

AN ABSTRACT OF THE THESIS OF

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Title: THE EFFECT OF DISPOSITION, SITUATION, AND

SETTING ON IMPRESSION FORMATION

Abstract approved:

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As the literature on impression formation indicates that certain traits are more central than others, the relative centrality of dispositional and situational characteristics is important to determine. As dispositional characteristics are consistent over time whereas situational characteristics vary across situations, there is reason to believe that the two may differentially affect impression formation. Furthermore, researchers have questioned the generalizability of studies using a methodology consisting of artificial or imaginary settings as such methodologies may be undermined by a lack of ecological validity i.e., they are not truly representative of real life situations.

Impression formation was operationalized as interpersonal proximity. It was hypothesized that subjects similar in both disposition and situation would sit significantly closer to a confederate. Furthermore, this study examined differences in the response of subjects in an actual setting relative to subjects in an imaginary setting. A second dependent variable, a person memory test, was used to further examine differences in the salience of dispositional and situational traits. The hypothesis was supported in that subjects similar in disposition and situation sat significantly closer to a stranger. However, the dispositional characteristics were found to be more central to the impression formation process than were situational characteristics. Subjects recalled significantly more dispositional relative to situational traits of the stranger. Moreover, significant differences were found between the actual and imaginary settings. Thus, it is apparent that individuals behave differently when they must act out their responses. Therefore, the concept of ecological validity i.e., the generalizability of the research, remains crucial to social psychological research.

THE EFFECTS OF DISPOSITION, SITUATION,  
AND SETTING ON IMPRESSION FORMATION

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A Thesis

Presented to  
the Division of Psychology and Special Education  
EMPORIA STATE UNIVERSITY

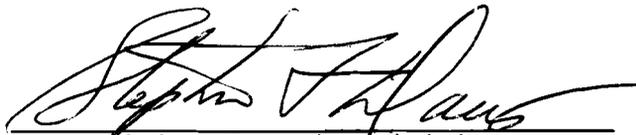
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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science

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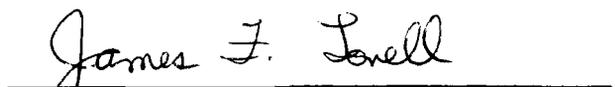
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TABLE OF CONTENTS

LIST OF TABLES..... iv

LIST OF FIGURES..... v

CHAPTER

1. INTRODUCTION..... 1

2. METHOD..... 7

    Subjects..... 7

    Design..... 7

    Materials..... 7

    Procedure..... 10

3. RESULTS..... 13

4. DISCUSSION..... 29

REFERENCES..... 36

APPENDICES:

A. Informed Consent Letter..... 40

B. Person Memory Test..... 41

C. Group Cohesion Task..... 43

## LIST OF TABLES

| Table  | Page |
|--|------|
| 1. One-way Analysis of Variance<br>Interpersonal Proximity<br>For Similarity.....  | 14   |
| 2. Means and Standard Deviations<br>Interpersonal Proximity<br>For Similar or Dissimilar Gender<br>and Armbands.....                                   | 15   |
| 3. Four-way Analysis of Variance<br>Interpersonal Proximity<br>For Subject Gender, Confederate<br>Gender, Armband, and Setting.....                    | 17   |
| 4. Means and Standard Deviations<br>Interpersonal Proximity in<br>the Actual Setting<br>For Subject Gender, Confederate<br>Gender, and Armband.....    | 18   |
| 5. Means and Standard Deviations<br>Interpersonal Proximity in<br>the Imaginary Setting<br>For Subject Gender, Confederate<br>Gender, and Armband..... | 19   |
| 6. Four-way Analysis of Variance<br>Stranger Memory Test<br>For Subject Gender, Confederate<br>Gender, Armband and Question Type.....                  | 21   |
| 7. Means and Standard Deviations<br>Stranger Memory Test<br>For Subject Gender, Confederate<br>Gender, Armband and Question Type.....                  | 22   |
| 8. Newman-Keuls Test of Specific Comparisons<br>Stranger Memory Test<br>For the Subject Gender X Armband X<br>Question Type Interaction.....           | 25   |

## LIST OF FIGURES

| Figure   | Page |
|--|------|
| 1. Diagram Questionnaire (floor<br>plan of testing room).....                                  | 9    |
| 2. Subject Gender X Armband X<br>Question Type Interaction<br>For Interpersonal Proximity..... | 24   |
| 3. Subject Gender X Confederate<br>Gender X Setting Interaction<br>For Person Memory Test..... | 26   |

## CHAPTER 1

### INTRODUCTION

As person perception begins with impression formation, its importance in establishing social relations is crucial (Asch, 1946). Although an impression can be easily formed from just one item of information, it is very difficult to change (Asch, 1946).

According to Asch's (1946) Central Trait Theory, the observer forms an impression of a stranger by attending primarily to certain salient characteristics. The observer's assessment of these "central traits" or elements then blend together such that the impression becomes "a sum of the elements" (Asch, 1946, p. 287). Although Anderson (1965) proposed that impressions are formed by averaging rather than adding the elements, he still incorporated Asch's notion of centrality into his model by suggesting that observers weigh some characteristics more heavily than others. However, neither Asch nor Anderson were able to operationally delineate central from peripheral traits other than to indicate that the central traits were more salient than the peripheral traits. This distinction seems unclear and thus, unsatisfactory.

