CULTURAL DIFFERENCES AND SEX DIFFERENCES IN PERSONAL SPACE

A Thesis

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by

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Most of the literature reviewed in this study showed that there is a difference among cultures regarding the way people handle personal space. The hypothesis formulated was:

> There is no significant difference in handling personal space among American, Saudi Arabian and Iranian males and females.

Ninety persons were the subjects for this study: fifteen American males and fifteen females; fifteen Saudi Arabian males and fifteen females; and fifteen Iranian males and fifteen females. The American group was

obtained from three English classes at Emporia State University, Spring, 1977. Most of the Iranians were students at Emporia State University and the rest were living in Emporia. For the Saudi Arabian group ten males and ten females were either students at the University of Kansas or Saudians living in Lawrence and the rest were students at Emporia State University.

The felt-board placement technique was the instrument used in this study to collect the data. Two ten-inch high male dolls and two ten-inch high female dolls and a two by three foot felt board were used. For statistical analysis, the three way (A x B x C) between subjects ANOVA was used to determine the significant differences.

The analysis of data showed that significant differences existed between males and females in the distance maintained among the three doll combinations by subjects. A significant difference was also found between sex and culture. American males maintained more distance between the dolls than the other two groups. Generally, Saudi Arabian and Iranian distances were similar.

Approved for the Major Department

Approved for the Graduate Council

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I would like to express my appreciation to my graduate committee, Dr. Cooper B. Holmes, Dr. Ray G. Heath and Dr. Christopher Joseph, for their encouragement and their assistance.

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N. I. M.

TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

LIST OF FIGURES

Chapter 1

INTRODUCTION

THEORETICAL FORMULATION

Until this decade the term personal space was confused with other psychological terms. Myers, Hale, Mykrowyez and Hughes, when describing the behavior of rabbits in a density situation, mentioned the intrusion between qualitative degrees in living space, individual tolerance limits, ego space, and personal space.[1] Sommer tried to explain the difference between personal space and individual distance by suggesting that:

> Individual distance exists only when two or more members of the same species are present and is greatly affected by population density and territorial behavior. Individual distance and personal space interact to affect the violation of society's expectations, the invasion of personal space is an intrusion into a person's self-boundaries.[2]

Freedman, in one of his recent books, used the personal space definition which was coined by Hall: "Personal space refers to the study of the way people

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[1]Arisride H. Esser, Behavior and Environment (New York: Plenum Press, 1972), p. 178.

[2]Robert Sommer, Personal Space (New Jersey: Prentice-Hall Incorporated, 1969), p. 27.

respond to the distance between themselves and others."[3]

The differences in the way people respond to or use the spatial difference between themselves, or the way they handle personal space, were supported by Haase and Markey: "There remains little doubt that spatial behavior is a cogent variable in human interaction."[4]

Sommer indicated that there are major differences between cultures in the distance a person maintains from others. Being close to somebody is acceptable for one culture but undesirable for another.[5] Arabs do not like to be alone; Japanese have no concept of privacy. The space that should be shared with the American is troublesome to the German. The Englishman must keep his own space while it is not that important to some of the Eastern people.[6]

It was and still is the problem of psychology how to measure and design behavioral research. Therefore, Haase and Markey examined three common methodologies in the measurement of personal space: observation of live action, felt-board placement, and judgment of photographs

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[3]Jonathan L. Freedman, Crowding and Behavior (New York: The Viking Press Incorporated, 1975), p. 71.

[4]Richard F. Haase and Martin J. Markey, Journal of Counseling and Clinical Psychology, 1973. Vol. 40, No. 1, pp. 122-25.

[5]Robert Sommer, op. cit., p. 26.

[6]Edward T. Hall, The Hidden Dimension (New York: Doubleday and Company Incorporated, 1966), pp. 121-52.

by using *in vivo* participation as the criterion. From inspection of the interrelationships among the methodologies, the best measure regarding the actual behavior was when the subject was asked to observe the live interaction of two other persons (the correlation between live observation and *in vivo* participation = .75, $p < .01$). The second was the felt-board technique, when the subject was asked to place dolls close to one another on a board (the correlation between felt-board and *in vivo* participation = .56, $p < .01$). Last was the use of photographs, where the subject was asked to observe slides of a male and female interacting at different distances and then to rank order, in terms of their preference, the photographed interaction distances (the correlation between photographs and *in vivo* participation = .30, ns).[7]

In spite of the difficulties which might face a researcher of personal space, Freedman indicated the importance of this kind of research from two points of view:

> [First, it demonstrates that people do respond to variations in the space around them and have rules about what is appropriate.] This makes it even more likely that population density affects people's behavior in some way. Second, it shows that there are no absolutes involving this space. There is no "right" distance, there is no automatic negative or aggressive response when someone is close. Instead, the appropriate distance depends almost entirely on such factors as the relationships among the people,

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[7]Richard F. Haase and Martin J. Markey, op. cit.

the setting, and personal characteristics of those people.[8]

THE PROBLEM

Would an American accept or feel comfortable when he is maintaining the same distance that the Saudi Arabian or the Iranian would maintain between himself and others? Does the Saudi Arabian or the Iranian stand or sit closer to the others he confronts more than the American does? Do these different cultures have some effect regarding personal space? It was the attempt of this study to answer these questions.

