

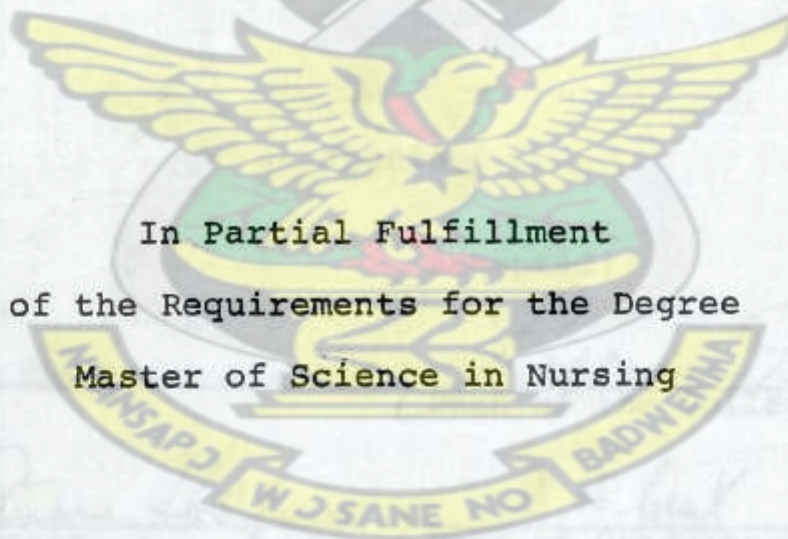
INTERPERSONAL DISTANCE BEHAVIOR OF ANGLO-  
AND BLACK-AMERICAN ENFAMILIED SELVES

KNUST

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Elizabeth K. Misko

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ABSTRACT

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KNUST

Elizabeth K. Misko

Thesis

Approved:

Accepted:

Joanne Marchion  
Adviser

Lillian Beyarney  
Dean of the College

Patricia Latham Hodfry  
Faculty Reader

A.N. Gent  
Dean of Graduate Studies  
and Research

James Reed  
Faculty Reader

Virginia Kershner  
Faculty Reader

May 7th 1982  
Date

## ABSTRACT

This study explored the interpersonal distance behaviors of Anglo- and Black-American enfamilied selves between the ages of forty five and sixty five years to determine if there were similarities or differences. Based on the literature review, Kantor and Lehr's theory of family process, which proposed that distance regulation was the principal activity in family, was selected as the theoretical framework for the study. The instrument used for data collection was also developed from literature review and consisted of two sections, a questionnaire which addressed the demographics of the subjects and the Comfortable Interpersonal Distance Scale by Duke and Nowicki. Subjects were obtained from two Anglo-American and two Black-American churches.

Three hypotheses and four research questions were developed:

H<sub>1</sub>: There will be a difference between male and female enfamilied selves interpersonal distance.

H<sub>2</sub>: There will be a difference in preferred interpersonal distance between Anglo- and Black-American enfamilied selves.

H<sub>3</sub>: There will be a difference in preferred interpersonal distance in sex by group of enfamilied selves.

The Kruskal-Wallis Test was used to analyze the three hypotheses. Hypothesis two was supported. Hypotheses one and three were not supported. Data which related to the four research questions indicated that:

1. Anglo-American enfamilied selves preferred a more proximal position to spouses in interpersonal distance than did Black-American enfamilied selves.

2. Over seventy-five percent of the subjects in the total sample, Anglo- and Black-American enfamilied selves, preferred the most proximate position to spouses in interpersonal distance.

This study is a beginning exploration of how space is used within the family unit. Results of this study could have implications for family health nurses by increasing the nurse's awareness of individualized personal space preferences both between families and within each family unit and by motivating nurses to continue research in personal space-interpersonal distance within and between family units.

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Administrative Design

Instrument Design

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## CHAPTER I

### DEVELOPMENT OF THE PROBLEM

#### Introduction

Space is a dimension of our daily lives, ever present, ever changing and ever influencing the quality of our lives. Webster defines space as a boundless expanse within which all things are contained.<sup>1</sup> Hall, pioneer of research in the use of space, emphasizes the importance of space when he writes ". . . virtually everything man is and does is associated with the experience of space."<sup>2</sup>

In writing about space, Laing states:

Persons are not separate objects in space. They are centres of orientation to the world. These different centres and their worlds are not islands, but the nature of their reciprocal influence and interaction has always been difficult to incorporate adequately into interpersonal theory.<sup>3</sup>

Hoyman supports Laing in describing man in interrelationship with the environment as the central focal point. Hoyman describes man as an open system in a dynamic ecologic process influenced by physiologic, psychologic, spiritual, and cultural variables evolving in a biosphere and noosphere.<sup>4</sup> Park defines biosphere as the

part of the world which is life supportive and noosphere as the sphere of the mind.<sup>5</sup>

From an ecological and phenomenologic perspective, space is defined as a boundless three dimensional extent in which objects and events occur and have relative positions and directions. The three dimensions of space are distance, area, and volume.<sup>6</sup> Space, a concept of intentionality, which is defined as those motives and goals that lead to expansion of consciousness,<sup>7</sup> signifies that man encounters a world that is meaningfully structured.<sup>8</sup>

Five assumptions have been developed from these definitions of space.

1. Space is a pervasive phenomenon containing everything that is in the universe.
2. Man is not a separate identity in space, yet man can be identified in space as a subsystem, specifically as a macro-, a meta-, and a micro-ecosystem. These ecosystems are defined as communities, families, and enfamilied selves. Enfamilied self is defined as an individual family member who is given personal identity and validation of self within the family ecosystem.<sup>9</sup>
3. Man exists in space as a macro-, a meta-, and a micro-ecosystem in the dialectical process of being, doing, and becoming.<sup>10</sup>
4. Everything that exists within space is given structure of distance, area, and volume.

5. It is difficult but possible to study man in the ecosystem by measuring distance, area, and/or volume in the evolving "here and now."

Since 1960 there has been increased study and research which indicates that man's use of space is uniquely and meaningfully structured. Scheflen and Ashcroft state that spatial orientation and spatial relations do not exist in isolation. Determinants of an individual's preferred space size are factors such as ethnicity, age, religious affiliations, role activity, social class, and sex.<sup>11</sup>

Family researchers Kantor and Lehr have observed that a newborn infant's first experiences are spatial relationships to the immediate environment. A child is immediately immersed in the developmental task of distinguishing between inner and outer space and these developmental tasks of spatial learnings continue and change throughout the life cycle.<sup>12</sup> Pasquali concurs with Kantor and Lehr that space is learned within the family unit. Pasquali emphasizes that, in family life, through the process of enculturation, an enfamilied self learns the behavioral systems of a culture.<sup>13</sup>

From these readings, it can be assumed that the use of space is learned in the family through the processes of enculturation, acculturation, and evolving development of the enfamilied self. To investigate these

assumptions about space, this research study explored the interpersonal distance behaviors of a selected sample of Anglo- and Black-American enfamilied selves between the ages of 45 and 65 years.

### Review of Literature

The review of literature is divided into three sections. In the first section, a theory of family process is discussed. Assumptions and major concepts of the family theorists, Kantor and Lehr, are addressed. The five basic components of the Kantor and Lehr Family Process Theory; namely, family subsystems, target and access dimensions, family dimensions, typical family design, and interactional player parts are included. In the second section empirical studies which address the concepts of personal space, cultural aspects of space, intrusions into space, structure, use and measurement of space in various settings are reviewed. The third section includes selected readings on family space. These studies represent the ideas of researchers from sociology, anthropology, psychology, and nursing.

### Theory of Family Process

Kantor and Lehr's descriptive theory of family process is founded on two general assumptions. One is the systems approach, the study of a family as a system of dynamic, interacting components. The second assumption is

that the phenomenological method is needed to study the family in natural geographic and social context.<sup>14</sup>

Because of their intensive empirical observation of families in natural settings, Kantor and Lehr write convincingly that space is the key variable in the investigation of families. As the basis for their theory of family process, these authors posed two key questions:

1. How does a family set up and maintain its territory?
2. How does a family regulate distance among its members?

The family system, like all social systems, is an organizationally complex, open, adaptive, and information-processing system. Information processed by the family system is distance-regulation information. The feedback loop signals associated with the entire family system are distance-regulation signals; therefore, the principal activity of family process is distance regulation.<sup>15</sup>

When two or more people are living in the same social field, strategies are developed which permit the linkage of principles of systems process with the phenomenological reality of daily family life experience.