Impression formation appears to be affected by a variety of traits which can be categorized as dispositional or situational characteristics. Dispositional characteristics are factors that are consistent across situations (Berger, Gardner, Parks, Schulman & Miller, 1976). Age, for example, has been demonstrated to play an important role in impression formation. College-aged subjects form stereotypical impressions of the elderly, especially when confronted with information inconsistent with the stranger (Brewer, Dull & Lui, 1981).

The influence of gender, another dispositional characteristic, on impression formation also appears to be important. In his study investigating impression formation, Rosenfeld (1965) used only female subjects and a female stranger (i.e., confederate) on the assumption that wanting to give a good first impression is "more appropriate to the female than to the male role" (p. 120). Shaffer (1977, 1978) reported that male strangers received higher likability ratings than female strangers. Korabik (1982) demonstrated that females in comparison to males tend to rate strangers more positively. Christensen and Rosenthal (1982) found that males are more influenced by information

received prior to contact with a target person than are females. Shaffer (1977, 1978) further demonstrated that subjects polarized their impressions about members of the opposite sex, i.e., impressions were either extremely negative or extremely positive. Thus, males and females may differentially form impressions about male and female strangers.

In contrast to dispositional variables, situational characteristics, such as task and social attraction (Powell, Hill & Hickson, 1980) and clothing (Yener, 1982) vary across "social contexts" (Berger et al., 1976, p.152). Wann and Weaver (1986) and Wann (1987), reported that manipulating the placement of chairs produced different impressions. When all chairs were an equal rather than unequal distance from the entrance to the testing room, subjects sat closer to the confederate.

Heider (1958) states that a common situational variable is luck in which some of a stranger's observable traits and/or abilities are characterized by the subject as being attributed to chance. That is, to the subject, the stranger's traits and/or abilities might be manifested in a different way, in a different situation (Heider, 1958). This inferred

inconsistency across situations adds the factor of chance to the impression formation process.

Therefore, any impression-forming trait which is viewed as being controlled by chance, e.g., random assignment to a group, is viewed as a situational factor.

Given Asch's and Anderson's emphasis on the importance of central traits to form an impression, it is unclear whether the individual primarily attends to the stranger's disposition or the situation or both. Although dispositional and situational characteristics contribute to impression formation, a determination of their relative importance, or centrality, has not been done. This study, in part, will attempt to ascertain whether subjects differentially weigh situational relative to dispositional characteristics in the formation of their impressions.

Impression formation has typically been investigated by presenting subjects imaginary (e.g., Becker, Gield & Froggatt, 1983; Leahy, 1979; Noffsinger, Pellegrini & Burnell, 1983) or actual (e.g., Rosenfeld, 1965) settings. However, the imaginary method may be lacking in ecological validity thereby producing results with limited

generalizability to real life events Neisser (1976). Wann and Weaver (1986) and Wann (1987) reported statistically significant differences in subjects' impressions between actual and imaginary settings. Subjects in the imaginary, relative to the actual, condition sat significantly closer to the stranger. The potential importance of these results for social psychological methodology warrants replication of the manipulation of actual and imaginary settings.

Impression formation, a type of interpersonal attraction, has been operationalized as interpersonal proximity (see, Hare, 1962; Morton, 1959; Rosenfeld, 1965). In the present study, impression formation was operationalized as the distance between the stranger and where the subject sits after entering the test room where the stranger is the sole occupant.

Impression formation appears to influence person memory (e.g., Cantor & Mischel, 1979; Hemsley & Marmurek, 1982; Srull & Wyer, 1979). Thus, a second dependent variable measured in the present study was subject's memory for the stranger, operationalized as scores on a person memory test. As the Von Restorff Effect indicates that the most salient aspects of the environment tend to be better remembered (Wallace,

1965), the memory test should provide additional information as to the relative saliency of dispositional and situational characteristics for impression formation.

From the aforementioned theories and research findings, it was hypothesized that subjects similar, rather than dissimilar, in disposition and situation to the stranger would sit closer to the stranger. In addition, this study attempted to answer the following research questions:

1) Will the dispositional and situational characteristics differentially affect interpersonal proximity?

2) For subjects in the actual condition, will the dispositional and situational characteristics differentially affect subject's memory for the stranger?

3) Will subjects differentially form impressions in an imaginary as compared to actual situation?

4) Will a statistically significant negative correlation exist between interpersonal proximity and person memory?

## CHAPTER 2

### METHOD

#### Subjects

The subjects were 160 student volunteers obtained from psychology and sociology courses at Emporia State University. Some subjects received extra credit for their participation. Their ages ranged from 18-23 with a mean of 19.7

#### Design

The present study had a 2 (Subject Gender: male or female) X 2 (Armband: similarly or dissimilarly colored) X 2 (Stranger Gender: male or female) X 2 (Setting: actual or imaginary) between subjects multifactor design. The subjects were blocked on gender and randomly assigned to the eight treatment conditions formed by crossing the Confederate Gender, Armband, and Setting independent variables.

#### Materials

The consent form, which all subjects were required to read and sign, appears in Appendix A. Typed on the bottom half of the consent form was a demographic question requesting the subject's age. The subjects in the actual setting condition were tested in a one-door, 17.5' X 23.5' room that contained seven chairs placed in a fan shape so as to

be equidistant from the entrance (see the bottom of Figure 1 for a schematic diagram of the testing room's floor plan). The stranger (confederate) was always seated in the sixth chair from the left as the subject entered the room.

Subjects in the imaginary condition were given a one-page diagram (see Figure 1) of the testing room which included a brief description of the situation and instructions to "circle the chair you would be most likely to sit in." The 10-item memory test (see Appendix B) contained randomly arranged questions about 5 situational and 5 dispositional characteristics that were present in the testing room. The armbands were 18" strips of red and blue crepe paper affixed with scotch tape. In addition, a group cohesion task (see Appendix C) that contained 10 questions was designed to promote group identity.