Statement of the Problem

Is there a significant difference in handling personal space among American, Saudi Arabian and Iranian males and females?

Statement of the Hypothesis (Null Form)

There is no significant difference in handling personal space among American, Saudi Arabian and Iranian males and females.

Purpose of the Study

It was the purpose of this study to investigate whether or not there is a difference in handling personal space among American, Saudi Arabian and Iranian males and

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[8]Jonathan L. Freedman, op. cit., p. 73.

females. The subjects were administered an experiment of placing different doll combinations on a board. The means of the group distances in placing dolls were compared by analysis of variance to test for significant differences between the six groups' performances.

Significance of the Study

A review of the literature shows that there are few studies concerning personal space and cultural differences. The possibility that the ways people use or respond to distance could have many indications regarding the organism's behavior. Finally, cultural study is an important one especially for psychology since psychologists are concerned about generalizations of their theories and concepts.

DEFINITION OF TERMS

Words and phrases with special meanings which pertain particularly to this study are defined herein for clarification.

Personal Space

Personal space is the distance which people tend to maintain between themselves and other people.[9]

Felt-board Placement

Felt-board placement is the instrument which

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[9]Jonathan L. Freedman, op. cit.

was used for this study. Two ten-inch male dolls and two ten-inch female dolls, one of them already on a two by three foot felt-board, were used. The other doll of each sex was used by the subjects to place it in relation to that on the board as if the two were going to carry on a conversation.[10]

American

An American is a person who was born and raised in the United States of America. His basic language is English.

Saudi Arabian

A Saudi Arabian is a person who was born in Saudi Arabia and lived there before his coming to the United States of America. His basic language is not English.

Iranian

An Iranian is a person who was born in Iran and lived there before his coming to the United States of America. His basic language is not English.

Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) is a method used to determine whether the differences in the variance in the dependent variable under different experimental

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[10]Richard F. Haase and Martin J. Markey, op. cit.

conditions could have occurred by chance only.[11]

LIMITATIONS OF STUDY

The subjects of this study were fifteen American males and fifteen females, fifteen Saudi Arabian males and fifteen females, and fifteen Iranian males and fifteen females. All Americans were selected from three English composition classes at Emporia State University. The Iranian group consisted of either students at Emporia State University or Iranians living in Emporia. For the Saudi Arabian group ten males and females were either students at the University of Kansas or Saudians living in Lawrence, and the rest were from Emporia State University students. The findings of this study only indicate possible differences among these groups. The use of a larger sample would be necessary to indicate general conclusions about culture and sex differences in handling personal space.

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[11]B. B. Wolman, Dictionary of Behavioral Sciences (New York: Van Nostrand Company, 1973), p. 24.

Chapter 2

REVIEW OF LITERATURE

The material presented in this chapter deals with the varied studies of personal space and related factors, personal space and cultural differences, and personal space and methods of study.

PERSONAL SPACE AND RELATED FACTORS

Since this study deals with cultural differences in personal space, this question may be asked: "Do people inherit or learn the way they handle personal space?" Hall suggested the relative importance of environment in personal space differences over inborn factors.[12] Freedman also doubted the existence of instinct concerning the human being's responses in personal space.[13] On the other hand it has been found that differences in personal space exist within the same culture, as in the American culture where there are differences between Blacks and other groups. Baxter noted that

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[12]Edward T. Hall, op. cit.

[13]Jonathan L. Freedman, op. cit.

personal space differences may be related to many factors.[14]

Meade and Singh conducted a study of changes in social distance. During the war between India and Pakistan in 1971 two hundred Hindus and two hundred Indian Muslims were the subjects for the study, using the Triandis technique for measuring social distance. The result showed that social distance increased (as compared to their distance before the war) between Indian and Pakistanian. Differences were also found between the two groups in the same country. Indian Hindus increased the distance between themselves and Indian Muslims ($\underline{t} = 5.01$, $p < .01$), while Indian Muslims increased their distance toward Hindus ($\underline{t} = 2.91$, $p < .01$). At the same time Muslims decreased the social distance between themselves and other Indian Muslims ($\underline{t} = 2.91$, $p < .01$). These results were compared with other results collected by the authors several years ago before the war.[15]

In a study of effect of political and cultural factors on the use of personal space, Thayer and Alban conducted an experiment two weeks before the New York State senatorial elections of 1970. The subjects were forty-four males drawn from two strikingly different

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[14]J. C. Baxter, "Interpersonal Spacing in a Natural Setting," Sociometry, 1970, 33, pp. 444-56.

[15]Robert D. Meade and Labe Singh, The Journal of Social Psychology, 1973, V. 90, pp. 325-26.

political-ethnic neighborhoods: (a) a Greenwich Village location and (b) a "Little Italy" location. In this experiment, the experimenter approached each subject while wearing one of two buttons (traditional American flag, and American flag with peace symbol) on his breast pocket. Each button was believed to be related to one of the candidates for New York State Senate. The experimenter walked toward each subject, stopped two feet in front of him and talked to him. As soon as the subject began to reply, the experimenter moved toward the subject to within six inches. The distance the subject assumed after the experimenter's movement was recorded. The result showed a significant difference ($p < .05$) in mean distance from flag versus peace button wearer in Little Italy but no significant difference in Greenwich Village.[16]

In studying the relationship between personal space and personality Altman, while describing such a relationship, indicated that several studies confirm the idea that highly anxious people maintain greater distance than less anxious persons. He also mentioned that extroverted persons maintain closer personal space than introverted persons. Altman continued discussing the influence of personality on personal space and listed different studies which have investigated this subject as follows:

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[16]Stephen Thayer and Lewis Alban, "A Field Experiment on the Effect of Political and Cultural Factors on the Use of Personal Space," The Journal of Social Psychology, 1972, V. 88, pp. 267-72.