Family strategies are designed to enable members to achieve their goals, and may be classified as maintenance, stress, or repair strategies. All three types of strategies may be described as complex distance-regulation

operations, essential to operational understanding of family process.<sup>16</sup>

The basic components of Kantor and Lehr's model of family process are:

1. Subsystems: Family-unit, interpersonal, and personal subsystems of the family system which interact with each other and the outside world.

2. Target and access dimensions: Physical and conceptual fields of interactional activities of the family.

3. Mechanisms: Patterns of organization that support, defend, and implement the family systems control function.

4. Typal family design: Three types of family systems, closed, open, and random.

5. Interactional player parts: Parts used to describe and analyze interpersonal processes within the family.

According to Kantor and Lehr, there are three family subsystems which interact with each other and the outside world. These subsystems are the family-unit subsystem, the interpersonal subsystem and the personal subsystem. The meeting ground of two or more subsystems is called an interface. Meetings at the interface result in shaping and reshaping of each unit's space. The boundaries or walls of each subsystem or system are maintained

in a characteristic way, determined by the family's culture. Permission of the family must be granted to individuals from other systems to enter the family unit or the interpersonal subsystem. Members of an interpersonal subsystem share a collective responsibility for developing and maintaining the subsystem; yet, each individual has a responsibility to develop his own interests, meanings, and desires. The concepts of subsystems and interface offer a perception of a family's goal.<sup>17</sup> This perception of a family goal demonstrates the concept of intentionality; specifically, the "we" relationship.<sup>18</sup>

Kantor and Lehr contend that the family has two sets of dimensions, the access and target dimensions. Dimensions may be defined as physical and conceptual fields of interactional activity, within which the family regulates the activities of people, objects and events. The access dimensions of space, time and energy are the physical media through which each family system attains the target it seeks; the target dimensions are the concepts of affect, power, and meaning. Kantor and Lehr state their basic thesis:

Through the transmission of matter and information via energy in time and space, family members regulate each other's access to the target of affect, power, and meaning.<sup>19</sup>

All six dimensions (energy, time, space, affect, power, meaning) of a family's social space are interrelated; yet, the access dimensions of space, time, and energy are the

spheres of activity in which family process takes place. Without space there can be no place for event; without time, no sequence; without energy, no vitality.<sup>20</sup>

Kantor and Lehr's family mechanisms are patterns of organization that support, defend, and implement the family system's control function at the interfaces of its access and target dimensions. Examples and definitions of mechanisms are:

1. Bounding is a mechanism in which families establish and maintain their territory within the larger community space.
2. Linking is the regulation of distance, that is, the physical and conceptual associations and dissociations of all persons within the family's spatial interior.
3. Centering is the developing, maintaining, and transmitting of spatial guidelines for traffic flow within, and across the family boundaries.

Bounding mechanisms control spatial perimeters. Linking mechanisms control spatial interior. Centering is concerned with spatial essences; for example, where and how family members' traffic should flow.<sup>21</sup>

Kantor and Lehr describe three types of family systems, closed, open, and random. In the closed family system, stable structures (fixed space, regular time, and steady energy) are relied upon as reference points for order and change. In the open family systems, order and

change are expected to result from the interaction of relatively stable evolving family structures (movable space, variable time, and flexible energy). In a random system, unstable structures (dispersed space, irregular time, and fluctuating energy) are experimented with as reference points for order and change.

The description of the three basic types of family systems reveal the different modal patterns families use to attain their goals. Each family system type conceives its goals differently. Each system establishes a different ideal and sets up a different distance-regulator plan for attaining the ideal.<sup>22</sup>

The four interactional player parts are a convenient means for describing and analyzing interpersonal processes within families. Kantor and Lehr's goal is to identify the way the family affects the individual family member and how the individual family members affect the family. Family members have four basic parts to play: mover, follower, oppressor, and bystander. A family in which each member is able to play all four parts effectively is a family with more resources than a family in which members are persons permitted to play only one or two parts.<sup>23</sup>

Each of the five basic components of Family Process Theory functions together to accomplish distance-

regulation. However, each of the parts may be studied separately.

### Empirical Studies

Selected studies from sociology, anthropology, psychology, and nursing were reviewed to clarify the concept of personal space, to determine the influence of culture on personal space, and to understand how man structures and uses personal space.

In reviewing the literature, the concept of personal space was identified with territoriality, personal distance, and privacy. Pastalon, studying spatial behavior of older people, indicates that although individual territory and personal space are often viewed as equivalent, the two can be distinguished in several ways. Personal space is carried around while individual territory is relatively stationary and usually much larger in area. A person will generally delineate territorial boundaries with a variety of environmental props both fixed and mobile so they are visible to others, while the boundaries of personal space are invisible though they may be inferred from self markers such as facial expressions, body movements, gestures, olfaction, visual contact and voice intonation.<sup>24</sup> Pastalon defines privacy as an expression of human territoriality and agrees with Westin, who, in differentiating privacy and freedom, defined privacy as the right of an individual to decide what personal

information should be communicated to others and under what conditions.<sup>25</sup>

Sommer, refers to personal space as an area with invisible boundaries surrounding a person's body. He also contends that most individuals evolve a concept of personal space from interpersonal transactions and that a few people claim to see an aura around human bodies. Sommer suggests that individual distance exists when two or more members of the same species are present; individual distance is affected by population density and territorial behavior. When society's expectations are violated so is individual distance; when self boundaries are invaded so is personal space.<sup>26</sup>

Baxter observed the interpersonal spacing of 859 subject pairs in several natural settings. Subjects were classified according to Anglo-, Black-, or Mexican-American ethnic group; adult, adolescent, or child, age level; male-male, female-female, or male-female sex combination; and indoor, outdoor observation setting. The pattern of results revealed striking ethnic, age, and sex group effects. The Mexican subjects of all ages and sex grouping interacted most proximally. The Blacks stood at greater distances than the Anglo groups. In sex groups, the female members interacted more proximally. By location of observation, the Anglo groups tended to interact consistently in both interior and exterior settings the

Mexican groups clustered more closely when interacting outdoors, while the Black groups clustered more closely indoors.<sup>27</sup>

Bauer studied fifteen male and fifteen female blacks, and fifteen male and fifteen female whites on a typical campus setting. Students were asked to approach, as close as comfortable, an individual of their own race and sex whom they did not know. Results showed that the white males chose the most distant position, a mean of 17.8 inches. White females choice revealed a mean of 13.4 inches. Black males mean of 11.4 inches and Black females revealed the most proximal position with an 8.1 inch mean on approach to a fellow student.<sup>28</sup>

Patterson and Mullins examined 80 college students, 40 males, and 40 females, in response to the seating, and glance intrusions at three reading rooms of a university library. Results indicated that compensatory reactions were produced as a function of increasing immediacy of an intruder. The reactions included increased leaning or sliding away from the intruder or using a hand or elbow in a position to screen the intruder.<sup>29</sup>

Hall, who introduced proxemics, the structure and use of space, defined as the result of multiple studies three types of space involving human interactions, informal, fixed feature and semi-fixed feature space. Informal space is the area extending outward from an individual to

the limit of unaided senses; informal space shifts with the mobility of an individual. Fixed feature space is defined by permanent objects such as walls, and semi-fixed feature space is identified by movable objects such as furniture.<sup>30</sup>

Space was further operationalized by Hall who examined four distances that man unconsciously maintains in his encounter with others. The four distance zones are intimate, personal, social, and public. Intimate distance includes distances from direct contact to eighteen inches. Personal distance is measured as one and a half to two and a half feet. Social distance is four to seven feet. Twelve to twenty five feet or more defines public distance. Linear measurement is used in calculating the distance zones.<sup>31</sup>