The strangers (one 21-year-old male and one 21-year-old female) were students from another university. They were previously trained to record interpersonal proximity on a 3 X 5 index card.

Figure 1

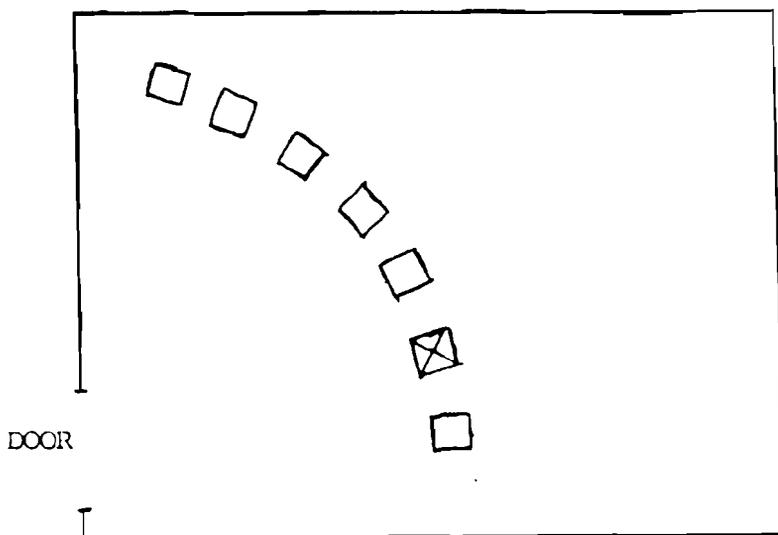
## Sample Diagram Questionnaire

[Note: A second version was prepared for the female stranger]

Please imagine yourself in the following situation:

Below is a diagram of a room with seven chairs.

Each square represents a different chair. As you enter this room, you notice a college-aged male seated in the chair marked 'X'. In addition, you also observe that this individual is wearing the blue arm band. Please circle the chair you would be most likely to sit in.



## Procedure

Fifteen to twenty-five males or females were run at a time. The procedure required five rooms. Assistants were located in the hallways to help insure that the subjects moved correctly from room to room. In the first room, after completing the consent form, subjects were randomly assigned to either the "blue" or "red" group, and given the following instructions:

I [the experimenter] am now going to hand you a red or blue armband to be worn on your right arm. The armband will signify your group membership. You will tape the armbands around your arm and receive further instructions in the next room.

They were then given an appropriately colored armband to wear for the duration of the experiment. Subjects then followed the experimenter to the second room and were seated in two groups according to armband color. Once seated, the subjects were given the following instructions:

I am now going to give each group a roll of tape. Help each other put

your armbands on the right arm. It should be done as follows. [The procedure was demonstrated.] Once everyone in the group has their armband in place, please be reseated.

Once everyone was reseated, a subject in each group was randomly selected to be a recorder for the group cohesion task. The two groups were instructed to answer at their own pace, some questions asked by the recorder who would be writing down their responses. In addition, the subjects were informed that when the experimenter pointed at them, they were individually to move to a different room (i.e., the third room), have a seat in any one of the chairs, and wait for further instructions. After all questions were answered, subjects were instructed to begin work on the cohesion task.

As the groups completed the task, randomly selected subjects were sent at 90-second intervals to the testing room where a male or female stranger wearing either a similarly or dissimilarly colored armband was waiting. When the subject entered the room, the stranger smiled naturally and established eye contact but did not speak with the subject. After the subject was seated, the stranger then

recorded the chairs separating him/herself from the subject on the 3" X 5" note card and then instructed the subject to move to the next (i.e., the fourth) room. It was in the fourth room that the stranger memory test was administered, lasting about two minutes. Subjects then went to the fifth room where they returned the armbands and were debriefed and thanked for their participation.

The procedure for subjects in the imaginary condition was identical except that after receiving red or blue armbands and being seated according to group, they were given a sheet of paper containing a diagram of the testing room and a typed description of the testing situation (see Figure 1). Subjects were instructed to read the description carefully and then circle the chair which they would sit in. Once the diagrams had been collected, subjects were sent to a separate room to be debriefed and thanked for their participation.

## CHAPTER 3

## RESULTS

Hypothesis 1

Hypothesis 1 predicted that subjects similar relative to dissimilar in disposition and situation would sit closer to the confederate. To test Hypothesis 1, the subjects first were collapsed across setting. The resulting eight treatment conditions formed by crossing Subject Gender, Confederate Gender, and Armband were further collapsed into four conditions such that the subject's relative to confederate's Gender and Armband were the same, different, or mixed. These four conditions were then considered to be four levels of the independent variable Similarity. A one-way analysis of variance was then performed on interpersonal proximity and appears in Table 1. The means and standard deviations of the four groups appear in Table 2. Similarity was statistically significant,  $F(3, 156) = 3.71, p < .05$ . A Newman-Keuls test of specific comparisons ( $p < .05, df = 156$ ) revealed that subjects in the Similar Gender - Similar Armband group sat significantly closer to the stranger than did subjects in the Dissimilar Gender - Similar Armband and Dissimilar Gender - Dissimilar

Table 1

One-way Analysis of Variance  
Interpersonal Proximity  
For Similarity

| Source     | DF  | MS   | F     |
|------------|-----|------|-------|
| Similarity | 3   | 2.51 | 3.71* |
| Error      | 156 | .68  |       |

\*  $p < .05$

Table 2

Means and Standard Deviations  
Interpersonal Proximity  
For Similarity

|  |            |
|--|------------|
| Similar Gender - Similar Armband       | .60 (.59)  |
| Similar Gender - Dissimilar Armband    | 1.02 (.97) |
| Dissimilar Gender - Similar Armband    | 1.13 (.65) |
| Dissimilar Gender - Dissimilar Armband | 1.13 (.99) |

Armband groups. The other comparisons were not significant thus, Hypothesis 1 was supported.

