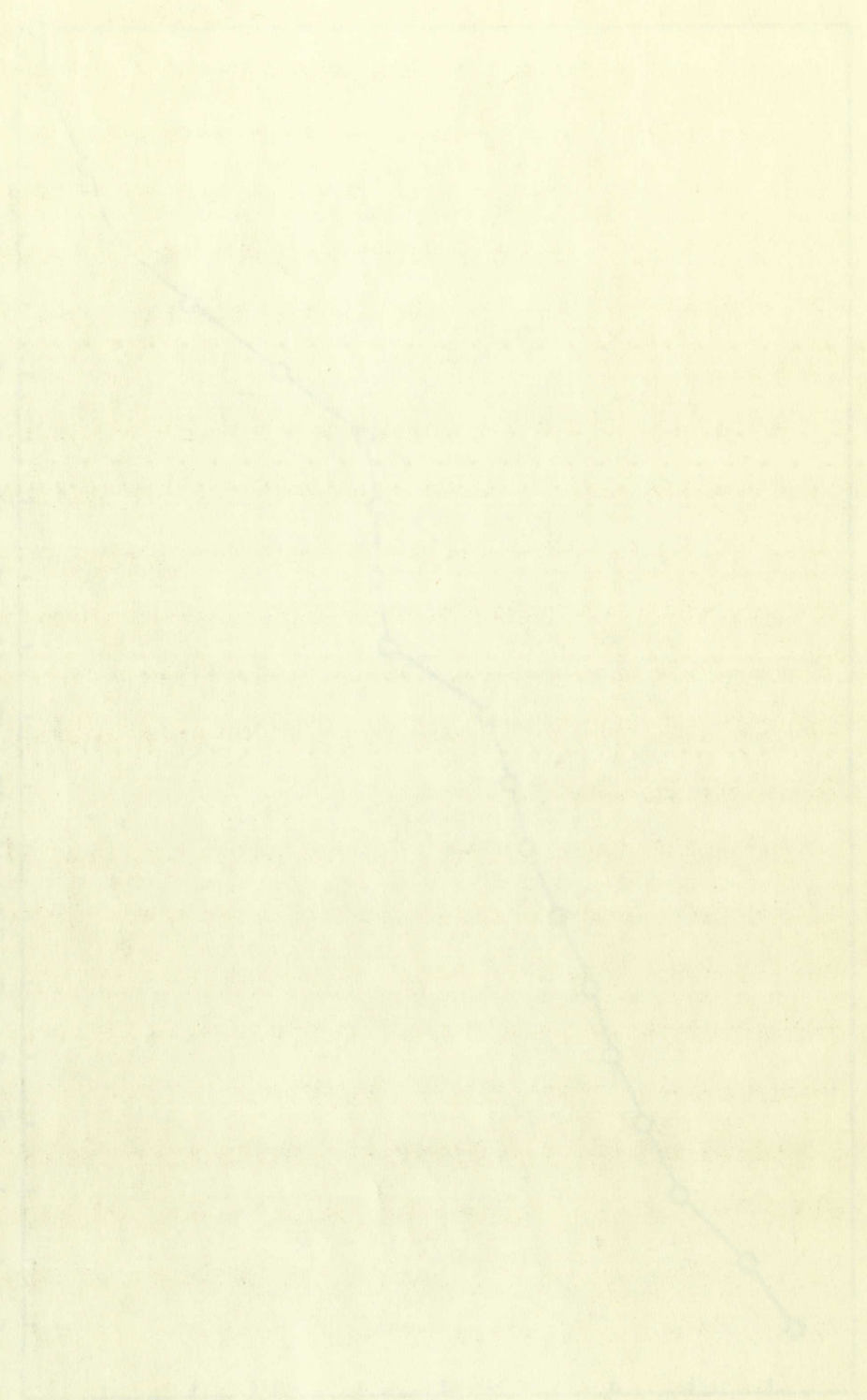


Fig. 2. The mean difference scores for all Subjects on the twenty traits, arranged in order of magnitude.



... ..

РЕЗУЛЬТАТЫ



... ..



the strength of that trait in the rater.

Also, a decrease in the strength of the trait of sociability in the raters is accompanied by a decrease in the centrality of this trait in the raters' impressions of another person, as evidenced by the consistent decline in the order of the mean difference scores for the high-, middle-, and low-sociability groups.

In a word, the "sociability status" of the described hypothetical person is more important to the high-sociability group than it is to the middle-sociability group, and carries more weight with the middle-sociability group than it does with the low-sociability group. Fig. 3 provides a clear picture of the second finding and shows how difference scores decline with a decrease in sociability.

Although the analysis of variance had indicated that the total difference scores, shown in Table 5, were significantly different well beyond the .01 level, the significance of the differences between each pair of total difference scores was left to be ascertained. For this purpose the following formula was used for determining the fiducial limits after  $A/V$ :  $L = (2 N F V)^{\frac{1}{2}}$ , where  $N$  = size of group tested;  $F$  = tabled value of  $F$  for  $1 + df$  in experimental error term;  $V$  = variance of experimental error term. The application of this formula yielded significance at the 5% level or beyond for all three pairs of total difference scores.

Further, the difference between any two of the mean difference scores is significant at or beyond the .05 level.



the strength of that trait in the future.

Also, a decrease in the strength of the trait is accompanied

in the future is accompanied by a decrease in the strength of

this trait in the future, suggesting that the strength of

evidenced by the consistency of the trait in the future.

difference scores for the high and low social desirability

MINI  
E A E F A

groups.

In a word, the 'social desirability' effect is a function of

ethical person is more important to the 'social desirability' effect

than it is to the 'social desirability' effect, and the effect

weight with the 'social desirability' effect than it is with the

low-social desirability group. This is consistent with the

second finding and shows that the effect of the trait is

decrease in social desirability.

Although the analysis of variance did not show that the

difference scores, shown in Table 1, were significantly different

well beyond the .01 level, an inspection of the difference

between each pair of social desirability groups and the

ascertained. For this purpose, the following formula was used

for determining the F-value:  $F = \frac{V}{N} \frac{S^2}{V}$  where N = size of group

where N = size of group, S = standard deviation of experimental

term. The application of this formula to the data in Table 1

the .05 level or beyond for all three pairs of social desirability

scores.

Further, the difference between the high and low social desirability

scores is significant at the .01 level.