According to Hall, man distinguishes between space or distance by the use of the senses. The independent variables include the sensory receptors of sight, vision, smell, touch, and hearing. The dependent or measurable variable was entry into personal space. Data generated by Hall's numerous studies with Americans, Germans, English, French, and the Arab World revealed there was a difference in the structure and use of space among cultures.<sup>32</sup>

Monge and Kirste reported a measure of proximity that spoke to psychological rather than functional space, the typical fluctuation of distance over time between

people, and the simultaneous proximity to multiple others rather than to a single other. In a naval training center, 500 subjects in 3,500 locations responded to questionnaires obtained in group interviews. Data were obtained on three variables; the number of minutes per week that they communicated with others, the enjoyment value they assigned to each communication relation, and the proximity value for each person. Correlation between amount of communication, and proximity was .47, a relationship that reflected approximately 22% shared variance. Correlation between proximity and enjoyment was .37, a relationship that reflected approximately 10% shared variance. Both correlations are significant for  $df > 100.0$ , and  $p < .005$ ,  $r_{crit} = .08$ .<sup>33</sup>

According to Altman, personal space is a mechanism used to regulate interpersonal interaction and to achieve a desired level of privacy. The invasion of one's personal space zone is like a real or imagined privacy invasion.<sup>34</sup> Altman relates privacy to control over social interaction which is similar to Duke and Nowicki's conceptualization of personal space. Duke and Nowicki assert that externally controlled individuals have larger personal space zones than internally controlled individuals. Externally controlled individuals do not feel competent in controlling another who is close to them; internally

controlled individuals feel capable in their control of other persons in their personal space.<sup>35</sup>

Greenberg, Strube, and Myers measured the interpersonal distance along the trait dimensions of comfort, control, and privacy. Measures were taken with the three most common measurement techniques; stop distance, silhouette placement, and a paper and pencil measure, the Comfortable Interpersonal Distance Scale, for the purposes of assessing the validity and reliability of these interpersonal distance techniques. Fifty undergraduate students, 20 males and 30 females, enrolled in psychology courses, at the University of Nebraska at Omaha, served as subjects. The correlations among the three measurement techniques and the three stimulus traits were combined to form a multitrait-multimethod matrix. The measurement techniques appeared to be reliable and valid indicators of interpersonal distance. The interpersonal distance traits appeared to have high convergent validity. These data support the theoretical suppositions that personal space may be conceptualized on a variety of dimensions.<sup>36</sup> These data support both Altman and Duke and Nowicki's notion that personal space is a privacy and control mechanism which, when violated will make one feel uncomfortable.

A search of the literature revealed no studies of space within the family. Three studies on personal space

findings indicated that preferred distances in the hospital

intrusions for hospitalized, and nursing home residents were found.

Allekan tested the hypothesis that hospitalized patients will experience anxiety when there are intrusions of territorial, and personal space. Seventy-six patients in four metropolitan Chicago hospitals were included in the study. The instrument was a two-part questionnaire. Patients were found to have feelings of anxiety when intrusions of territory occurred, but personal space intrusions were viewed with indifference.<sup>37</sup>

Johnson's study was designed to determine and describe factors that would influence the response of elderly institutionalized clients to territorial intrusion. Socially disengaged residents were described as those residents who were not involved with other residents or staff in their environment; the socially engaged residents were involved with others in the environment. Using the Guttman Scale of Disengagement, residents who were socially engaged demonstrated greater anxiety toward territorial intrusion than residents who were socially disengaged.<sup>38</sup>

Geden and Begeman's study on personal space preferences of hospitalized adults utilized sixty subjects, thirty men and thirty women. The figure-placement technique was used to measure personal space preferences. Major findings indicated that preferred distances in the hospi-

tal were smaller than in the home. In both settings the family members were placed closest to the self-silhouette followed by a doctor, nurse, and stranger respectively.<sup>39</sup>

#### Selected Readings on Family Space

McClain and Weigert point out that in Western society family has become the dominant group for designating households and domestic units. Therefore, a family inhabits a separate or meaningful space often referred to as home. McClain and Weigert continue:

This unique spatial arrangement contributes to the degree of knowledge, intimacy, intensity and frequency that characterizes family relationships as patterns of interaction and communication.<sup>40</sup>

Since the unique spatiality of the family is characterized by domesticity, boundaries are the same for each member of the immediate family and are defined by house and property. There are also special areas within the family's domestic space available only to one or another family member. To conclude, McClain and Weigert state:

Spatiality transformed into domesticity can be described as a powerful intentional form of family as a phenomenon.<sup>41</sup>

Laing supports McClain and Weigert's concept of family as a system. Laing states that the family as a system is internalized and the family as internalized is a space-time system. Internalizations of "near" or "far"

"together" or "divorced" are both spatial relationships and temporal sequence. Laing speculates that Sartre would state that the family is united by the reciprocal internalization by each and of each other's internalization.<sup>42</sup>

To conclude Laing states:

Family space and time is akin to mythic space and time, in that it tends to be ordered around a centre and runs on repeating cycles.<sup>43</sup>

Forrest applies Laing's view of family as a space-time system to health. Forrest believes that families initiate and develop health behaviors in daily family life both in time and space and by values. The family's attitudes, values, and beliefs determines the family's health practice in time and space.<sup>44</sup>

Hoyman acknowledges the dynamic network between man and the environment in space, identifying health as being promoted by favorable ecologic conditions. Hoyman believes that humans are reciprocally enmeshed with the total environment; man is affected by the environment and man changes self through interaction with the environment.<sup>45</sup>

Paolucci, Hall, and Axnin believe that a family's ecological perspective focuses on the family and those environments that directly affect the family and over which the family has some measure of control. According to Paolucci et al., the quality of human life and the prospect of the family's continued survival within limited

environmental settings depends primarily on the decisions made in daily family living.<sup>46</sup>

From the literature review there is a consensus among researchers that enfamilied selves alone and with family and community are enmeshed with the ecosystem. An enfamilied self's concept of space is unique, is learned primarily within family, and changes while moving through the span of life. Personal space preferences can be measured both with reliability and validity with stop distance, silhouette placement and the Comfortable Interpersonal Distance Scale on trait dimensions of comfort, control, and privacy.<sup>47</sup>

### Purpose of the Study

The purpose of this study is to determine interpersonal distance behaviors of enfamilied selves from Anglo- and Black-American cultural groups.

### Statement of the Problem

The problem under investigation is to explore the interpersonal distance behaviors of Anglo- and Black-American enfamilied selves to determine whether there are similarities or differences.

### Research Hypotheses

- H<sub>1</sub>: There will be a difference between male and female enfamilied selves interpersonal distance as measured by Duke and Nowicki's Comfortable Interpersonal Distance Scale.

H<sub>2</sub>: There will be a difference in preferred interpersonal distance between Anglo- and Black-American enfamilied selves as measured by Duke and Nowicki's Comfortable Interpersonal Distance Scale.

H<sub>3</sub>: There will be a difference in preferred interpersonal distance in sex by group of enfamilied selves as measured by Duke and Nowicki's Comfortable Interpersonal Distance Scale.

### Research Questions

1. What are the interpersonal distance behaviors of Anglo-American enfamilied selves?
2. What are the interpersonal distance behaviors of Black-American enfamilied selves?
3. What are the differences in the interpersonal distance behaviors between Anglo- and Black-American enfamilied selves?
4. What are the similarities in the interpersonal distance behaviors between Anglo- and Black-American enfamilied selves?