### Research Question 1

Research Question 1 asked whether the dispositional and situational characteristics would differentially affect interpersonal proximity. A 2 (Subject Gender: male or female) X 2 (Confederate Gender: male or female) X 2 (Armband: similar or dissimilar) X 2 (Setting: actual or imaginary) between subjects analysis of variance was performed on the number of chairs separating the stranger from the subject. The analysis of variance is presented in Table 3 and means and standard deviations by actual and imaginary settings are presented in Tables 4 and 5. Although a statistically significant main effect was not found for Subject Gender, Confederate Gender, or Armband, the Subject Gender X Confederate Gender interaction was statistically significant,  $F(1, 143) = 6.52, p < .02$ . Newman-Keuls tests of specific comparisons failed to indicate significant differences between any two groups. Overall then, subjects with matched gender sat closer to the stranger than subjects with mismatched gender. No interaction involving Armband was found. It appears that the dispositional relative to situational

Table 3

Four-way Analysis of Variance  
 Interpersonal Proximity For Subject Gender,  
 Confederate Gender,  
 Armband and Setting

| Source                 | DF  | MS   | F     |
|------------------------|-----|------|-------|
| Subject Gender (S)     | 1   | 0.25 | 0.34  |
| Confederate Gender (C) | 1   | 0.09 | 0.70  |
| Armband (A)            | 1   | 2.02 | 3.11  |
| Setting (T)            | 1   | 0.90 | 1.39  |
| SC                     | 1   | 4.27 | 6.52* |
| SA                     | 1   | 0.09 | 0.01  |
| ST                     | 1   | 0.01 | 0.03  |
| CA                     | 1   | 1.26 | 1.92  |
| CT                     | 1   | 0.10 | 0.15  |
| AT                     | 1   | 4.24 | 6.48* |
| SCA                    | 1   | 1.63 | 2.45  |
| SCT                    | 1   | 2.90 | 4.56* |
| SAT                    | 1   | 0.39 | 0.59  |
| CAT                    | 1   | 0.24 | 0.39  |
| SCAT                   | 1   | 0.00 | 1.00  |
| Error                  | 143 | 0.65 |       |

\*  $p < .05$

Table 4

Means and Standard Deviations  
 Interpersonal Proximity in the Actual Setting  
 Subject Gender by Confederate Gender by Armband

|                    |                       | Similar<br>Armband | Dissimilar<br>Armband | Overall       |
|--------------------|-----------------------|--------------------|-----------------------|---------------|
| Male<br>Subjects   | Male<br>Confederate   | .70<br>(.48)       | .80<br>(.78)          | .75<br>(.55)  |
|                    | Female<br>Confederate | 1.50<br>(.71)      | .80<br>(.61)          | 1.15<br>(.75) |
|                    | Total                 | 1.10<br>(.72)      | .80<br>(.62)          | .95<br>(.68)  |
| Female<br>Subjects | Male<br>Confederate   | 1.50<br>(.53)      | 1.00<br>(.67)         | 1.25<br>(.62) |
|                    | Female<br>Confederate | .70<br>(.48)       | .80<br>(.78)          | .75<br>(.55)  |
|                    | Total                 | 1.10<br>(.64)      | .90<br>(.64)          | 1.00<br>(.64) |
| Overall            | Male<br>Confederate   | 1.10<br>(.64)      | .90<br>(.64)          | 1.00<br>(.64) |
|                    | Female<br>Confederate | 1.10<br>(.72)      | .80<br>(.62)          | .95<br>(.68)  |
|                    | Total                 | 1.10<br>(.57)      | .85<br>(.62)          | .98<br>(.66)  |

Table 5

Means and Standard Deviations  
 Interpersonal Proximity in the Imaginary Setting  
 Subject Gender by Confederate Gender by Armband

|                    |                       | Similar<br>Armband | Dissimilar<br>Armband | Overall       |
|--------------------|-----------------------|--------------------|-----------------------|---------------|
| Male<br>Subjects   | Male<br>Confederate   | .70<br>(.82)       | 1.10<br>(1.20)        | .90<br>(1.02) |
|                    | Female<br>Confederate | .70<br>(.48)       | 1.10<br>(1.29)        | .90<br>(1.01) |
|                    | Total                 | .70<br>(.65)       | 1.10<br>(1.27)        | .90<br>(1.09) |
| Female<br>Subjects | Male<br>Confederate   | .80<br>(.42)       | 1.00<br>(1.29)        | .90<br>(.91)  |
|                    | Female<br>Confederate | .30<br>(.64)       | 1.40<br>(1.27)        | .85<br>(1.09) |
|                    | Total                 | .55<br>(.57)       | 1.20<br>(1.24)        | .88<br>(.99)  |
| Overall            | Male<br>Confederate   | .75<br>(.64)       | 1.05<br>(1.19)        | .90<br>(1.09) |
|                    | Female<br>Confederate | .50<br>(.51)       | 1.15<br>(1.25)        | .83<br>(1.02) |
|                    | Total                 | .63<br>(.59)       | 1.10<br>(1.16)        | .87<br>(.98)  |

characteristics were more central to impression formation.