1. Self directed people were more willing to approach strangers and authority figures than were those more dependent on external reinforcement from others.
2. Persons with high self-esteem and low authoritarianism approached others more closely than did authoritarians and those with low self-esteem.
3. Those with high self-concepts approached others closely on a simulation task but not on a laboratory task.
4. Racially prejudiced persons did not group different ethnic figures together as often as did unprejudiced people.
5. First-born children placed themselves closer to their fathers and more distance from their mothers and siblings than later borns.
6. Those with predispositions for high affiliations sat closer to others than did low affiliators.[17]

The relationship between personal space and homosexuals was investigated by Kuethe and Weingartner. The subjects for this study were homosexual and non-homosexual prisoners. The results showed that homosexuals placed male figures closer together than did non-homosexuals.[18]

PERSONAL SPACE AND CULTURAL DIFFERENCES

It was Hall's suggestion that there are two different groups of countries regarding handling of personal space. Those people from Middle Eastern, Mediterranean and Latin American countries tend to maintain closer distance than people from either Northern or

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[17]Irwin Altman, The Environment and Social Behavior (California: Wadsworth Publishing Company Incorporated, 1975), pp. 72-73.

[18]Ibid., p. 70.

Western Europe.[19]

In order to have an international list of the interpersonal distance, Freedman felt that it is necessary to conduct more research in personal space so it would become easy to categorize people in levels of personal space action.[20] To determine to what degree this desire has been met, some comparison studies between different cultures were discussed in this section.

By using two samples: sixteen American students from four regional groups--New York, New Jersey, Colorado, California and the Midwest (Michigan, Illinois and Wisconsin)--four students from each group and sixteen Arabian students from four countries--Saudi Arabia, the United Arab Republic, Iraq, and Kuwait--four students from each country, Watson and Graves conducted an experiment in measuring personal space using an observation of the students' responses. The students were told to enter a special room and then talk with each other. Arabian students were allowed to speak Arabic. During the conversation the researchers were watching the students through a one-way glass and recorded the students' movements, distance between others, and voices. The result of this study showed a significant difference between

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[19]Ibid., p. 76.

[20]Jonathan L. Freedman, op. cit., p. 72.

Arabian and American students. Only males were used for the study.[21]

In a comparison among American, English, Swedish, Dutch and Pakistani college students on intimacy in seating arrangements (corner to corner, side by side and opposite) Sommer found that American, English and Swedish students were similar in handling seating arrangements. Dutch students viewed corner seating as less intimate than Americans, while Pakistani students perceived opposite seating as quite distant.[22]

In his study, Little compared five national groups--the United States of America, Swedish, Greek, Southern Italian and Scot. The samples for this study were: American, fifty-three males and fifty-three females; Swede, forty-two males and forty-three females; Scot, fifty males and fifty females; Greek, thirty-five males and thirty-five females, and Italian, thirty-six males and thirty-five females. The results showed that Greek and Italians were closer than the other three groups in the distance maintained between figures representing males and females. The averages of distance maintained between figures were 28.9 inches for Greek males and 25.2 inches for females. The Italians' averages

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[21]O. M. Watson and T. D. Graves, "Quantitative Research in Proxmic Behavior," American Anthropologist, 1966, 68, 971-85.

[22]Irwin Altman, op. cit., pp. 76-77.

were 31.3 and 28.9 inches. These two countries represented the Mediterranean. Sweden and Scotland displayed larger distances. The averages of distance maintained between figures were 32.3 inches for males and 32.3 inches for females. The American averages of distance maintained between figures were 28.0 inches for males and 31.5 inches for females. The American averages were similar to those of Italians.[23]

In studying sex and body type differences Lerner, Iwawaki and Chichara used "felt-board" techniques with kindergarten, first, second and third-grade Japanese middle-class children. The number was forty-six for each grade, one-half of whom were males. The results of the study were compared with a study which has been done on Americans. The finding was that males used more space toward females (the mean was 10.4 cm) than toward males (the mean was 7.6 cm). Females used more space toward males (the mean was 8.3 cm) than toward females (the mean was 5.8 cm). The result of the comparison between Japanese and Americans was no more than 1.00 cm as the difference between those means for both cultures.[24]

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[23]Kenneth B. Little, "Cultural Variations in Social Schemata," Journal of Personality and Social Psychology, 1968, Vol. 10, No. 1, pp. 1-7.

[24]Richard Lerner, Saburo Iwawaki and Tukashi Chichara, "Development of Personal Space Schemata Among Japanese Children," Developmental Psychology, 1976, Vol. 12, No. 5, pp. 466-67.