### Definitions

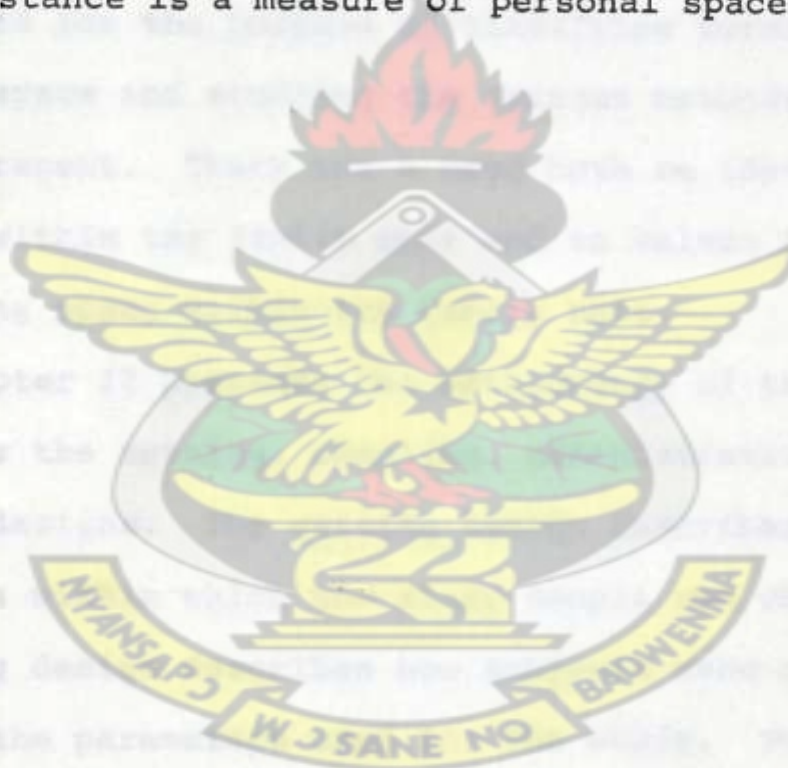
For the purpose of this study the following definitions are submitted.

Enfamilied self is an individual family member who is given personal identity and validation of self within the family ecosystem.<sup>48</sup>

Black-American enfamilied self is an individual family member from a church with predominantly Black-American members.

Anglo-American enfamilied self is an individual family member from a church with predominantly Caucasian members of varying ethnic backgrounds.

Interpersonal distance is the measure of interval or separation between two people in space or time. Interpersonal distance is a measure of personal space preferences.<sup>49</sup>



## CHAPTER II

### METHODOLOGY

#### Introduction

In Chapter I, Kantor and Lehr's theory and concepts of family process were explored and discussed. Empirical studies and selected readings on family space were reviewed for the purpose of clarifying terminology related to space and studying the various methods of space measurement. There was a need both to identify the space used within the family unit and to select a tool for measuring space within the family unit.

Chapter II presents the methodology of the study and includes the setting, sampling, administrative, and instrument designs. The setting design describes the environments within which the study sample was obtained. The sampling design describes how subjects were selected as well as the parameters used for the study. The administrative design describes the method of obtaining approval to conduct the study and how the instrument was distributed for the purpose of the data collection. The instrument design describes the tool used for data collection.

### Setting Design

The settings from which the study sample was obtained are four community churches. All of these churches were in an urban location. The subjects who participated in this study were individuals who attended these churches.

### Sample Design

The sample for this study was selected to include a cross section of the age group, 45-65 years. It was originally projected that the sample would consist of eighty subjects. Four groups of twenty subjects each, composed of forty males and forty females would be drawn from a convenience sample of the available population. There were four groups, totaling sixty-three subjects, consisting of the following:

- Group I: Anglo-American males ( $n = 3$ )  
 Anglo-American females ( $n = 15$ )  
 Ages range from 45-65 years and are  
 from Church A, Roman Catholic
- Group II: Black-American males ( $n = 3$ )  
 Anglo-American females ( $n = 12$ )  
 Ages range from 45-65 years and are  
 from Church B, United Methodist

Group III: Anglo-American males ( $n = 2$ )

Anglo-American females ( $n = 13$ )

Ages range from 45-65 years and are

from Church C, Roman Catholic

Group IV: Black-American males ( $n = 4$ )

Black-American females ( $n = 11$ )

Ages range from 45-65 years and are

from Church D, Baptist

#### Administrative Design

The proposed data collection procedure was submitted to The University of Akron, Committee for the Protection of Humans in the Area of Research. Permission was granted to proceed with the proposed research (Appendix A).

Initially pastors from Churches A, B, C, and D were contacted by telephone for an appointment to explain the purpose of the study. At the meetings with the pastors and the appointed representatives. An explanation of the study was given and a request to approach potential subjects for participation in the study was requested.

At a regularly scheduled meeting, the subjects were introduced to the testing instrument. Subjects who agreed to participate received both a verbal and written explanation of the study, and of the question-

naire and scale used for data collection (Appendix B). Anonymity was assured by coding the questionnaires and scales in each of the groups. Potential clients were also requested not to identify themselves on the questionnaires, scales, and envelopes. Letters of appreciation were sent to the pastors and other personnel who assisted in suggesting potential subjects for this study.

### Instrument Design

The instrument used for data collection (Appendix C) in this study consisted of two sections. The first section was a questionnaire composed of six items which addressed demographic characteristics of the subjects. For the purpose of this study it was determined that only demographic data regarding the characteristics of church affiliation, sex, age, marital status, education, and income were pertinent.

The Comfortable Interpersonal Distance Scale, a paper-and-pencil measure developed by Duke and Nowicki, comprised the second section of the instrument. The figural layout of the scale is in the form of a plane with eight radii emanating from a common point. Each 80 millimeter radius is associated with a randomly numbered entrance to what is presented as an imaginary round room. The distance between the center point and any location on

a given radius is measured in millimeters and reflects the author's assumption that space is a continuous variable. This scale demonstrates applicability to a wide age range, with different cultures, and to a variety of classes and socioeconomic levels.<sup>50</sup>

Duke and Nowicki's Scale was selected as the instrument for measurement of three basic components of Kantor and Lehr's family process:

1. The boundaries of the interpersonal and family unit systems, spouses of the family, were studied.
2. The target and access dimensions, the interactional activities of spouses, were studied in the living room.
3. The family system control functions, the regulation of distance within the family by the linking mechanism and the guidelines for traffic flow within family boundaries by the centering mechanism, were studied

The instrument for data collection was five pages in length. No time limit was set for the completion of the instrument. The subjects were informed that average completion time was approximately ten minutes.

Permission to use the Comfortable Interpersonal Distance Scale was granted during a telephone consultation with Dr. Marshall Duke, one of the original authors

of the Comfortable Interpersonal Distance Scale. As recommended by Duke and Nowicki, the scale was group administered whenever possible.

### Introduction

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### Description of Sample

Characteristics of the sample were obtained through descriptive statistics. The characteristics of the sample were obtained from the following sources: I, II, III, and IV were obtained from the following sources:

### CHAPTER III

## STUDY FINDINGS AND DISCUSSION

### Introduction

In Chapter I the review of literature indicated that the regulation of space within the family was a major task of family process. This regulation of space within and by the family was reported to be unique and to differ because of variables such as culture, age, and socioeconomic status. In Chapter II a method of measuring personal space-interpersonal distance which permitted the approach of multiple others such as family into a selected enfamilied self's personal space was described. Chapter III contains a description of the data analysis and conclusions drawn from the analysis. Conclusions are reported for each research hypothesis and for each research question. Implications of the study for family health nursing, recommendations, and limitations of the study are also addressed.

### Description of Sample

Characteristics of the sample were defined through descriptive statistics. The characteristics for Groups I, II, III, and IV were obtained from subject

response to the questions on the personal data questionnaire. Table 1 describes the sample by church groups in terms of the variables, age, sex, marital status, education, and annual income.

#### Church by Group

There were four Groups: I, II, III, and IV.

Group I (Church A) contained eighteen Anglo-American enfamilied selves. Group II (Church B) contained fifteen Black-American enfamilied selves. Group III (Church C) was composed of fifteen Anglo-American selves and Group IV (Church D) had fifteen Black-American enfamilied selves.

#### Age

Four age groups were utilized in the study.

Twenty eight members of the sample fell in the age group 60-65 years.

#### Sex

The sample consisted of fourteen males and forty seven females.

#### Marital Status

Data collected indicated that forty eight of the subjects in the group were married. The widowed group was composed of nine individuals.