### Research Question 2

Research Question 2 asked whether dispositional and situational characteristics would differentially affect memory for the stranger. A 2 (Subject Gender) X 2 (Confederate Gender) X 2 (Armband) X 2 (Question Type: dispositional and situational questions) repeated measures analysis of variance was performed on the number of correct answers on the stranger memory test, which was only administered to subjects in the actual condition. The first three factors were between subjects and Question Type was a within subjects independent variable. The analysis of variance is presented in Table 6 and means and standard deviations are displayed in Table 7. The main effect of Question Type was statistically significant,  $F(1, 144) = 69.54, p < .0001$ . The dispositional characteristics ( $\bar{m} = 4.09$ ) were remembered better than the situational characteristics ( $\bar{m} = 2.94$ ). Furthermore, Armband was statistically significant,  $F(1, 144) = 4.73, p < .05$ . Subjects with armband color not matched with the confederate's armband remembered the stranger better than subjects with matching colored armbands. In

Table 6

## Four-way Analysis of Variance

Stranger Memory Test For Subject Gender, Confederate  
Gender,  
Armband and Question Type

| Source                  | DF  | MS    | F       |
|-------------------------|-----|-------|---------|
| <b>Between Subjects</b> |     |       |         |
| Subject Gender (S)      | 1   | 2.50  | 3.29    |
| Confederate Gender (C)  | 1   | 0.90  | 1.18    |
| Armband (A)             | 1   | 3.60  | 4.73*   |
| SC                      | 1   | 0.03  | 0.03    |
| SA                      | 1   | 0.63  | 0.79    |
| CA                      | 1   | 2.03  | 2.54    |
| SCA                     | 1   | 0.10  | 0.13    |
| <b>Within Subjects</b>  |     |       |         |
| Question Type (Q)       | 1   | 52.90 | 69.54** |
| SQ                      | 1   | 1.23  | 1.54    |
| CQ                      | 1   | 2.03  | 2.54    |
| AQ                      | 1   | 2.03  | 2.54    |
| SCQ                     | 1   | 0.90  | 1.13    |
| SAQ                     | 1   | 3.60  | 4.52*   |
| CAQ                     | 1   | 0.90  | 1.13    |
| SCAQ                    | 1   | 0.03  | 0.03    |
| Error                   | 144 | 0.79  |         |

\* p&lt;.05

\*\* p&lt;.01

Table 7

Means and Standard Deviations  
Stranger Memory Test  
For Subject Gender, Confederate Gender,  
Armband and Question Type

|                    |                       | Male<br>Confederate |                | Female<br>Confederate |                | Overall       |                |
|--------------------|-----------------------|---------------------|----------------|-----------------------|----------------|---------------|----------------|
|                    |                       | DIS                 | SIT            | DIS                   | SIT            | DIS           | SIT            |
| Male<br>Subjects   | Similar<br>Armband    | 3.80<br>(.63)       | 3.10<br>(1.16) | 3.70<br>(.76)         | 2.60<br>(1.17) | 3.75<br>(.67) | 2.85<br>(1.21) |
|                    | Dissimilar<br>Armband | 4.00<br>(.47)       | 2.90<br>(1.20) | 4.00<br>(.67)         | 3.00<br>(.92)  | 4.00<br>(.52) | 2.95<br>(.84)  |
|                    | Total                 | 3.90<br>(.55)       | 3.00<br>(1.12) | 3.85<br>(.70)         | 2.80<br>(1.01) | 3.88<br>(.62) | 2.90<br>(1.09) |
| Female<br>Subjects | Similar<br>Armband    | 4.30<br>(.67)       | 3.00<br>(1.05) | 4.40<br>(.85)         | 2.00<br>(1.15) | 4.35<br>(.79) | 2.50<br>(1.11) |
|                    | Dissimilar<br>Armband | 4.10<br>(.57)       | 3.50<br>(.99)  | 4.40<br>(.85)         | 3.40<br>(.85)  | 4.25<br>(.61) | 3.45<br>(.92)  |
|                    | Total                 | 4.20<br>(.62)       | 3.25<br>(1.01) | 4.40<br>(.85)         | 2.70<br>(1.01) | 4.30<br>(.72) | 2.98<br>(1.01) |
| Overall            | Similar<br>Armband    | 4.05<br>(.72)       | 3.05<br>(1.09) | 4.05<br>(.83)         | 2.30<br>(1.18) | 4.05<br>(.79) | 2.68<br>(1.14) |
|                    | Dissimilar<br>Armband | 4.05<br>(.51)       | 3.20<br>(1.16) | 4.20<br>(.71)         | 3.20<br>(1.04) | 4.13<br>(.63) | 3.20<br>(1.14) |
|                    | Total                 | 4.05<br>(.60)       | 3.13<br>(1.07) | 4.13<br>(.77)         | 2.75<br>(1.07) | 4.09<br>(.66) | 2.94<br>(1.08) |

DIS = Dispositional Questions  
SIT = Situational Questions

addition, the Subject Gender X Armband X Question Type interaction was significant,  $F(1, 144) = 4.52$ ,  $p < .05$  and appears graphically in Figure 2. While female relative to male subjects with dissimilarly colored armbands consistently remembered the stranger better regardless of question type, female relative to male subjects with similarly colored armbands revealed better memory for dispositional questions yet poorer recall of the situational characteristics. Furthermore, Figure 1 reveals that the dispositional characteristics were remembered better across all other factors. Newman-Keuls tests of specific comparisons ( $p < .05$ ,  $df=20$ ) appear in Table 8.