PERSONAL SPACE AND METHODS OF STUDY

Many kinds of methods have been used for studying and measuring people's responses in personal space. These are: (1) social schemata technique, which is the use of placement and replacement of figures (male-male, male-female and female-female) as an instrument;[25] (2) actual interpersonal behavioral measures, where subjects are asked either to move toward or sit beside somebody; (3) psychological distance preference measures, where subjects are asked to check one of four alternatives to indicate the distance a person prefers; (4) photographs, where subjects are asked to observe slides of different sexes at different distances and then to rank them in order; (5) live observation, where the subject is asked to rank in order while watching male and female actors.[26] In all of the above the subjects knew that they were being watched by someone. A different method, which is field-naturalistic, utilizes subjects who are observed by the experimenter without their knowledge. This kind of technique has been used in public places such as schools, streets, or any natural setting.[27]

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[25]Alexander Tolor and Richard Foleblane, "An Attempted Clarification of the Psychological Distance Construct," The Journal of Social Psychology, 1974, 92, 257-67.

[26]Richard F. Haase and Martin J. Markey, op. cit.

[27]Irwin Altman, op. cit., p. 55.

Chapter 3

METHODS AND PROCEDURES

The material presented in this chapter deals with methods and procedures used in this study. The population and sampling, design of the study, procedure, the instrument, and data analysis are presented and explained.

POPULATION AND SAMPLING

The samples were obtained from students attending Emporia State University during the spring semester, 1977, or from other available international persons. The thirty American persons were obtained from three English composition classes (all students in the first two classes and the first eight in the third class) by telling their classes that they were going to participate in an experiment concerned with "how people behave in a simple social situation." English classes are required for almost all undergraduate students. They include students who are different in their major, age, classification, income and background. Saudi Arabian and Iranian persons were also asked to participate in this study. Most of these people are listed in the

International Student Newsletter,[28] which includes all international students' names, countries, majors, addresses, and classifications, or they were people known by this experimenter. The experimenter contacted these two groups individually and arranged for the experiment.

DESIGN OF THE STUDY

The doll placement technique was used to determine if there was a significant difference in handling personal space between American, Saudi Arabian and Iranian males or females as a function of culture, sex and type of doll combination. Ninety subjects were used: fifteen males and fifteen females for each group.

PROCEDURE

For Group 1, the American students, the experiment was held in a hall close to the students' classes. The subjects were asked to enter the hall one at a time. The experimenter asked each subject to sit in a chair which was beside the table that included the felt board and the two dolls. The subject was asked to place the dolls on the board as if the two were going to carry on a conversation. The starting point between the two dolls was always twenty-four inches. The experimenter recorded the number of inches between the toes of each doll, with

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[28] ESU International Student Newsletter, International Student Office, Spring 1977.

a ruler. The procedure was carried out three times, for each combination of dolls, for each subject, to include the combinations of male-male dolls, male-female dolls and female-female dolls. All subjects placed the dolls in the same order; i.e., male-male first, male-female second, and female-female third. The three scores were added together and the mean of them was the final score for each subject.

The Iranian and Saudi Arabian groups met with the experimenter in different places. The light and seating arrangements were similar to that used for the American group. The procedure used with Group 1 was repeated with the other two groups. To control influence of language problems Group 3, the Iranian group, performed with an Iranian assistant who read the instructions to each subject in his language when the subject could not understand English.

THE INSTRUMENT

The felt-board placement was the instrument used to collect the data. Two ten-inch high male dolls and two ten-inch high female dolls, one of them already on a two by three foot felt-board, were used.[29] A ruler was used by the experimenter for measuring the distance. A regular table and two chairs for groups which did not

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[29]Richard F. Haase and Martin J. Markey, op. cit.

perform with an assistant and three chairs with the Iranian group, which performed with an assistant, were used during this experiment.

All subjects completed the task with a male-male doll combination, a male-female combination and a female-female doll combination, in the same order.

DATA ANALYSIS

A three-way (a x b x c) between subjects ANOVA was used to determine the differences among the six groups in placing dolls as a function of the three variables, which were culture, sex and type of dolls combination.[30] The .05 level of significance was employed in the study.

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[30]Marigold Linton and Philip S. Gallo, Jr., The Practical Statistician (California: Wadsworth Publishing Company Incorporated, 1975), pp. 156-57.

Chapter 4

ANALYSIS OF DATA

The statistical data are presented in this chapter in relation to the hypothesis of this study. The null hypothesis was:

> There is no significant difference in handling personal space among American, Saudi Arabian and Iranian males and females.

A three-way (a x b x c) between subjects ANOVA was used to determine the differences among the six groups in the way they handle personal space as a function of culture, sex and type of doll combination, or the interaction of these three variables. The results of this analysis are summarized in Table 1 on page 21. All distances are in sixteenths of an inch.

The factor A (sex) difference in distance maintained between doll combinations was significant ($F = 21.60$; $df = 1/252$; $p < .01$). The average distance between the dolls was 46.5 (2.9 inches) for males and 57.6 (3.6 inches) for females.