TABLE 1  
FREQUENCY DISTRIBUTION OF SELECTED DEMOGRAPHIC CHARACTERISTICS OF THE TOTAL SAMPLE BY GROUPS

Characteristics	Group I (Church A) Anglo-American Subjects		Group II (Church B) Black-American Subjects		Group III (Church C) Anglo-American Subjects		Group IV (Church D) Black-American Subjects	
	f	%	f	%	f	%	f	%
<b>Age</b>								
45-49	1	5.6	4	26.7	3	20.0	0	0
50-54	4	22.2	3	20.0	3	20.0	2	13.3
55-59	7	38.9	3	20.0	4	26.7	1	6.7
60-64	6	33.3	5	33.3	5	33.3	12	80.0
Total	18	100.0	15	100.0	15	100.0	15	100.0
<b>Sex</b>								
Male	3	16.7	5	33.3	2	13.3	4	26.7
Female	15	83.3	10	66.7	12	80.0	11	73.3
Total	18	100.0	15	100.0	15	100.0	15	100.0
<b>Marital Status</b>								
Married	16	88.9	11	73.3	14	93.3	8	53.4
Divorced	0	0	1	6.7	1	6.6	2	13.3
Widowed	1	5.5	3	100.0	0	0	5	33.3
Separated	1	5.5	3	100.0	0	0	0	0
Total	18	100.0	15	100.0	15	100.0	15	100.0
<b>Education</b>								
Elementary	1	5.6	0	0	2	13.3	5	33.3
School	12	66.6	10	66.7	7	46.7	5	33.3
High School	5	27.8	3	20.0	3	20.0	1	6.7
College	0	0	1	6.6	3	20.0	3	20.0
Special	0	0	1	6.6	0	0	1	6.7
Diplomas	0	0	1	6.6	0	0	0	0
No Response	0	0	1	6.6	0	0	1	6.7
Total	18	100.0	15	100.0	15	100.0	15	100.0
<b>Income</b>								
0-9,999	0	0	1	6.6	1	6.6	6	40.0
10,000-19,999	2	11.1	7	46.7	4	26.7	2	13.3
20,000-29,999	11	61.1	1	6.6	6	40.0	1	6.7
30,000-and over	3	16.7	1	6.6	4	26.7	1	6.7
No Response	2	11.1	5	33.3	0	0	5	33.3
Total	18	100.0	15	100.0	15	100.0	15	100.0

### Education

Data collected indicated that thirty four of the sixty three subjects in the sample had completed high school; twelve subjects had completed college.

### Income

Thirty four of the subjects reported an annual income between \$10,000-\$29,000. Of this number, fifteen subjects claimed an annual income of \$10,000-\$19,999. Nineteen subjects claimed an annual income of \$20,000-\$29,999.

### Research Hypotheses

The Kruskal-Wallis Test statistic was used to analyze the three hypotheses. This statistic was selected based on the characteristics of the data set.

#### Hypothesis One:

There will be a difference between male and female enfamilied selves interpersonal distance measured by Duke and Nowicki's Comfortable interpersonal Distance Scales.

Data generated was analyzed. A test statistic of 2.926 with a significance level of 0.232 revealed that there was no significant difference between sex and interpersonal distance (see Table 2). Hypothesis One was not supported.

TABLE 2  
MEASUREMENT OF INTERPERSONAL DISTANCE  
BY SEX USING THE KRUSKAL-WALLIS TEST

Sex	Male	Female	No Response
Number	14	47	2
Mean Ranks	27.43	33.66	25.00
$n = 63$ $\chi^2 = 2.926$ $p = 0.232$			

Hypothesis Two:

There will be a difference in preferred interpersonal distance between Anglo- and Black-American enfamilied selves as measured by Duke and Nowicki's Comfortable Interpersonal Distance Scale.

A test statistic equalling 13.315 with a significance of 0.004 indicates a significant difference between groups in Anglo- and Black-American churches in interpersonal distance (see Table 3). Further analysis of the data indicated a difference in mean rank between the churches by groups as follows: (a) Church Group I (Anglo) and Church Group IV (Black), (b) Church Group II (Black) and Church Group IV (Black), and (c) Church Group III (White) and Church Group IV (Black). There was not a difference in mean rank between Church Group I (Anglo-American), Church Group II (Black-American) and Church Group III (Anglo-American). Hypothesis Two was supported.

TABLE 3

MEASUREMENT OF INTERPERSONAL DISTANCE BY CHURCHES  
(ANGLO- AND BLACK-AMERICAN SUBJECTS)  
USING THE KRUSKAL-WALLIS TEST

Churches	Group I Anglo	Group II Black	Group III Anglo	Group IV Black
Number	18	15	15	15
Mean Ranks	28.56	25.00	33.53	41.60
n = 63 $\chi^2 = 13.315$ p = 0.004				

### Hypothesis Three:

There will be a difference in preferred interpersonal distances in sex by group of enfamilied selves as measured by Duke and Nowicki's Comfortable Interpersonal Distance Scale.

A contingency table of interpersonal distance measurements by sex and church by group did not indicate any areas of significant association. Hypothesis Three was not supported.

### Research Questions

The four research questions were analyzed using data generated by Duke and Nowicki's Comfortable Interpersonal Distance Scale. The response was recorded in millimeters for Group I, II, III, and IV. See Table 4 in Appendix D.

Research Question One:

What are the interpersonal distance behaviors of Anglo-American enfamilied selves?

Twenty seven of the Anglo-American enfamilied selves chose the 0-9 millimeter interpersonal distance from spouses. One enfamilied self selected the distance of 10-19 millimeters and one enfamilied self selected the 80 millimeter distance. Two enfamilied selves selected each of the following distances: 20-29 millimeters and 40-49 millimeters. (See Figure 1)

Research Question Two:

What are the interpersonal distance behaviors of Black-American enfamilied selves?

Twenty two of the Black-American enfamilied selves chose the 0-9 millimeters distance from spouses. Three enfamilied selves selected the 20-29 millimeters distance while one enfamilied self selected each of the following distances: 10-19, 30-39, 40-49, 50-59, and 70-79 millimeters. (See Figure 2)

Research Question Three:

What are the similarities in interpersonal distance behaviors between Anglo- and Black-American enfamilied selves?

As delineated in Figure 3, the greater number of Anglo- and Black American enfamilied selves chose the distance of 0-9 millimeters with spouses. One each of both Anglo- and Black-Americans selected 10-19 milli-