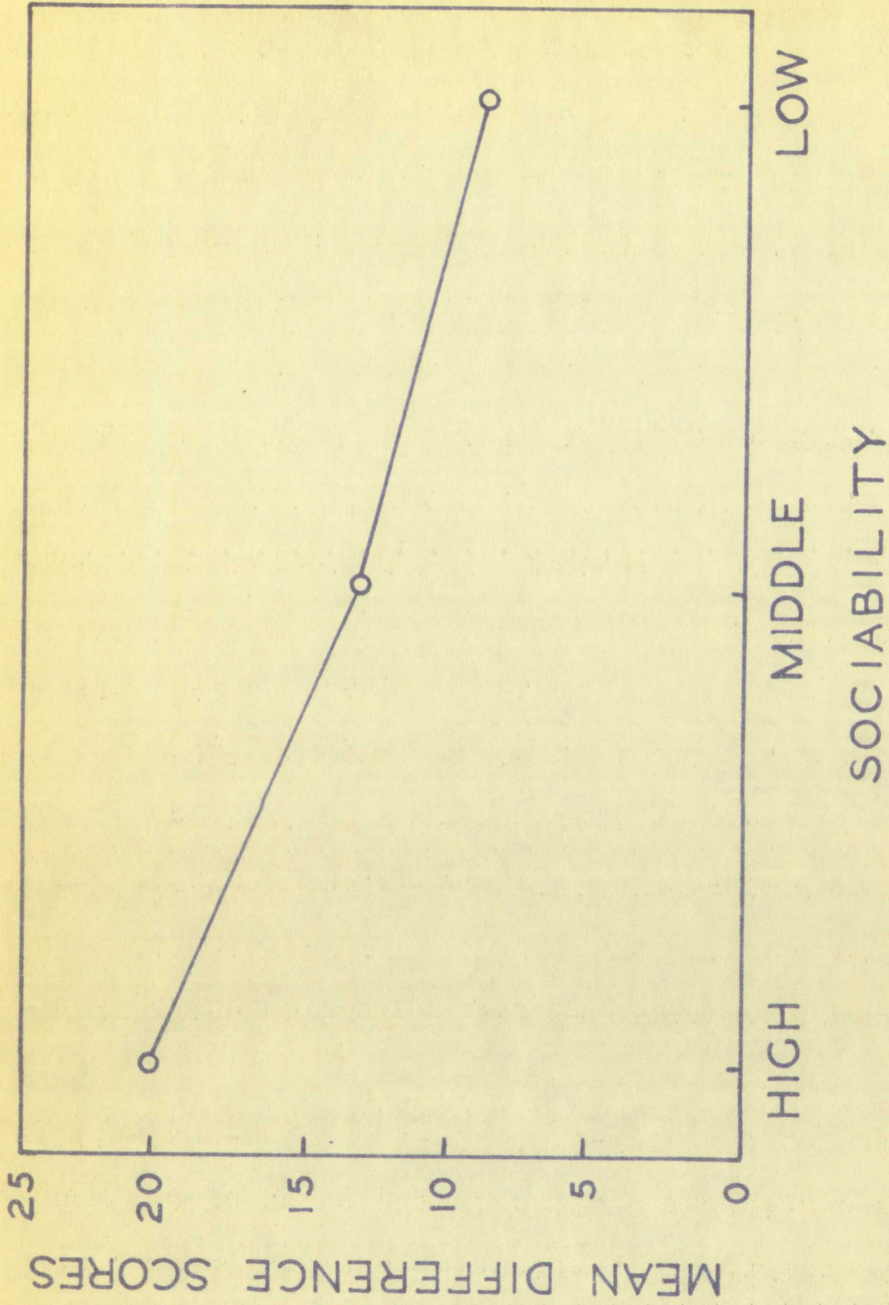
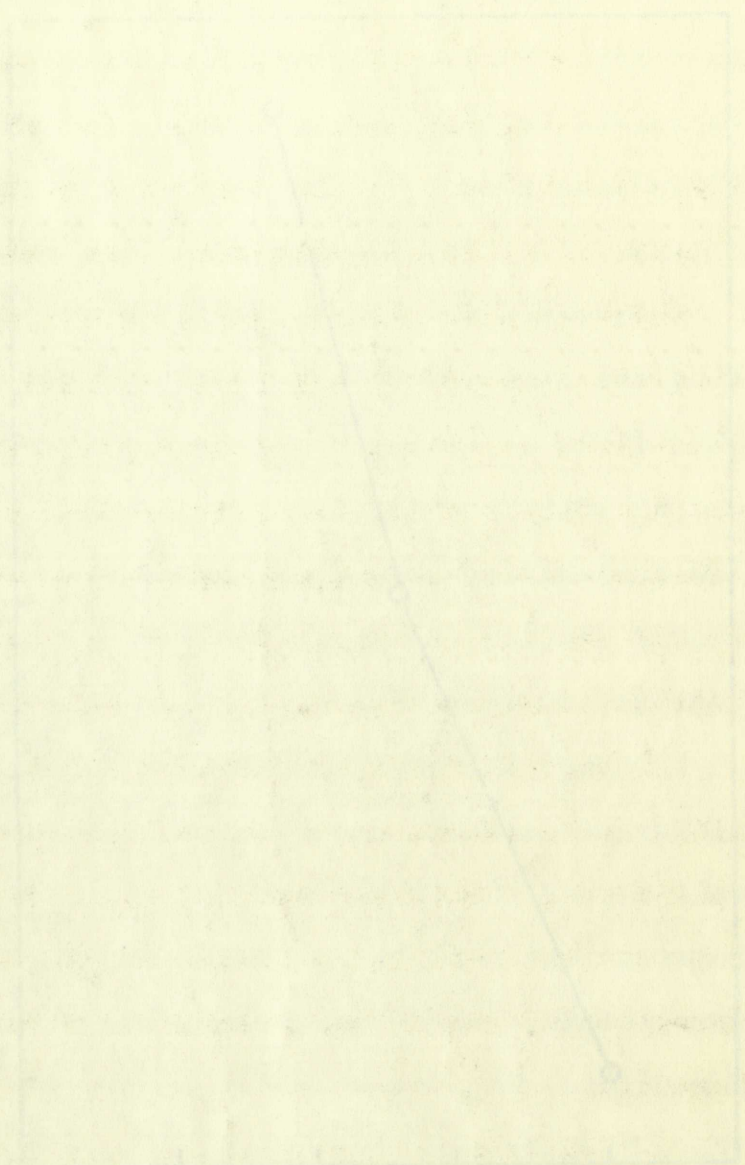


Fig. 3. The mean difference scores for the high-, middle-, and low-sociability groups.