The difference between the combination (factor B) was found to be significant ($F = 6.48$; $df = 2/252$; $p < .01$). The average distance between male-male dolls was 57.9 (3.6 inches), male-female, 50.8

Table 1

Analysis of Variance of Distances Between Doll Combinations for the Six Groups. Three Way Between Subject ANOVA (2 x 3 x 3)

Source	df	SS = Sum of Squares	MS = Mean of Squares	F	p
Sex (A)	1	8436.99	8436.99	21.60	.01
Doll Combination (B)	2	5064.16	2532.08	6.48	.01
Culture (C)	2	587.18	293.59	.75	NS
Sex x Doll Combination (A x B)	2	2232.51	1116.26	2.85	NS
Sex x Culture (A x C)	2	3787.41	1893.71	4.84	.01
Doll Combination x Culture (B x C)	4	4737.49	1184.37	3.00	.05
Sex x Doll Combination x Culture (A x B x C)	4	28.22	7.06	.07	NS
Error	252	98427.14	393.70		
Total	269				

Table 2

Mean Distance Between Dolls
for the Three National Groups*

	American				Iranian				Saudi Arabian					
Doll Combination	Male		Female		Male		Female		Male		Female		Average	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Male-Male	61.1 (3.8)	17.5	56.9 (3.8)	16.1	50.4 (3.1)	17.3	70.3 (4.4)	22.0	48.4 (3.0)	15.7	60.3 (3.8)	19.8	57.9 (3.6)	7.3
Male-Female	36.5 (2.3)	13.8	45.4 (2.8)	13.7	42.8 (2.7)	13.8	67.9 (4.3)	15.2	44.5 (2.8)	17.1	67.4 (4.2)	23.6	50.8 (3.2)	12.2
Female-Female	51.3 (3.2)	11.3	49.6 (3.1)	14.9	39.7 (2.5)	14.7	51.1 (3.2)	21.1	43.6 (2.8)	14.9	49.9 (3.1)	14.3	47.5 (3.0)	4.3
Averages	49.6 (3.1)	10.1	50.6 (3.2)	5.1	44.3 (2.8)	3.1	63.1 (3.9)	8.5	45.5 (2.9)	2.0	59.2 (3.7)	7.5	52.1 (3.3)	6.7

*The top number refers to sixteenths of an inch, while the bottom number in each cell refers to inches.

(3.2 inches), and female-female, 47.5 (3.0 inches).

The differences among the three cultures (factor C) were not significant ($F = .75$; $df = 2/252$). The Iranian group (male and female) average was 53.7 (3.4 inches), Saudi Arabian (male and female) average was 52.3 (3.3 inches), and American (male and female) average was 50.1 (3.1 inches).

In factor A x B, the sex differences in the distance maintained between the doll combinations (male-male, male-female and female-female) was not significant ($F = 2.85$; $df = 2/252$). For males (all males) the average distance between male-male dolls was 53.3 (3.3 inches); for females (all females) the average was 62.5 (3.9 inches). In the male-female combination the average for males was 41.2 (2.6 inches), for females it was 60.2 (3.8 inches). In the female-female combination the male average was 44.8 (2.8 inches) while the female average was 50.2 (3.1 inches).

A significant difference was found between sex x culture ($F = 4.8$; $df = 2/252$; $p < .01$). American males maintained more distance between the dolls than the other two groups. The American average was 49.6 (3.1 inches); Saudi Arabian, 45.5 (2.9 inches); and Iranian, 44.3 (2.8 inches). American females maintained less distance (50.6) (3.2 inches) than Iranians (63.1) (3.9 inches) and Saudi Arabians (59.2) (3.7 inches). Females not only maintained greater distance but Iranian

females maintained significantly greater distance than did other females. These differences are presented in Figure 1, on page 25.

The results showed a significant difference among the three groups in the distance they maintained between each of the doll combinations (B x C) ($F = 3.0$; $df = 4/252$; $p < .05$) as presented in Figure 2 on page 26. In placing male-male dolls, the Saudi Arabian group average was 54.2 (3.4 inches); American, 59.0 (3.7 inches), and Iranian, 60.4 (3.8 inches). The Saudi Arabian group maintained the shortest distance between male-male dolls followed by the American and the Iranian groups. In placing male-female dolls, Americans maintained the closest distance. Their average was 41.0 (2.6 inches); Iranian, 55.3 (3.4 inches); and Saudi Arabian, 56.0 (3.5 inches). For female-female dolls, Iranian distance was 45.4 (2.8 inches), which is close to the Saudi Arabian (46.8) (2.9 inches). The longest distance was maintained by the American group (50.5) (3.2 inches). However for Americans the effects were, male-female the closest, then female-female, and male-male the farthest apart. For Iranians, female-female the closest, male-female next, and, like Americans, male-male farthest apart. For Saudi Arabians, like Iranians, female-female closest, but unlike both others male-male and male-female were almost the same (male-female was slightly more distant than male-male).