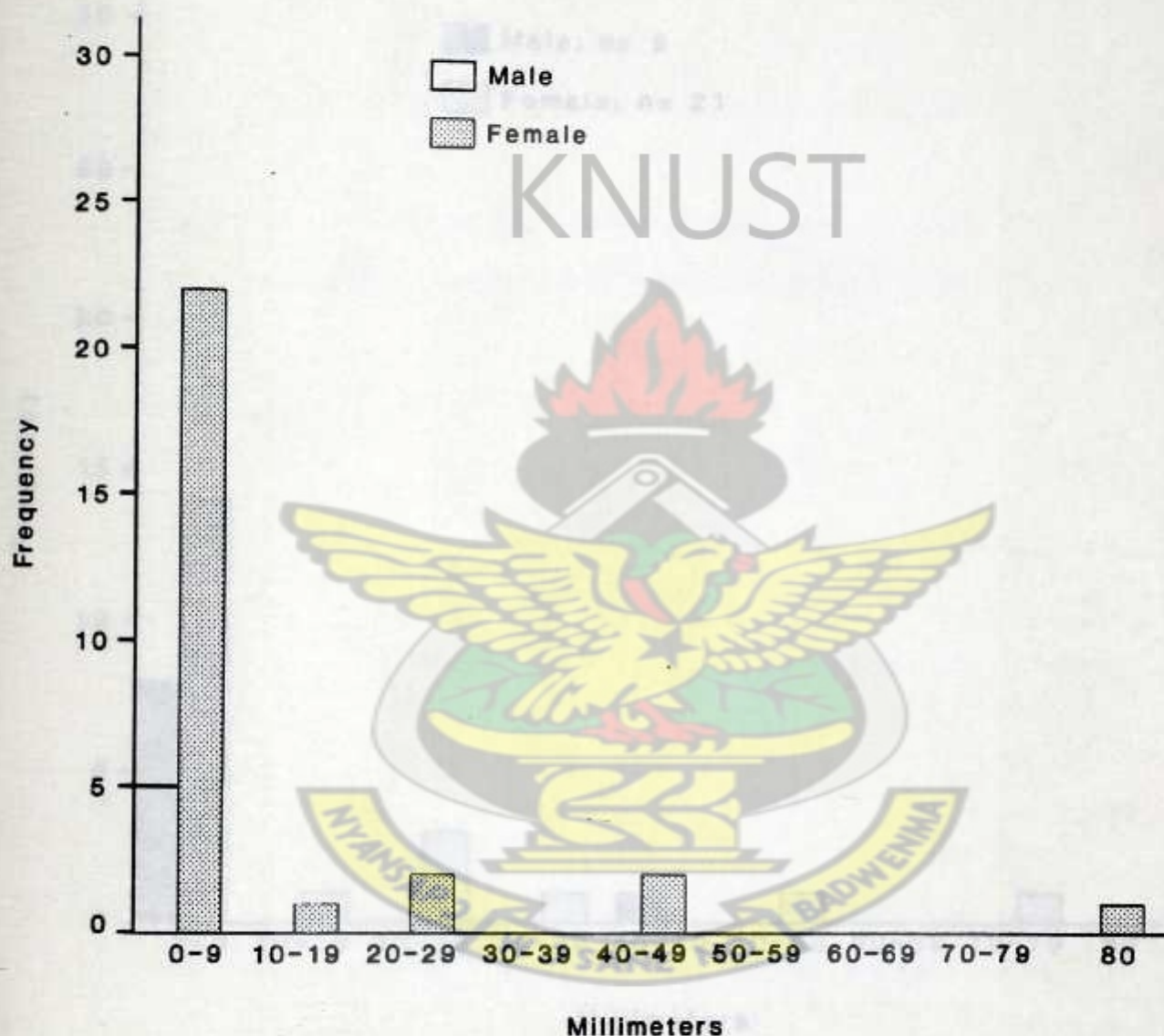


FIGURE 1. FREQUENCY OF INTERPERSONAL DISTANCE BEHAVIORS OF ANGLO-AMERICAN ENFAMILIED SELVES BY SEX

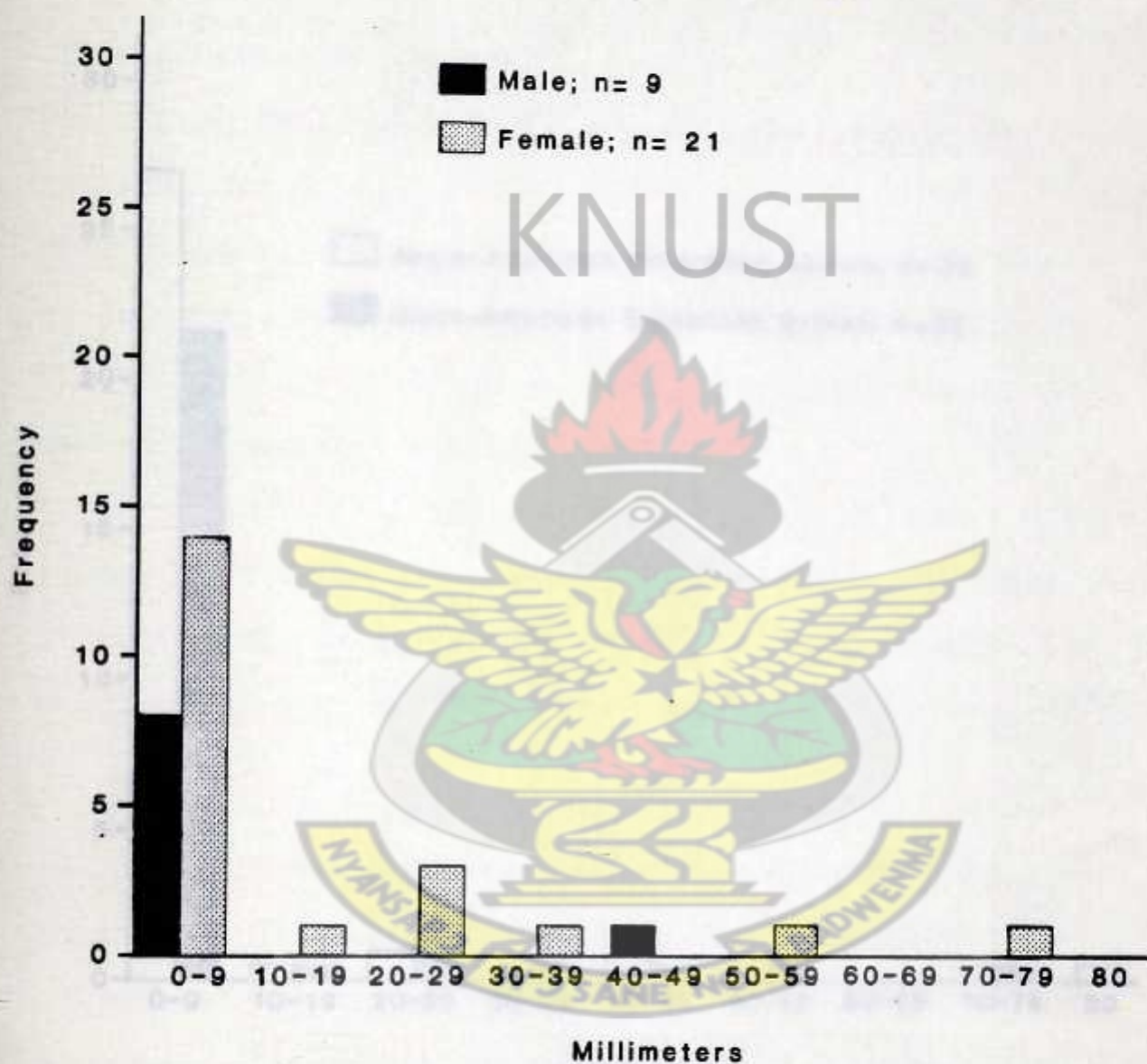


FIGURE 2. FREQUENCY OF INTERPERSONAL DISTANCE BEHAVIORS OF BLACK-AMERICAN ENFAMILIED SELVES BY SEX

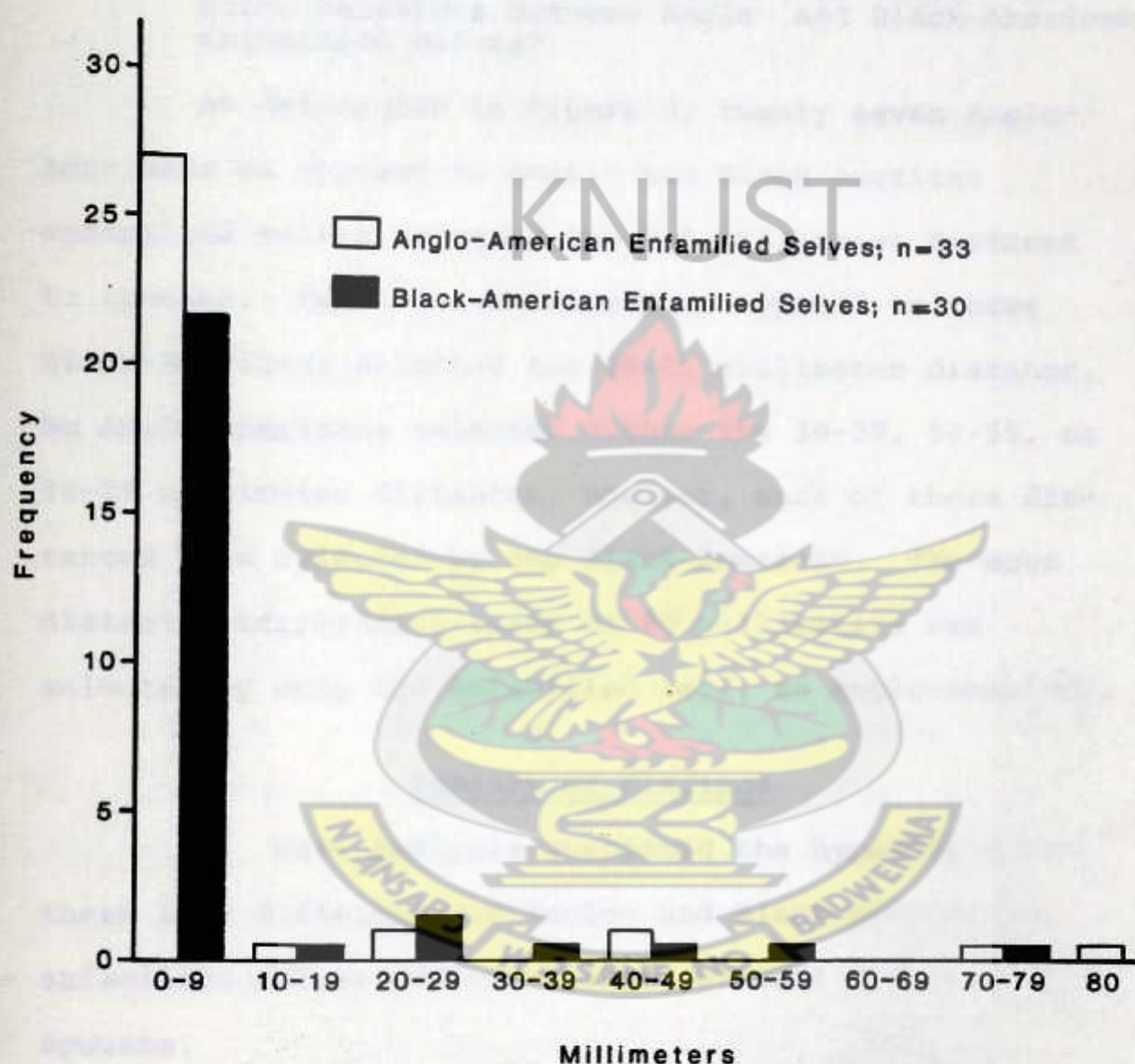


FIGURE 3. SIMILARITIES AND DIFFERENCES IN INTERPERSONAL DISTANCE OF ANGLO- AND BLACK-AMERICAN ENFAMILIED SELVES

meter distance. Neither Anglo- or Black-Americans selected the 60-69 millimeter distance.

Research Question Four:

What are the differences in interpersonal distance behaviors between Anglo- and Black-American enfamilied selves?

As delineated in Figure 3, twenty seven Anglo-Americans as opposed to twenty two Black-American enfamilied selves selected the 0-9 millimeter distance to spouses. Two Anglo-Americans as opposed to three Black-Americans selected the 20-29 millimeter distance. No Anglo-Americans selected either the 30-39, 50-59, or 70-79 millimeter distances; however, each of these distances were selected by one Black-American. The most distant interpersonal space of 80 millimeters was selected by only one enfamilied self, an Anglo-American.

Summary of Findings

1. Data analysis supported the hypothesis that there is a difference in Anglo- and Black-American enfamilied selves preferred interpersonal distance from spouses.
2. Data analysis did not support the hypothesis that there is a difference between male and female enfamilied selves in interpersonal distance from spouses.

3. Data analysis did not support the hypothesis that there is a difference in sex by group of enfamilied selves in interpersonal distance from spouses.

4. Data which related to the four research questions indicated: (a) Anglo-American enfamilied selves prefer a more proximal position to spouses in interpersonal distance than do Black-American enfamilied selves, and (b) over seventy five percent of the subjects in the total sample, Anglo- and Black-American enfamilied selves preferred the most proximate position to spouses in interpersonal distance.

### Conclusions

Based on the results of this study, it may be concluded that Duke and Nowicki's Comfortable Interpersonal Distance Scale may be used to study three of Kantor and Lehr's basic components of family process; namely, subsystems, target and access dimensions and mechanisms. Duke and Nowicki's Comfortable Interpersonal Distance Scale provided

1. A measurement for Kantor and Lehr's subsystems of the spouse.
2. A measurement for the boundaries or walls of family unit and interpersonal subsystems of spouses from both Anglo- and Black-American cultures.

3. A measurement of target and access dimensions, the physical and conceptual fields of interactional activities of spouses, in the living room of the space called home.

4. A measurement of the family systems control function; namely, the regulation of distance within the family by the linking mechanism.

5. A measurement of the family systems control function; namely, the spatial guidelines for traffic flow within family boundaries by the centering mechanism.

#### Limitations for the Study

The conclusions drawn from this study are limited due to several factors.

1. Subjects were selected because they chose to participate in the study and therefore the sample must be identified as a convenience rather than a random sample.

2. The sample was drawn from a restricted geographical area. The sample included only subjects from an urban setting.

3. The sample was composed of sixty three subjects. Considering that two subcultures of American society were studied, the size of the sample is very small.