A further study of Table 5, page 22, shows that variations in the difference scores of all three sociability-groups came about mainly because of variations in the numbers of subjects attributing the traits under the unsociable experimental condition and not under the sociable one. For example, trait number 15, bold, showed very little variation between the three sociability-groups under the sociable condition but a considerably greater difference under the unsociable condition, as shown by varying difference scores in the three sociability-groups. In a word, there were only slight differences in the amount of weight which the "sociability" of the hypothetical person carried for the three sociability-groups, while there were striking differences in the perceived "unsociability" of the hypothetical person. This third major finding may be summarized as follows:

(3) Variations in difference scores among the three groups with varying degrees of sociability came about in the unsociable condition of the experiment. Fig. 4 provides an illustration of this finding, using the means for the sociable and unsociable experimental conditions, recorded in the last row of Table 5, page 22.

Further, the average numbers of all subjects attributing the several positive traits showed a greater spread, and were considerably smaller under the unsociable than under the sociable condition. Also the rank order of traits, when viewed from the standpoint of the number of subjects attributing them, differed in the two experimental conditions.

Table 8 will clarify this finding. Here the traits are



A further study of Table 2, page 22, shows that variations

in the difference scores of all three sociability-conditions

about equally because of variations in the number of subjects

attributing the traits under the respective experimental conditions

and not under the social conditions. That is, the social conditions

showed very little variation between the three sociability-

groups under the social conditions. This is shown by the fact

that the difference scores under the social conditions are shown by the fact

that the difference scores in the three sociability-conditions are

there were only slight differences in the number of subjects

the "sociability" of the experimental groups under the social

three sociability-groups, while there were marked differences

in the perceived "sociability" of the experimental groups.

This third major finding may be summarized as follows:

(2) Variations in difference scores under the social conditions

with varying degrees of sociability-conditions are shown by the fact

condition of the experiment. This is shown by the fact that the

this finding, using the same set of traits as in the

experimental conditions, showed (1) that the

page 22.

Further, the average number of all subjects attributing

several positive traits shows a greater number, and vice versa,

slightly smaller under the experimental conditions than under the social

condition. Also the rank order of the traits was found to be

standpoint of the number of subjects attributing traits, although

in the two experimental conditions.

Table 2 will clarify this finding. The two tables



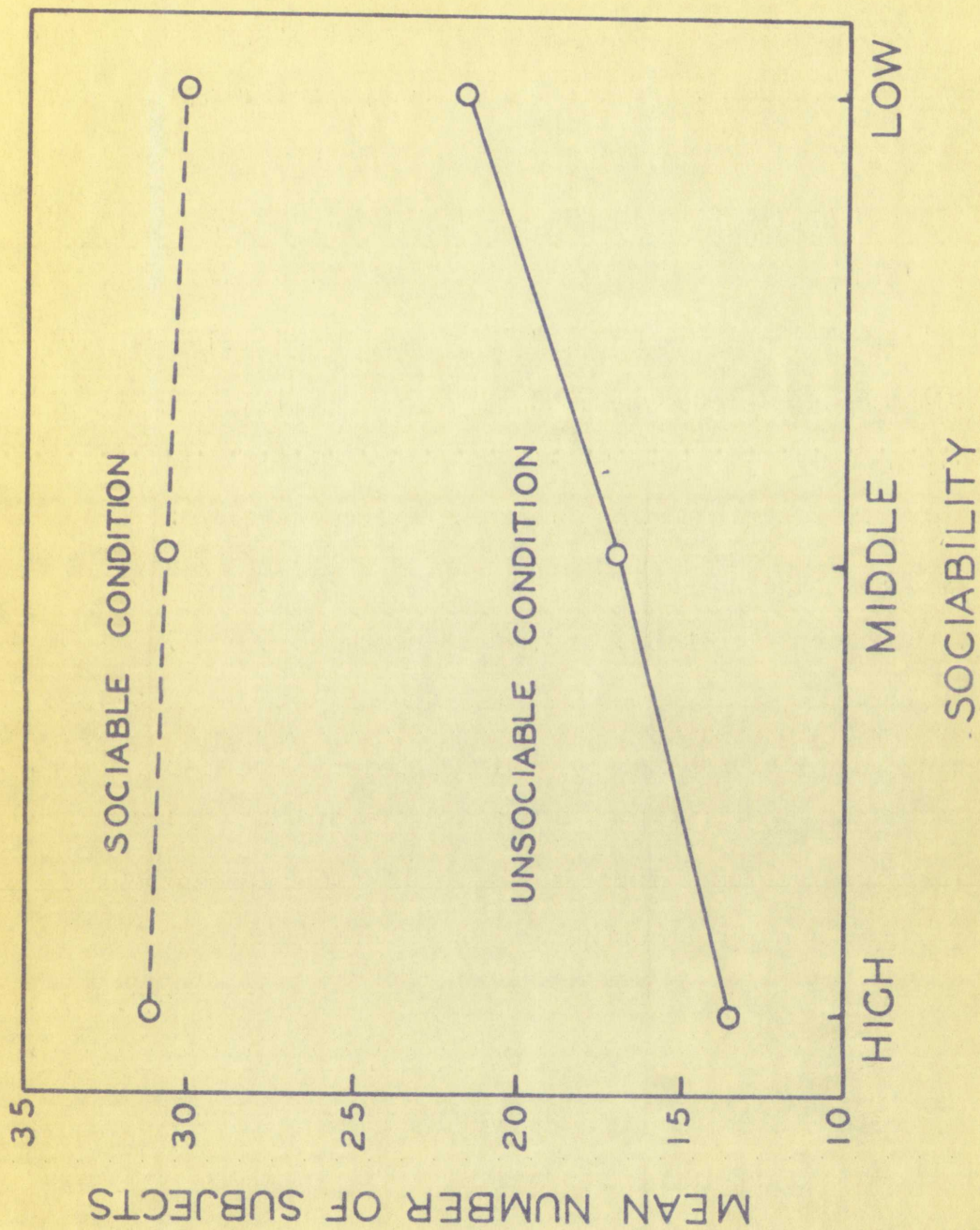


Fig. 4. The mean number of high-, middle-, and low-sociability Subjects attributing traits under the sociable and unsociable conditions.