### Research Question 3

Research Question 3 investigated the difference in interpersonal proximity between actual and imaginary settings. Although no main effect for Setting was obtained, a statistically significant Subject Gender X Confederate Gender X Setting interaction was revealed  $F(1, 143) = 4.56$ ,  $p < .05$ . The interaction is graphically revealed in Figure 3. Newman-Keuls tests of specific comparisons ( $p < .05$ ,  $df=20$ ) indicated that males and females in the actual condition sat further from strangers of opposite rather than same gender, as well as any subjects in

Figure 2

Subject Gender X Armband X Question Type Interaction  
For Person Memory Test

LEGEND:

Dispositional Questions ———  
Situational Questions - - - - -

Similar Armband

Dissimilar Armband

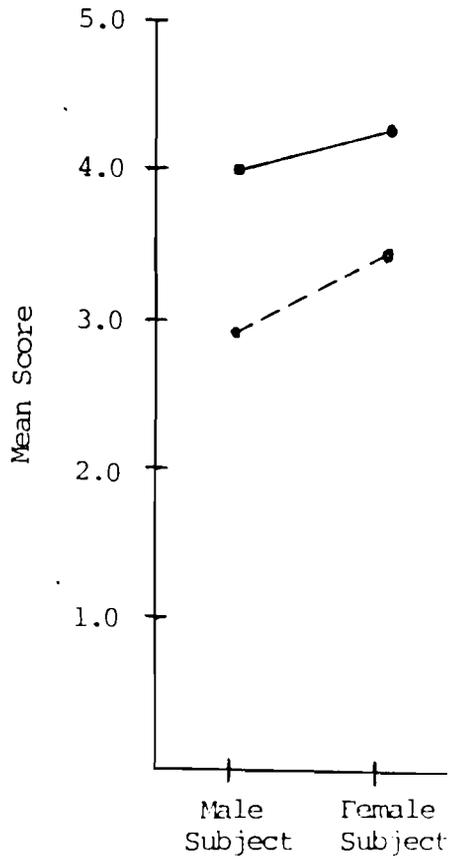
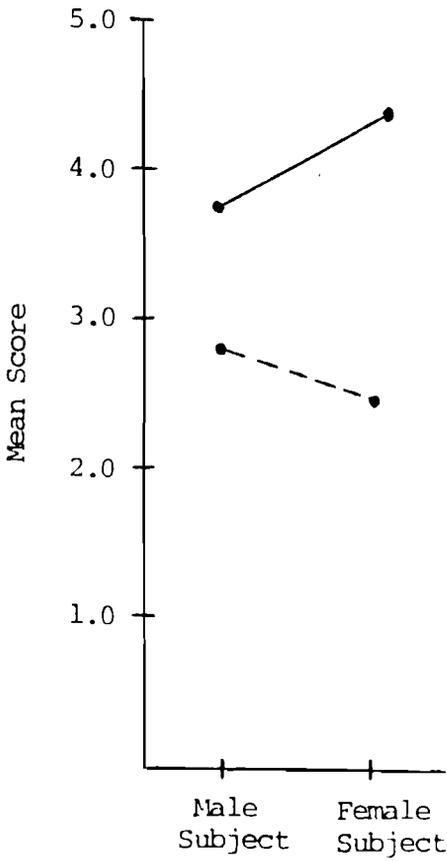


Table 8

## Newman-Keuls Test of Specific Comparisons

## Stranger Memory Test

For Subject Gender X Armband X Question Type Interaction

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| FS  | FD  | MD  | MS  | FD  | MD  | MS  | FS  |
| DIS | DIS | DIS | DIS | SIT | SIT | SIT | SIT |