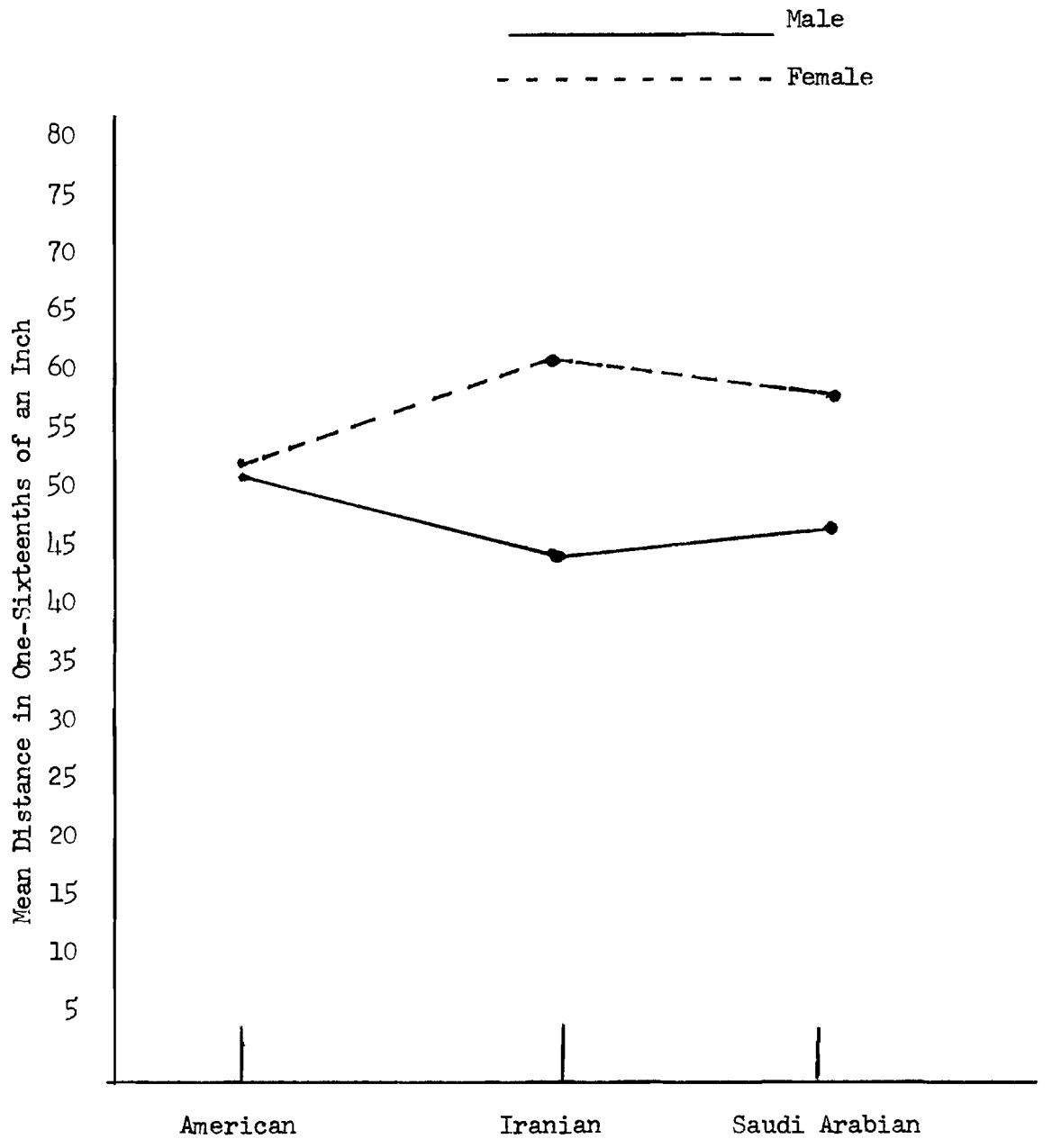

Figure 1

The Mean Distance Maintained by the Six Groups in All Combinations of Dolls

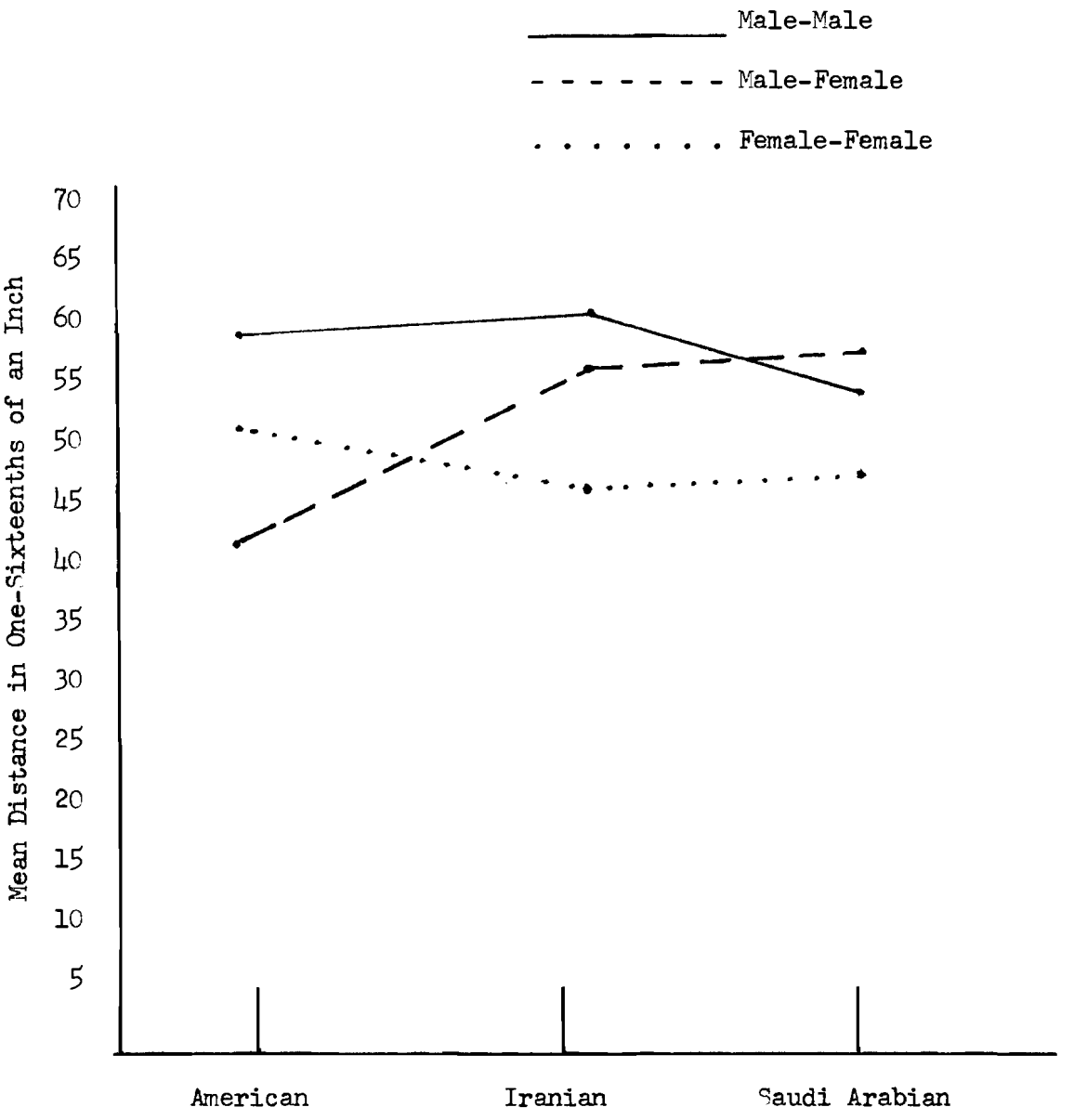

Figure 2

The Mean Distance Maintained by the Three Groups Between Male-Male, Male-Female and Female-Female Dolls (Combination of Dolls)

Sex x doll combinations x culture (A x B x C) differences were not significant (F = .07). The null hypothesis was accepted.

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

Most of the literature reviewed in this study showed that there is a difference among cultures regarding the way people handle personal space. The literature showed also that differences in personal space are related to many factors such as, mental situations, personality, race, sex and the relationships among people. The hypothesis formulated was:

> There is no significant difference in handling personal space among American, Saudi Arabian and Iranian males and females.

Ninety persons were the subjects for this study: fifteen American males and fifteen females; fifteen Saudi Arabian males and fifteen females, and fifteen Iranian males and fifteen females. The American group was obtained from three English classes at Emporia State University, Spring, 1977. Most of the Iranians were students at Emporia State University and the rest were living in Emporia. For the Saudi Arabian group ten males and ten females were either students at the University of Kansas or Saudians living in Lawrence and

the rest were students at Emporia State University.

The felt-board placement technique was the instrument used in this study to collect the data. Two ten-inch high male dolls and two ten-inch high female dolls and a two by three foot felt board were used. For statistical analysis, the three way (A x B x C) between subjects ANOVA was used to determine the significant differences.

The analysis of data showed that differences existed between males and females in the distance maintained among the three doll combinations by subjects. Generally, American males maintained more distance between male-male than that maintained by the Iranian and the Saudi Arabian groups, these two groups were similar. American females maintained less distance than that maintained by the other two groups. The Saudi Arabian and Iranian groups were also similar.

CONCLUSIONS