THE EFFECT OF VIBRATION ON THE STABILITY OF THE HUMAN POSTURE

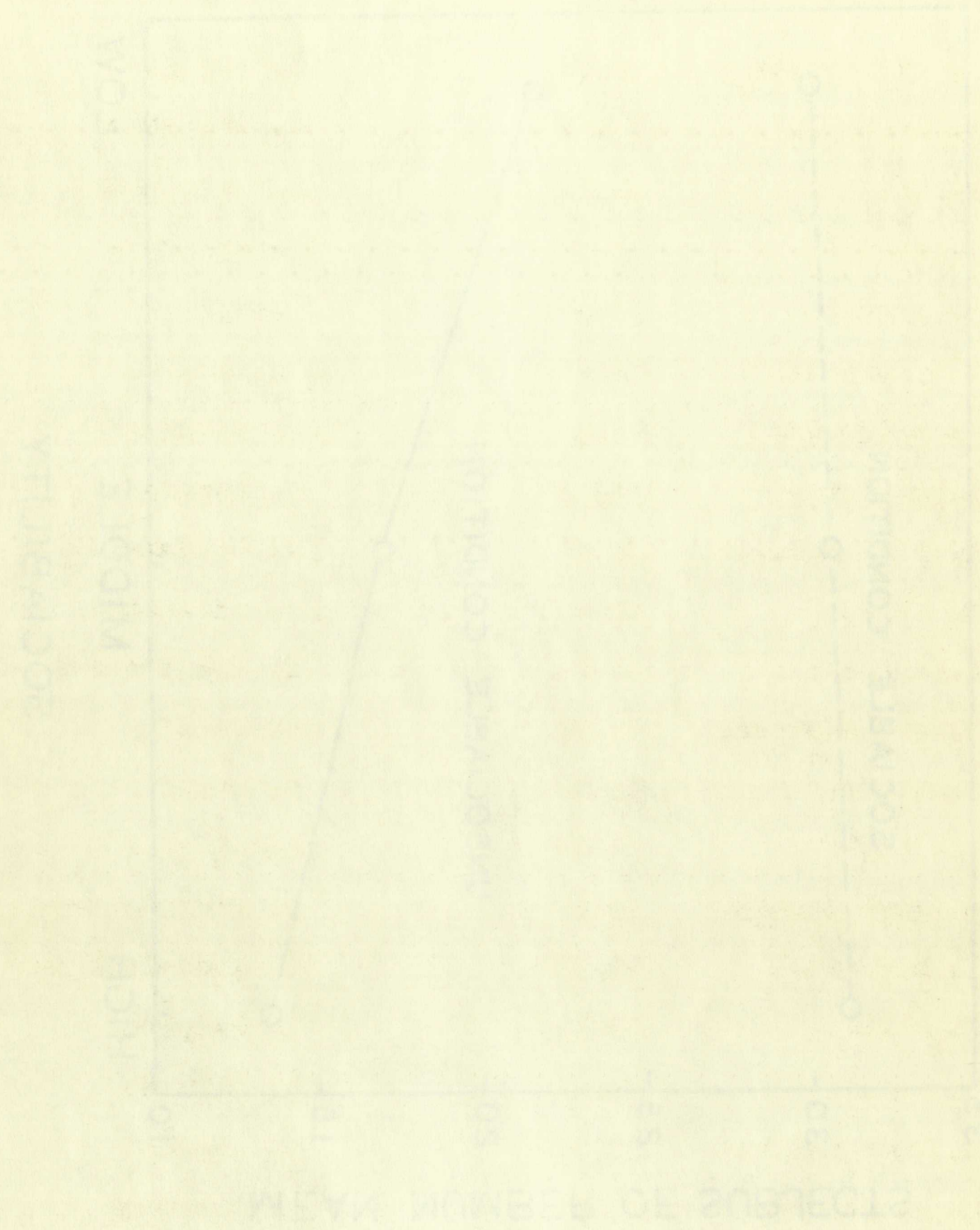




Table 8

Mean Number of All Subjects  
Attributing Traits under  
the Sociable Condition

Mean Number of All Subjects  
Attributing Traits under  
the Unsociable Condition

Trait	Mean No. of <u>Ss</u>	Trait	Mean No. of <u>Ss</u>
9. persistent	34.00	14. honest	34.00
6. reliable	33.67	6. reliable	33.33
14. honest	33.33	9. persistent	31.67
16. mature	33.00	18. decisive	31.33
5. popular	32.67	13. strong	26.33
1. generous	32.33	16. mature	24.00
10. talkative	32.33	20. secure	18.67
18. decisive	32.33	7. humane	18.00
3. good-natured	32.00	19. broad-minded	15.00
13. strong	32.00	10. talkative	14.67
2. happy	31.67	12. imaginative	13.67
19. broad-minded	31.67	15. bold	12.33
20. secure	31.00	2. happy	11.33
7. humane	31.00	11. altruistic	10.33
8. good-looking	30.67	3. good-natured	9.67
4. humorous	30.33	8. good-looking	9.67
15. bold	30.33	1. generous	8.67
17. relaxed	27.67	17. relaxed	8.33
12. imaginative	27.00	5. popular	4.33
11. altruistic	23.33	4. humorous	4.00
Means	31.12		16.97



Mean Number of All Subjects  
Attributing Traits under  
the Social Condition

Mean Number of All Subjects  
Attributing Traits under  
the Social Condition

Trait	Mean No. of 25	Mean No. of 25
1. generous	32.32	32.32
2. popular	32.07	32.07
3. good-natured	32.00	32.00
4. reliable	33.07	33.07
5. honest	33.33	33.33
6. mature	33.00	33.00
7. sensitive	32.32	32.32
8. good-looking	30.07	30.07
9. bold	30.32	30.32
10. imaginative	27.00	27.00
11. altruistic	23.32	23.32
12. relaxed	27.07	27.07
13. strong	32.00	32.00
14. broad-minded	31.07	31.07
15. secure	31.00	31.00
16. humorous	30.32	30.32
17. happy	31.07	31.07
18. nervous	31.00	31.00
19. shy	30.07	30.07
20. nervous	30.32	30.32
21. nervous	30.07	30.07
22. nervous	30.32	30.32
23. nervous	30.07	30.07
24. nervous	30.32	30.32
25. nervous	30.07	30.07
Mean	31.12	31.12



MILLERS FALLS

arranged in the order of decreasing numbers of subjects, regardless of their sociability, attributing the traits under each of the two experimental conditions. For example, under the sociable condition, trait 9, persistent, ranked first because it had the highest average number of subjects attributing it, namely 34. Since there were three experimental subgroups with 34 subjects each under the sociable condition, this means that every one of the 102 subjects under this condition attributed the trait of persistence.

It is interesting to note in Table 8 that the rank order of traits shows considerable variation in the two experimental conditions. Also, the last row of the table shows that the group mean for the unsociable condition is considerably smaller than under the sociable condition. It may thus be said that subjects attributed the positive traits less often under the unsociable condition, regardless of the subjects' own sociability. A graphic illustration of this finding is provided in Fig. 5. This figure makes it clear that the mean numbers of all subjects attributing the positive traits are consistently higher under the sociable condition, and that there are striking differences in the numbers of subjects attributing the same traits under different experimental conditions.