4. Female subjects outnumbered male subjects forty seven to fourteen.

5. Duke and Nowicki's Comfortable Interpersonal Distance Scale permits the approach of one to eight enfamilied selves. This study used only one, a spouse, as a measure of preferred interpersonal distance.

6. The use of an Anglo-American research investigator may have elicited a different response from Black-Americans than would have a Black-American investigator.

#### Recommendations

After reviewing the purpose of this research and the analyses of data the following recommendations are suggested:

1. Replication of this study using a larger random sample.
2. Extension of this study to measure differences between urban and suburban settings, using a larger sample.
3. Utilization of the Duke and Nowicki's Comfortable Interpersonal Distance Scale to study all family members of the research sample from both Anglo- and Black-American cultures.
4. Comparison of interpersonal distance by a multi-method investigation of measurements; such as stop behavior and silhouette placement, with Duke and Nowicki's Comfortable Interpersonal Distance Scale.

### Implications for Family Health Nursing

This study has implications for family health nursing in research, practice, and education. Since no literature on family space was found by the investigator, the nurse may be motivated to contribute to the knowledge of family health nursing by conducting research on personal-space interpersonal distance. In nursing practice the family health nurse in the leadership role may have the opportunity to facilitate the self-direction of families in the management of space both within and outside of the home. The family health nurse can become aware of the spatial dimension preferences in daily life, both for self and for families.



## CHAPTER IV

### SUMMARY

This research thesis explored the personal space-interpersonal distance behavior of Anglo- and Black-American enfamilied selves. The study was developed from Kantor and Lehr's theory of family process which proposed space to be the key variable in the investigation of the family. Kantor and Lehr contended that the principle activity of family process was distance regulation and that families developed specific mechanisms for controlling distance regulation, both in maintaining family territory and regulating distance within the spatial interior of the family. Other theorists who contributed to the development of this research were from the fields of psychology and anthropology.

There were sixty-three subjects in this study. Of this number there were forty seven women and fourteen men. The ages ranged from forty five to sixty five years. The sample included four groups. Group I and III were from Anglo-American churches and Groups II and IV were from Black-American churches.

The instrument used for data collection consisted of two parts, a questionnaire that provided a demographic profile of the subjects and Duke and Nowicki's Comfortable Interpersonal Distance Scale. Three research hypotheses were developed.

Hypothesis One:

There will be a difference between male and female enfamilied selves interpersonal distance measured by Duke and Nowicki's Comfortable Interpersonal Distance Scales.

Hypothesis Two:

There will be a difference in preferred interpersonal distance between Anglo- and Black-American enfamilied selves as measured by Duke and Nowicki's Comfortable Interpersonal Distance Scale.

Hypothesis Three:

There will be a difference in preferred interpersonal distance in sex by group of enfamilied selves as measured by Duke and Nowicki's Comfortable Interpersonal Distance Scale.