M = Male

F = Female

S = Similarly Colored Armband

D = Dissimilarly Colored Armband

SIT = Situational Questions

DIS = Dispositional Questions

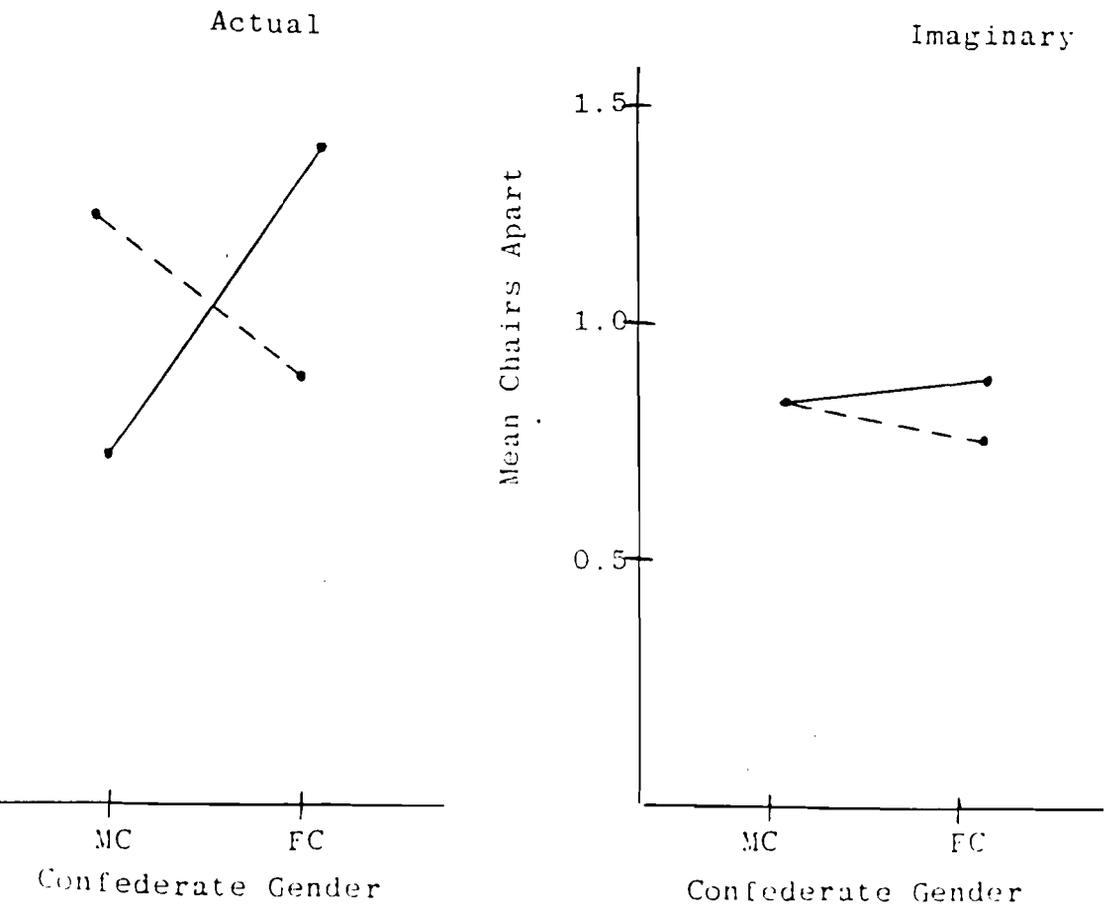
Underlined means are not significantly different.

Figure 3

Subject Gender X Confederate Gender X Setting Interaction  
For Interpersonal Proximity

LEGEND:

Male Subjects ———  
Female Subjects - - - -



the imaginary setting. It is apparent that in the actual condition, matched relative to mismatched gender reduced interpersonal proximity, whereas in the imaginary condition, proximity remained quite stable regardless of gender. In addition, a significant Armband X Setting interaction was obtained,  $F(1, 143) = 6.48, p < .05$ ). Newman-Kuels tests of specific comparisons revealed that subjects with similar armbands in the imaginary setting indicated that they would sit significantly ( $p < .05, df=40$ ) closer to the stranger than did subjects in the Dissimilar Armband - Imaginary Setting, Similar Armbands - Actual Setting, and Similar Armbands - Imaginary Setting.

#### Research Question 4

Research Question 4 asked if there would be a statistically significant negative correlation between interpersonal proximity and person memory. A Pearson-product moment correlation coefficient performed on subject's proximity and overall memory test score revealed a marginally significant negative correlation,  $r(80) = -.21, p < .07$  although no significant correlations were obtained between proximity and either the dispositional or situational scores. Given the large number of subjects in the

study, the failure to obtain a statistically significant correlation suggests that memory for a person is not necessarily dependent upon the physical distance between the person and perceiver.

## CHAPTER 4

### DISCUSSION

Within Asch's (1946) and Anderson's (1965) notion of centrality, the present study investigated the relative importance of dispositional and situational characteristics to impression formation by using physical distance separating the subjects from a stranger as an indicator of the quality of the impression. Dispositional and situational characteristics were manipulated using gender and group membership, respectively. A memory test of the stranger was also administered to clarify further the concept of centrality as it relates to dispositional and situational traits. In addition, this study compared actual and imaginary settings in an attempt to determine the ecological validity i.e., generalizability, of studies employing imaginary methodologies.

#### Hypothesis 1

The hypothesis that subjects similar in disposition and situation would sit closer to the stranger was supported. Subjects similar to a stranger in both gender and armband sat significantly closer to the confederate than did subjects who were dissimilar. It is apparent that the combined

similarities encouraged the subjects to reduce the proximity between themselves and the stranger. The results indicate that both dispositional and situational characteristics are involved in impression formation. Both dispositional and situational characteristics were attended to by the subjects and both appeared to contribute to a favorable or unfavorable impression. Thus, in light of Asch (1946) and Anderson (1965), it appears that both dispositional and situational traits may be somewhat central to the impression formation process although an analysis of the relative centrality of each could not be determined through the analysis of Hypothesis 1. Further, as the other three groups did not differ significantly, Anderson's Averaging Model (1965) appears more valid than Asch's (1946) notion of "adding". In light of Asch's notion of adding, one would expect the two mixed similarity groups to differ significantly from the dissimilar group.

#### Research Question 1

Analysis of Research Question 1 indicated that individuals rely more on dispositional rather than situational characteristics when forming their impressions. These results indicate that dispositional characteristics are more central than

situational characteristics in the forming of impressions. Thus, the theories of both Asch (1946) and Anderson (1965) are supported as the dispositional traits were weighed more heavily in the impression formation process.

### Research Question 2

The dispositional relative to situational characteristics of the stranger were better remembered. Congruent with the results for Research Question 1, individuals appear to attend more to the dispositional than situational characteristics of others as they form their impressions. If the most salient characteristics of an individual are better remembered (Wallace, 1965), then gender relative to group membership appears to be of greater value in forming a subject's memory for a stranger. As situational characteristics vary across settings, encoding them would not be as beneficial to individuals as their use is limited.