#### Discussion

##### Limitations of Findings

Aside from that part of the study which was a repetition of work done by Asch and to which finding 1 is specifically related, the remaining findings should be considered tentative for two



# MILLER FALLS

## EXPERIMENT

### CONTENT

arranged in the order of greatest to least of their social...  
the two experimental conditions...  
condition, that is, greatest...  
highest average number of...  
Since there were three...  
each under the social...  
the 100 subjects...  
percentages.

It is interesting to note...  
falls shows considerable...  
condition. Also, the...  
mean for the unassociated...  
under the social...  
established the positive...  
condition, regardless...  
graphic illustration...  
lighter shade of color...  
establishing the positive...  
the social condition...  
in the number of...  
different experimental...  
condition.

### Illustrations of Results

Aside from that part...  
with done by each...  
the remaining results...



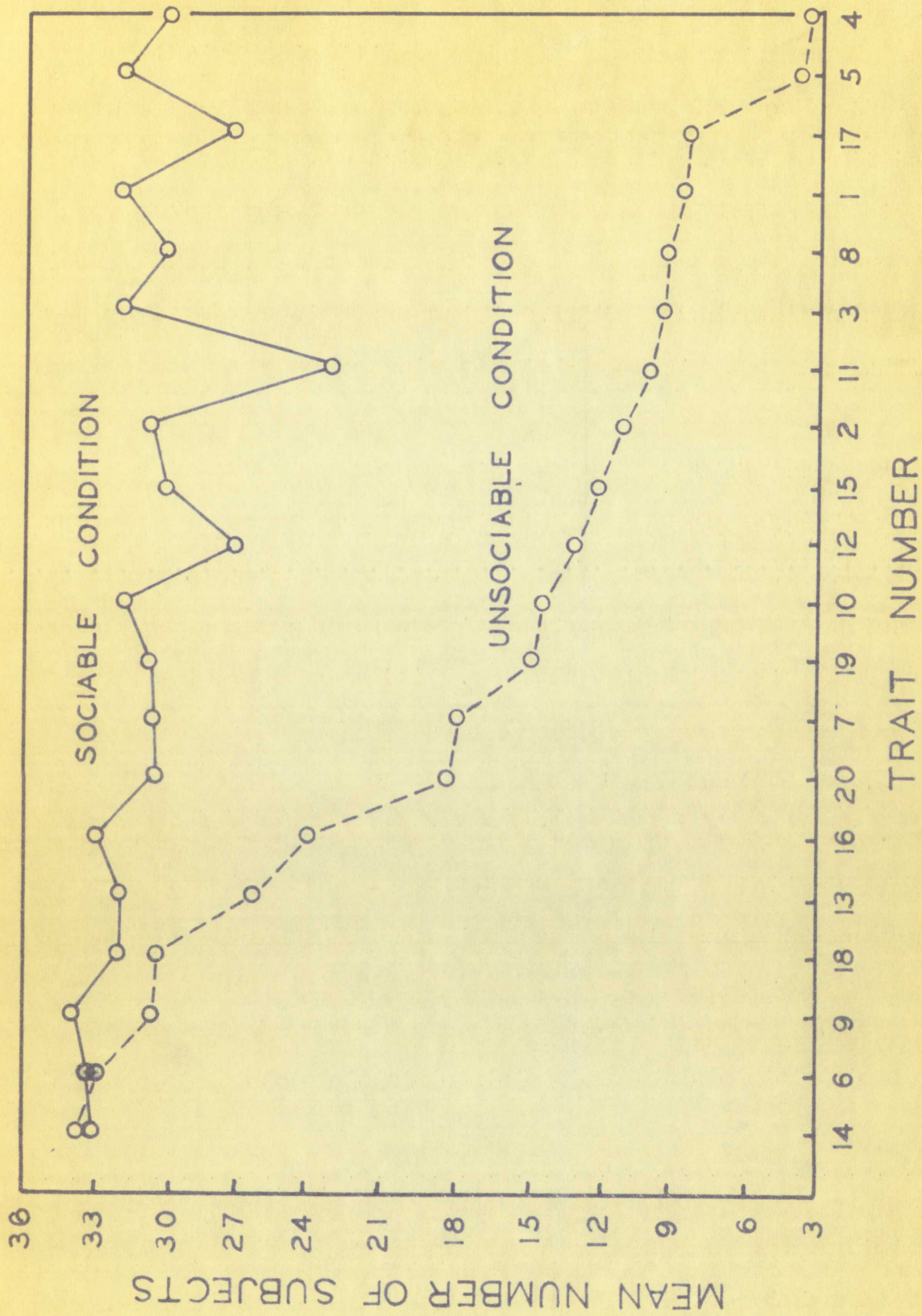
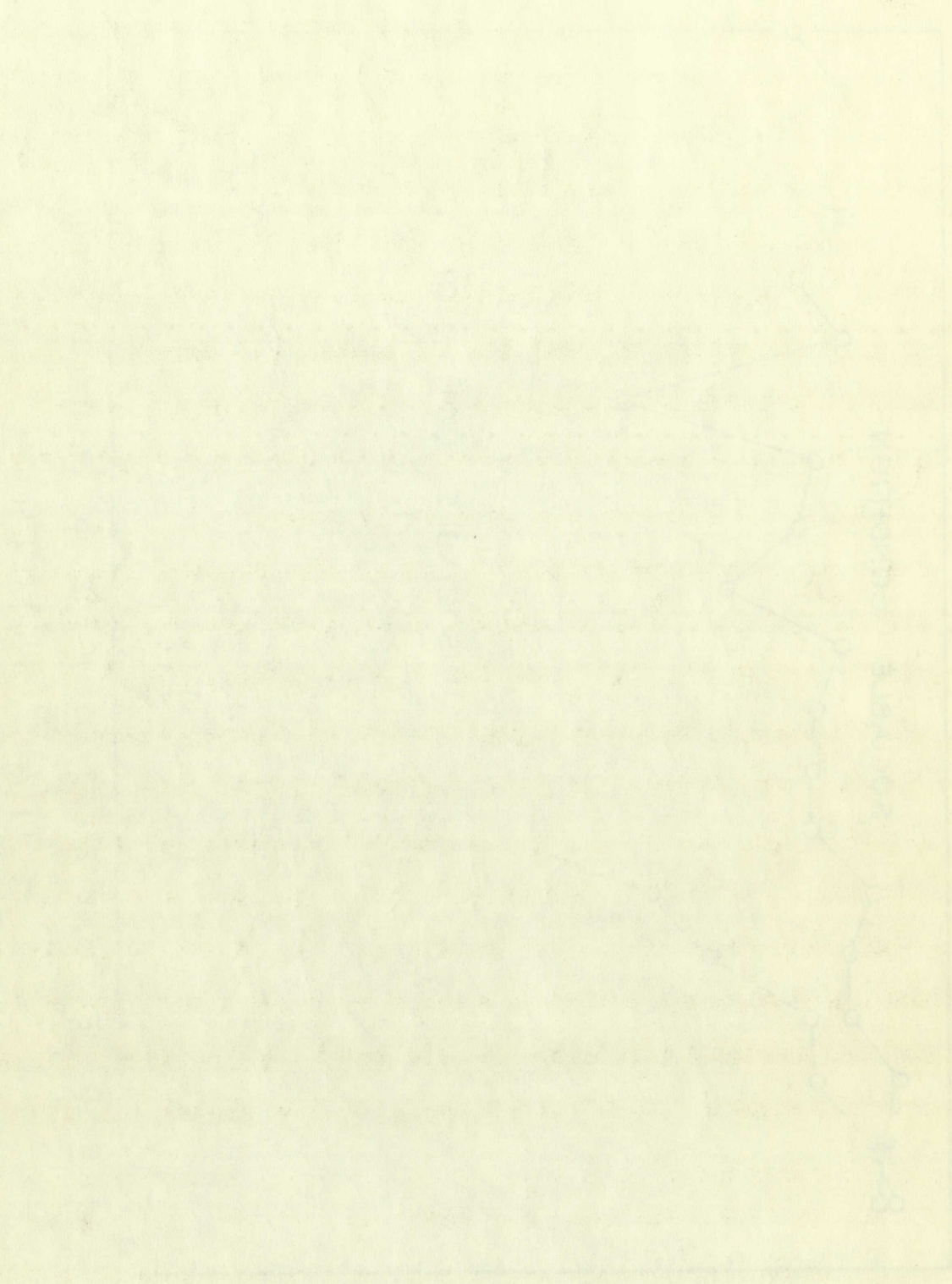