The results of this study indicated considerable similarity between the Iranian and the Saudi Arabian male groups. In overall averages of distance, their averages were less than those maintained by the Americans. These results were expected since the two groups are from the Mediterranean groups, those whom Hall suggested will maintain less distance between themselves and others than the distance that will be maintained by Western

European culture.[31] The findings also supported the results found by Watson and Graves who found significant differences between American and Arabian students during their study.[32]

The surprising observation was that American females maintained less distance between male-male and male-female combinations than those maintained by Saudi Arabian and Iranian females. However, the three female groups were similar in placing female-female dolls. The American distance average was 49.6 (3.1 inches), which is close to the Saudi Arabian (49.9) (3.1 inches) and not that far from the Iranian (51.1) (3.2 inches). This result supported what Lerner, Iwawaki and Chihara found. They indicated that females used less space toward females than toward males.[33] On placing male-male dolls the three female groups maintained more distance than they did between male-female. This may support Little's suggestion that women see the interaction of men as more distant than do males.[34] On placing male-female dolls, Americans maintained less distance (45.4) (2.8 inches) than that maintained by the other

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[31]Irwin Altman, op. cit.

[32]O. M. Watson and T. D. Graves, op. cit.

[33]Richard Lerner, Saburo Iwawaki and Tukashi Chichara, op. cit.

[34]Kenneth B. Little, op. cit.

two female groups. Those two groups were quite similar. The Saudi Arabian average was 67.4 (4.2 inches); Iranian, 67.9 (4.3 inches). This difference may be explained to be related to the situation of women in the Middle East. The relationships between females and males in the Middle East are different in some ways from the situation in the United States of America. Years ago in some parts of the Middle East, being in sight of man was avoided by women.[35] Therefore, the distance differences may have reflected the group's social needs.

Hall suggested that density may affect personal space boundaries. People who live in crowded areas use less distance in personal space.[36] American density is 57.5 per square mile, Iranian, 47.4, and Saudi Arabian, 9.3. In the present study density did not seem to be involved. For example, the American male average was more than the other two groups' averages despite the fact that Saudi Arabian density was the lowest.