In addition, evidence was obtained indicating that the situational variable was being attended to. Subjects with dissimilar armbands remembered the stranger better than subjects with similar armbands. With regard to the Subject Gender X Armband X Question Type interaction, having a matched armband

seemingly caused female subjects to remember fewer situational characteristics. With the realization of a similar situational characteristic, other situational characteristics apparently lost some of their salience. Therefore, in keeping with the Von Restorff effect, the dispositional characteristics thus gained in saliency and were therefore better remembered.

### Research Question 3

Subjects behave differently when they act out rather than imagine their responses. In general, actual settings may differ from imaginary settings in that subjects may tend to feel anxious, nervous, or apprehensive. As the present study is the third successful replication of differences in actual and imaginary settings (see Wann & Weaver, 1986; Wann, 1987) it is apparent that the generalizability of imaginary to actual settings is limited at best. The concept of ecological validity, therefore, remains of vital importance to social psychological research. One must be cautious in generalizing studies which use methodologies containing actual and/or imaginary settings. Researchers employing such methods may find disturbing discrepancies if their research were replicated in an actual setting.

#### Research Question 4

The correlational analysis of Research Question 4 revealed that interpersonal proximity appears not to be related to memory for the stranger. Although dispositional relative to situational characteristics are better remembered, people's proximity to a stranger may have only a modest effect. Memory for a stranger appears independent of forming a positive or negative impression about that stranger.

#### Conclusion

Anderson's model appears supported in that characteristics are averaged as opposed to added to arrive at the final impression. Furthermore, subjects appear to attend to a stranger's dispositional and situational characteristics when forming an impression. However, the dispositional traits appear more central to the forming of an impression. This supports the models of both Asch and Anderson in that dispositional relative to central characteristics are more central to impression formation, and thus weighed more heavily. Memory for a person appears to be strongest for the dispositional characteristics but independent of the formed impression. Finally, the results indicate that subjects respond differently in actual and

imaginary settings. Caution in the generalizability of studies which use imaginary settings is thus warranted.

### Recommendations for Future Research

At least three recommendations for future research evolve from the present study. One such study would involve the use of different dispositional and situational characteristics. The question remains as to whether the results of the present study can be generalized to other dispositional and situational characteristics. It is feasible that other dispositional and situational traits vary in their relative centrality. Second, further exploration is warranted into the contrast between actual and imaginary settings. A within subjects design in which each subject responds in both settings would increase the generalizability of any discrepancies between actual and imaginary settings. While the present study revealed differences between subjects in the actual and imaginary settings, the question remains if the same subject would behave differently in the two conditions. A final, general recommendation is made to researchers in the area of social psychology. The aforementioned results point to a lack of ecological

validity of studies using artificial and or imaginary settings. Researchers should, whenever possible, use methodologies consisting of actual settings.

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## Appendix A

## Informed Consent Letter

Please read the following statements and if you agree with them, sign your name at the bottom.

I agree to participate in a study conducted by Dan Wann and the graduate students assisting him. The purpose of this study is to investigate the relationship between your perceptions and the environment. Your participation and cooperation is appreciated. However, you may stop participating at any time for any reason. When you have read and signed this letter, please return it to the envelope at the front of the room and return to your seat.

Signed \_\_\_\_\_

## Demographic Questionnaire

In addition, would you please provide the following information:

Age \_\_\_\_\_ Gender \_\_\_\_\_

Appendix B  
Person Memory Test

Please answer the following questions about the person in the previous room. [Note: Question type is indicated in parentheses after each question, i.e., D for Dispositional and S for Situational. This notation was deleted from subject's copy of the test.]

- 1) The stranger's gender was: (D)  
a) Male b) Female
  
- 2) The stranger's armband was: (S)  
a) The same as mine b) Different from mine
  
- 3) The color of the stranger's shirt/blouse was: (S)  
a) white b) green c) yellow d) gray
  
- 4) The color of the stranger's hair was: (D)  
a) blonde b) brown c) red d) black

- 5) The stranger was: (D)
- a) Several years younger than I
  - b) About the same age as I
  - c) Several years older than I
- 6) How many chairs were in the room. (S)
- a) 6
  - b) 7
  - c) 8
- 7) The stranger's race was: (D)
- a) White
  - b) Black
  - c) Hispanic
  - d) Oriental
- 8) How many empty chairs separated you from the stranger? (S)
- a) 0
  - b) 1
  - c) 2
  - d) 3
  - e) 4
- 9) Was the stranger: (D)
- a) Extremely thin
  - b) Average in size
  - c) Extremely heavy
- 10) Did the stranger cross his/her arms? (S)
- a) yes
  - b) no

## Appendix C

## Group Cohesion Task

As a group, please discuss the following questions.

1. Which group member most recently visited the library? \_\_\_\_\_
2. Which member of the group had the most recent birthday? \_\_\_\_\_
3. Which member of a group went to a high school the greatest distance from Emporia? \_\_\_\_\_
4. Which member of your group most recently ate pizza? \_\_\_\_\_
5. What is the most common major for the members of your group? \_\_\_\_\_
6. Which member of the group most recently ate at the Hornet's Nest? \_\_\_\_\_
7. How many members of the group are freshmen?  
\_\_\_\_\_ sophomores? \_\_\_\_\_ juniors? \_\_\_\_\_ seniors? \_\_\_\_\_
8. How many people in the group were born in Kansas? \_\_\_\_\_ In Missouri? \_\_\_\_\_
9. How many members of the group live in a dormitory? \_\_\_\_\_ In a fraternity/sorority? \_\_\_\_\_ In an apartment? \_\_\_\_\_
10. How many individuals in the group are wearing tennis shoes? \_\_\_\_\_