Fig. 5. The mean number of all Subjects attributing traits under the sociable and unsociable conditions.







reasons. First, although the total number of subjects was 204 the fact that each of the six subgroups had only 34 should be considered. Second, the applicability of these findings to a real life situation remains to be checked.

Therefore, it does not seem justified to generalize to the point where all of the findings would seem to be applicable to social perception in real life situations. Nevertheless, in spite of the fact that the experimental situation was removed from a real life one, suggestive evidence of applicability to social perception is present for several reasons.

First, the experimental design of the present experiment was very much like those of Asch's which have been repeated among others by Luchins (18), Kelley (13), and Mensh and Wishner (20). Asch's results were confirmed by all of these authors except Luchins, who claimed to have followed Asch's instructions exactly although less than half of the subjects submitted descriptive sketches. Luchins' quarrel with Asch did not rest on a basis of experimental, objective findings. The only criticism Luchins had which was suggestive of such a basis was his contention that the few sketches his subjects did submit lacked unification of impression which Asch had claimed for the sketches written by his subjects.

Second, the findings from that part of the study which was unlike any work done by Asch or others are in accord with the widely accepted point of view that personality influences perception, as pointed out in the introduction to this paper.

Third, although the sketches are not quantified data, they



reasons. First, although the fact that the subject was not  
 the fact that each of the subjects had not  
 considered. Second, the possibility of a  
 real life situation remains to be  
 Therefore, it does not seem justified to  
 point where all of the findings would seem to  
 social perception in real life situations. However, in  
 of the fact that the experimental situation was removed from  
 real life one, suggestive evidence of perceptibility in social  
 perception is present for several reasons.

First, the experimental design of the present experiment was  
 very much like those of Asch's which have been reported  
 others by Luchins (18), Kelley (19), and Smith and Sherman (20).  
 Asch's results were confirmed by all of these earlier workers.  
 Luchins, who claimed to have followed Asch's procedure, found  
 although less than half of the subjects rendered a majority  
 sketches. Luchins' control with Asch's control in a  
 of experimental, objective findings. The only difference  
 had which was suggestive of such a bias was the condition that  
 the few sketches his subjects did submit looked more like  
 impression which Asch had claimed for the sketches written by  
 his subjects.

Second, the findings from this part of the study were  
 unlike any work done by Asch or others in the laboratory with the  
 widely accepted point of view that perceptibility is a  
 tion, as pointed out in the introduction to this paper.  
 Third, although the sketches are not necessarily better than



provide suggestive evidence for the applicability of the findings to social perception in real life in that a great number of the subjects seemed to be capable of going beyond the scanty pre-information to a life-like perception of the person. Many subjects "perceived" the person at his work, in specific situations, and in certain kinds of clothes.

### Implications

Confirmation of Asch's findings has been obtained.

Second, finding 3 showed how differences in centrality occurred with perceived unsociability as opposed to sociability. Future research might be directed, therefore, towards a further investigation of this phenomenon, which is important to the field of social perception.

Finally, the high significance figures obtained seem to warrant providing further evidence for findings 2, 2a, and 2b by means of an experiment using a real-life situation and a larger number of subjects.

### Summary

This problem grew directly out of Asch's demonstration that the traits, "warm" and "cold," are "central," i.e., they markedly influence the choice of other fitting qualities when they are given as preinformation about a person.

At the same time Asch demonstrated that other traits, such as "polite" and "blunt" are "peripheral," i.e., they do not carry much weight in determining the overall impression of the person possessing that trait.

This study asked, "What determines the centrality of a trait?"



provides suggestive evidence for the possibility that the tendency  
to social perception in real life is that a great number of  
subjects seemed to be capable of gaining the same information  
information to a life-like perception of the person, they  
subjects "perceived" the person as if they were in a social situation.

and in certain kinds of circumstances  
IMPLICATIONS  
Confirmation of Asch's findings is a first step in the direction

Second, finding 3 showed how the tendency to social perception  
with perceived unavailability as a result of social isolation.  
research might be directed, therefore, towards a further investi-  
gation of this phenomenon, which is perhaps the most important  
social perception.

Finally, the high significance of the findings in this study  
providing further evidence for the tendency to social perception  
an experiment using a real-life situation and a larger number  
subjects.

Summary

This problem grew directly out of the tendency to social perception  
the trials, "warm" and "cold", and "friendly" and "unfriendly".  
influence the choice of other social perception.  
given as preinformation about a person.