Other explanations for the differences between the American and Iranian and Saudi Arabian female groups may be social reinforcement, which females receive for being close to others and displaying warmth.[37] That was

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[35]Dorothy Van Ess, Fatima and Her Sisters (New York: John Day Company, 1961), p. 46.

[36]Ernest A. Bauer, Personal Space: A Study of Negroes and Whites, Emporia Kansas State College, 1971, p. 20

[37]Nan M. Sussman, Tactile and Spatial Violation: Effects on Performance and Liking, The University of Kansas, 1975, p. 20.

supported by the recent study for American females, but was not by Iranian and Saudi Arabian females. It may be because of the difference in the degree of social reinforcement.

The difference between the three females groups in placing dolls which was found may also be related to recent study limitations in instruction and sample situations. Iranian and Saudi Arabian groups may be influenced by living in a different culture. A student may try to keep some of his/her culture's background unused, seeking for an adaptation to the new environment and society.[38] It must also be kept in mind that those groups only represent Iranian students in Emporia, Kansas, and Saudi Arabians in Emporia and Lawrence. They may not be representative of other Iranian or Saudi Arabians, especially those who did not have a chance to study outside of their country. Those students may differ in one way or another.

Other explanations of the differences between females on placing male-male and male-female dolls may be that, as is known by the present writer, some of the Iranian females and most of the Saudi Arabian females are married. That may have affected those females' performances in placing doll combinations because the

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[38]Claire Selltiz and others, Attitude and Social Relations of Foreign Students in the United States (Minneapolis: University of Minnesota, 1963). p. 120.

subject may place dolls in relationship to the other at the distance desired to be, not the distance at which the subject felt comfortable.

The similarity between the Saudi Arabian and Iranian groups may be related to two facts: (1) living in the same region (Middle East), and (2) having the same religion. All Saudi Arabians are Muslims, 90 percent of the Iranians are.[39]

Finally, sex x dolls combination x culture (A x B x C) was not significant simply because of considerable similarity among Saudi Arabian and Iranian groups and the interaction between sex of the six groups.

RECOMMENDATIONS

According to the results of this study, the following suggestions may be recommended to individuals who might be interested in cross-culture research in personal space:

1. To make more general conclusions larger samples are needed.

2. It would be more controlled if the Iranian and Saudi Arabian samples were in their countries. This procedure is needed to avoid the influence of being away from home and living in a different culture.

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[39]Dan Golenpaul, Information Please Almanac, 1974, pp. 275.731.

3. More investigation should be conducted to determine what makes one group of people different from another group of people in handling personal space? There may be many as yet undiscovered factors which influence the handling of personal space.

BIBLIOGRAPHY

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Alexander, Tolov, and Richard Foleblanc. "An Attempted Clarification of the Psychological Distance Construct," The Journal of Social Psychology, 1974, 92, 259-67.

Altman, Irwin. The Environment and Social Behavior. California: Wadsworth Publishing Company, Incorporated, 1975.

Bauer, Ernest A. Personal Space: A Study of Negroes and Whites. Emporia Kansas State College, 1971.

Baxter, J. C. "Interpersonal Spacing in a Natural Setting," Sociometry, 1970, 33. Pp. 444-56.

Claire, Selltiz, and Others. Attitudes and Social Relations of Foreign Students in the United States. Minneapolis: University of Minnesota, 1963.

Esser, Arisride H. Behavior and Environment. New York: Plenum Press, 1972.

ESU International Student Newsletter. International Student Office, Spring 1977.

Freedman, Jonathan L. Crowding and Behavior. New York: The Viking Press, Incorporated, 1975.

Golenpaul, Dan. Information Please Almanac, 1974. P. 275.731.

Haase, Richard F., and Martin J. Markey. Journal of Counseling and Clinical Psychology, 1973.

Hall, Edward T. The Hidden Dimension. New York: Doubleday and Company, Incorporated, 1966.

Lerner, Richard M., Saburo Iwawak and Takshi Chihara. "Development of Personal Space Schemata Among Japanese Children," Developmental Psychology, 1976. Vol. 12, No. 5, Pp. 466-67.

Linton, Marigold, and Philip S. Gallo, Jr. The Practical Statistician. California: Wadsworth Publishing Company, Incorporated, 1975.

Little, Kenneth B. "Cultural Variations in Social Schemata," Journal of Personality and Social Psychology, 1968. Vol. 10, No. 1, Pp. 1-7.

Meade, Robert D., and Labe Singh. The Journal of Social Psychology, 1973. V. 90. Pp. 325-26.

Sommer, Robert. Personal Space. New Jersey: Prentice-Hall, Incorporated, 1969.

Sussman, Nan M. Tactile and Spatial Violations Effects on Performance and Liking. The University of Kansas, 1975.

Thayer, Stephen, and Lewis Alban. "A Field Experiment on the Effect of Political and Cultural Factors on the Use of Personal Space," The Journal of Social Psychology, 1972. V. 88. Pp. 267-72.

Van Ess, Dorothy. Fatima and Her Sisters. New York: John Day Company, 1961.

Watson, O. M., and T. D. Graves, "Quantitative Research in Proxmic Behavior," American Anthropologist, 1966, 68, 971-85.

Wolman, B. B. Dictionary of Behavioral Sciences. New York: Van Nostrand Company, 1973.