At the same time Asch demonstrated that social perception is  
"polite" and "impolite", "friendly" and "unfriendly", and "warm"  
each weight in determining the overall perception of the person  
possessing that trait.

This study asked, "what determines the perception of a person



The hypothesis was that differences in the strength of a central trait in the raters themselves would be accompanied by differential centrality of that trait in the raters' impressions of others.

The trait dimension of "sociable-unsociable" was selected for experimental manipulation in place of Asch's "warm-cold" because the trait of "sociable" had been found to be central in a pilot study and the Gordon Personal Profile was available for measuring sociability.

Three groups of subjects were formed: high, middle and low on the sociability scale. Each group was put through an Asch-type experiment, with one half of each group hearing these trait names as describing the hypothetical person: intelligent, skillful, industrious, sociable, determined, practical, cautious. The other half of each sociability group heard these traits: intelligent, skillful, industrious, unsociable, determined, practical, cautious.

Each subject then wrote a brief sketch of the hypothetical person, and selected from each pair of a list of 20 trait-pairs the trait which best fitted their impression.

Centrality was quantified by means of difference scores. A difference score was the difference in the number of subjects checking the desirable or positive trait in each pair under the two conditions, sociable and unsociable. For example, the trait "generous" yielded a difference score of 28 in the high-sociability group, 26 in the middle-sociability group and 17 in the low-sociability group. The highest possible difference score was 34,



The hypothesis was that differences in the extent of a central trait in the relevant dimension would be accompanied by differences in the centrality of that trait in the relevant dimension of others.

The trait dimension of "sociality" was selected for experimental manipulation in order to test the hypothesis that the trait of "sociality" has been found to be central in a number of studies and the Gordon Personality Inventory and available for comparison.

Three groups of subjects were formed: high, middle and low on the sociality scale. Each group was put through an experimental procedure, with one half of each group having the trait names as described in the hypothetical person: intelligent, skillful, industrious, socially, determined, practical, cautious. The other half of each sociality group had these trait names: intelligent, skillful, industrious, socially, determined, practical, cautious.

Each subject then wrote a brief sketch of the hypothetical person, and selected from each half of the list of 30 traits the trait which best fitted their impression. Centrality was quantified by means of difference scores. The difference score was the difference in the number of subjects checking the desirable or positive trait in each half under the two conditions, socially and associated. The hypothesis that "generous" yielded a difference score of 25 in the high-sociality group, 25 in the middle-sociality group and 15 in the low-sociality group. The highest possible difference score was 25.

UNIVERSITY OF MICHIGAN  
LIBRARY



the number of subjects in each sub-group.

The mean D-scores for the high-, middle-, and low-sociability groups on the twenty trait-pairs were 20.15, 13.75 and 9.15, respectively. By means of the analysis of variance these three means were found to be significantly different well beyond the 1% level. A fiducial limits test indicated that the differences between any pair of means were significant beyond the 5% level.

This confirmed the writer's hypothesis that the centrality of a trait will vary with the strength of that trait in the rater.

A related finding was this: The three mean difference scores show a consistent decline from the high- to the low-sociability groups. That is to say, the presence or absence of the central trait of sociability in the described hypothetical person is more important to the high-sociability group than it is to the middle-sociability group, and carries more weight with the middle-sociability group than it does with the low-sociability group.

Another finding may be described as follows. Centrality in all three sociability-groups was produced mainly by variations in the numbers of subjects attributing the traits under the unsociable experimental condition rather than under the sociable condition. In a word, there were only slight differences in the amounts of weight which the sociability of the perceived person carried for the three sociability-groups, while there were striking differences in the perceived unsociability of the hypothetical person, accompanied by differences in centrality.

A final finding may be summarized as follows. The average



the number of subjects in each sub-group. The mean D-scores for the high-, middle-, and low-sociality groups on the twenty trial-pairs were 53.15, 43.75 and 31.15, respectively. By means of the analysis of variance these means were found to be significantly different, with the high level. A Fitch's test indicated that the differences between any pair of means were significant beyond the 5% level. This confirmed the writer's hypothesis that the centrality

### DISCUSSION

A related finding was that the three main sub-groups show a consistent decline from the high- to the low-sociality groups. That is to say, the presence or absence of the central trait of sociability in the described hypothetical persons is more important to the high-sociality group than it is to the middle-sociality group, and carries more weight with the middle-sociality group than it does with the low-sociality group.

Another finding may be described as follows. Centrality in all three sociality-groups was produced mainly by variations in the number of subjects attributing the trait under the antisocial experimental condition rather than under the social condition. In a word, there were only slight differences in the amount of weight which the antisocial of the outside person carried for the three sociality-groups, whereas there were marked differences in the perceived antisociality of the respondent

person, accompanied by differences in response. A final finding may be summarized as follows. The average



numbers of subjects, regardless of their sociability, attributing the several positive traits showed a much greater spread, and were considerably smaller, under the unsociable than the sociable condition.

Evidence gathered in this study supports the following conclusions:

(1) The centrality of the trait of sociability varies with the measured sociability of the subjects forming the impressions. In general, the higher the sociability scores of the subjects, the higher the centrality of that trait.

(2) The sociability scores of subjects are related to the centrality of the trait of sociability only in the case where the hypothetical person is described as "unsociable". Perceived "sociability" does not differentially affect subjects who differ in sociability themselves.

Future research might further explore the finding that differences in centrality occurred with perceived unsociability as opposed to sociability.

Also, a further search for central traits might prove of value to the field of social perception.



numbers of subjects, regardless of their social class, and the several positive traits showed a small increase in scores, and were considerably smaller, under the same conditions, in the control condition.

Evidence gathered in this study supports the following conclusions:

(1) The centrality of the trait of sociability was measured sociability of the subjects during the experiment. In general, the higher the sociability scores of the subjects, the higher the centrality of that trait.

(2) The sociability scores of subjects are related to the centrality of the trait of sociability only in the case of the hypothetical person is described as "antisocial". "Sociability" does not differentially affect subjects who are high in sociability themselves.

Future research might further explore the relationship between scores in centrality occurred with persons and sociability, as opposed to sociability.

Also, a further search for central traits might prove useful to the field of social perception.



## References

1. Adams, H. F. The good judge of personality. J. abnorm. soc. Psychol., 1927, 22, 172-181.
2. Asch, S. E. Forming impressions of personality. J. abnorm. soc. Psychol., 1946, 41, 258-290.
3. Asch, S. E. Social Psychology. Prentice Hall, Inc., New York, N. Y., 1952.
4. Bieri, J. J. Changes in interpersonal perceptions following social interaction. J. abnorm. soc. Psychol., 1953, 48, 61-66.
5. Crutchfield, R. S. Social Psychology and group processes. Annu. Rev. Psychol., 1954, 5, 171-198.
6. Estes, S. G. Judging personality from expressive behavior. J. abnorm. soc. Psychol., 1938, 33, 217-236.
7. Fensterheim, H., & Tresselt, H. The influence of value systems on the perception of people. J. abnorm. soc. Psychol., 1953, 48, 93-98.
8. Gage, N. L. Accuracy of social perception and effectiveness in interpersonal relationships. J. Pers., 22, 1953, 128-141.
9. Gage, N. L. Explorations in the understanding of others. Educ. psychol. measmt, 13, 1953, 14-26.
10. Gordon, L. V. Gordon Personal Profile. New York & Chicago: World Book Co., 1953.
11. Haire, M., & Grunes, W. F. Perceptual defenses: Processes protecting an organized perception of another personality. Human Relat., 3, 1950, 404-412.



1. Adams, H. V. The good judge of character. Psychol. Monographs, 1927, 22, 113-114.

2. Asch, S. E. Forming impressions of personality. Psychol. Monographs, 1946, 59, 1-20.

3. Asch, S. E. Social Psychology. Englewood Cliffs, N. J., 1952.

4. Bieri, J. J. Changes in interpersonal behavior during social interaction. Psychol. Monographs, 1953, 66, 51-66.

5. Gurtman, R. E. Social psychology and social structure. Annu. Rev. Psychol., 1954, 5, 401-425.

6. Kassin, S. G. Judging personality from expressions of emotion. Psychol. Monographs, 1955, 68, 113-124.

7. Pennebaker, H., & Trost, R. Systems on the development of personality. Psychol. Monographs, 1953, 66, 27-38.

8. Gage, N. L. A survey of social psychology. Psychol. Monographs, 1953, 66, 1-11.

9. Gage, N. L. Explorations in the study of personality. Educ. Psychol. Monographs, 1953, 23, 1-11.

10. Gordon, J. V. Gordon's Personality. New York: World Book Co., 1953.

11. Cairns, M., & Grimes, W. F. Personality. Englewood Cliffs, N. J., 1953, 138 pp.

UNIVERSITY OF  
 TEXAS AT AUSTIN  
 LIBRARY  
 COTTON CONTENT



12. Ichheiser, G. Structure and dynamics of interpersonal relations. Amer. Sociol. Rev., 1943, 8, 302-305.
13. Kelley, H. H. The warm-cold variable in first impressions of persons. J. Pers., 1950, 18, 431-439.
14. Kneeland, N. That lenient tendency in rating. Pers. J., 1928, 7, 356-366.
15. Kornhauser, A. W. Reliability of average ratings. J. Person. Res., 1926, V, 309-317, and A comparison of raters, *ibid.*, pp. 338-343.
16. Kornhauser, A. W. & McMurray, R. N. Rating from photographs. Pers. J., 17, 1938, 21-24.
17. LaKin, P. E. Attitudes towards self and others: a brief questionnaire report. J. Consult. Psychol., 1951, 15, 79-81.
18. Luchins, A. S. Forming impressions of personality: a critique. J. abnorm. soc. Psychol., 1948, 43, 318-325.
19. McKenna, Sr. H. V., Hofstaetter, P. R., & O'Connor, J. P. The concept of the ideal self and of the friend. J. Pers., 1956, 24, 262-271.
20. Mensh, I. N., & Wishner, J. Asch on forming impressions of personality: further evidence. J. Pers., 1947, 16, 188-191.
21. Pastore, N. Need as a determinant of perception. J. Psychol., 1949, 28, 457-475.
22. Precker, J. A. Similarity of valuing as a factor in selection of peers and near authority figures. J. abnorm. soc. Psychol., 1952, 47, 406-414.



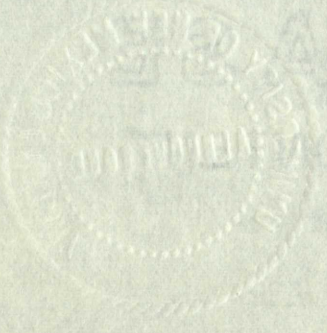
12. Ichikawa, G. Psychology of the Japanese. Tokyo, 1954. Pp. 1-100.
13. Kelley, H. H. The causal analysis of behavior. New York, 1967. Pp. 1-100.
14. Kandel, D. B. Principles of psychology. Englewood Cliffs, 1958. Pp. 1-100.
15. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.
16. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.
17. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.
18. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.
19. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.
20. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.
21. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.
22. Kamin, L. J. Psychology of learning and motivation. New York, 1969. Pp. 1-100.

**EXERCISES**



- 45
23. Rice, S. A., Stereotypes: a source of error in judging human character. J. Pers. Res., 5, 1926-1927, 267-276.
  24. Scodel, A., & Mussen, P. J. Social perceptions of authoritarians and non-authoritarians. J. abnorm. soc. Psychol., 1953, 48, 181-184.
  25. Secord, P. L. & Muthard, E. Personalities in faces: IV A descriptive analysis of the perception of women's faces and the identification of some physiognomic determinants. J. Psychol., 1956, 39, 269-278.
  26. Smoke, K. L. An objective study of concept formation. Psychol. Monogr., 1932, 42, No. 4.
  27. Stritch, T. M. & Secord, P. L. Interaction effects in the perception of faces. J. Pers., 24, 1955, 272-284.
  28. Taft, R. The ability to judge people. Psychol. Bull., 1955, 52, 1-23.
  29. Thornton, G. R. The effect of wearing glasses upon judgments of personality traits of a person seen briefly. J. appl. Psychol., 1928, 203-207.
  30. Tresselt, M. E., & Becker, M. Scales of judgment and personality correlates. J. genet. Psychol., 1950, 43, 221-230.
  31. Wittreich, W. J. The Hopi Phenomenon: a case of selective perceptual distortion. J. abnorm. soc. Psychol., 1952, 47, 705-712.





- 23. Rice, S. A., Development of human character, 3 vols., 1922.
- 24. Seidel, A., Development of character, 2 vols., 1922.
- 25. Seidel, F. L., Development of character, 2 vols., 1922.
- 26. Smoke, K. L., An objective study of character, 1922.
- 27. Striban, T. M., Development of character, 1922.
- 28. Tait, R., The ability to judge people, 1922.
- 29. Thompson, G. R., The effect of mental training, 1922.
- 30. Treaselle, M. H., Development of personality, 1922.
- 31. Wierzbicki, W. J., The effect of mental training, 1922.







Memorandum

Crassa - (C. ...)

25th DORTON 1928