The Kruskal Wallis Test were used to analyze the three hypotheses. Hypothesis Two was supported. Hypothesis One and Three were not supported.

Four research questions were developed:

1. What are the interpersonal distance behaviors of Anglo-American enfamilied selves?
2. What are the interpersonal distance behaviors of Black-American enfamilied selves?

3. What are the similarities in interpersonal distance behaviors between Anglo- and Black-American enfamilied selves?

4. What are the differences in interpersonal distance behaviors between Anglo- and Black-American enfamilied selves?

The research questions were analyzed using the data generated by Duke and Nowicki's Comfortable Interpersonal Distance Scale and indicated that:

1. Anglo-American enfamilied selves preferred a more proximal position to spouses in interpersonal distance than did Black-American enfamilied selves.

2. Over seventy-five percent of the subjects in the total sample, Anglo- and Black-American enfamilied selves, preferred the most proximate position to spouses in interpersonal distance.

This study may be of interest to nurses by stimulating an awareness of the family's use of space as a health behavior. Nurses may also be motivated to conduct or participate in research related to personal space-interpersonal distance in the family.

# FOOTNOTES

<sup>1</sup> Webster's New World Dictionary of the American Language (New York: Popular Library, 1973), p. 546.

<sup>2</sup> Edward Hall, The Hidden Dimension (Garden City, New York: Doubleday and Company, 1969), p. 113.

<sup>3</sup> Martin Howerth Hillman, A. A. Laing: His Work and its Relevance for Sociology (Boston: Routledge and Kegan Paul, 1977), p. 111.

<sup>4</sup> Howard S. Hoyman, A Syncretic Health Curriculum Design in Ecologic Perspective, The Journal of School Health (January 1977): **FOOTNOTES**

<sup>5</sup> Robert Park, "Human Ecology," American Journal of Sociology 12 (1936): 145.

<sup>6</sup> Journal of Nursing Education, 1981-82, College of Nursing, University of Akron, 1981), p. 13.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid., 14.

<sup>10</sup> Ibid., 1.

<sup>11</sup> Albert Scheflen and Ashcroft, Human Territories: How to Behave in Space-Time (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1976), pp. 8-10.

<sup>12</sup> David Kantor and William Lehr, Inside the Family (New York: Harper and Row Publishers, 1975), p. 7.

<sup>13</sup> Eising Pasquelli, et al., Mental Health Nursing (St. Louis: The C. V. Mosby Company, 1981), pp. 34-38.

<sup>14</sup> Kantor and Lehr, Inside the Family, p. 2.

#### FOOTNOTES

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<sup>6</sup> \_\_\_\_\_, Graduate Student Handbook: 1981-82, College of Nursing (Akron, Ohio: University of Akron, 1981), p. 13.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid., p. 14.

<sup>10</sup> Ibid., p. 16.

<sup>11</sup> Albert Schefflen and Norman Ashcroft, Human Territories: How to Behave in Space-Time (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1976), pp. 8-10.

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<sup>14</sup> Kantor and Lehr, Inside the Family, p. 2.

- 15 Ibid, pp. 8-15.
- 16 Ibid., pp. 15-22.
- 17 Ibid., pp. 23-25.
- 18 Raymond McLain and Andrew Weigert, "Toward a Phenomenological Sociology of Family: A Programmatic Essay." In Contemporary Theories about the Family, ed. Wesley Burr et al (New York: The Free Press, 1979), p. 175.
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- 41 Ibid., p. 176.
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<sup>48</sup> \_\_\_\_\_, Graduate Student Handbook, p. 14.

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# KNUST

## APPENDICES

MEMO FROM THE CHAIRMAN FOR PROTECTION  
OF HUMANS IN THE AREA OF RESEARCH



THE UNIVERSITY OF KNUST  
INFORMATION COMMUNICATIONS

To: Mrs. Elizabeth Nkomo,  
Director  
From: J. Mulholland, Coordinator of Research Office  
Subject: Research using human subjects

Thank you for providing a copy of your proposed research for our records. After examination of these materials, it has been determined that they qualify as research activity subject to further review. In accordance with the guidelines of the University of KNUST, 27, 1981.

You should feel free to contact the Research Office for further arrangements. We will advise you if you wish to participate in the research project.

KNUST

APPENDIX A

MEMO FROM THE COMMITTEE FOR PROTECTION  
OF HUMANS IN THE AREA OF RESEARCH



THE UNIVERSITY OF AKRON  
INTEROFFICE CORRESPONDENCE

TO: Mrs. Elizabeth Misko,  
Nursing

FROM: J. Mulhauser, Coordinator of Research Office

SUBJECT: Research using human subjects

DATE: 2/8/82

Thank you for providing a copy of your proposed research for our records. After examination of these materials, it has been determined that they qualify as research activity exempt from further review, in accordance with the guidelines from D.H.H.S. of July 27, 1981.

You should feel free to proceed with your research arrangements. Let us know if you make any substantial changes in your research protocol.



## EXPLANATION OF RESEARCH TO POTENTIAL SUBJECTS

My name is Elizabeth Hinton. I am a graduate student at the University of Akron, College of Nursing, in Akron, Ohio. I am completing a master's degree in Family Health Nursing and I am studying interpersonal distance preferences of African American families.

# KNUST

If you agree to participate in this study, I will ask you to complete a questionnaire about yourself and to rank your degree of comfort with other members of your race on an interpersonal distance scale. It should take about 10 minutes to complete. Participation is voluntary. Anonymity will be maintained. A numerical coding system will be used on the questionnaire and the results of the questionnaire and their relationship to the data and no attempt will be made to identify you.

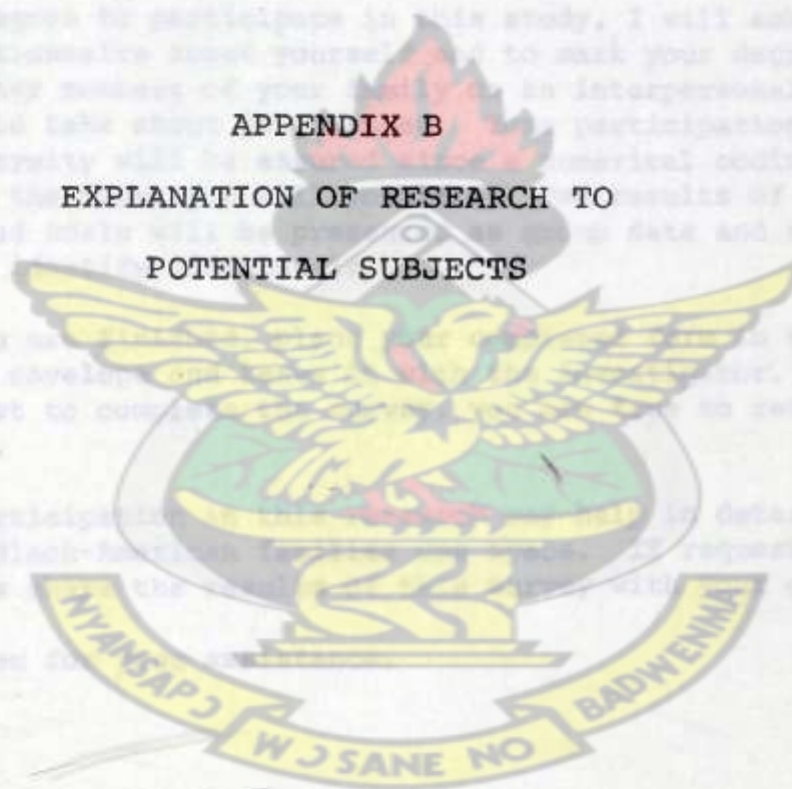
### APPENDIX B

## EXPLANATION OF RESEARCH TO POTENTIAL SUBJECTS

When you are asked to participate in the study, you will be given a copy of the attached written explanation of the study. If you should decide not to complete the questionnaire, you will receive your questionnaire form.

Your participation in this study is in determining how African American and Black families in Akron, Ohio, rank their degree of comfort with other members of their race. If requested, I will be happy to discuss the study with you.

Thank you for your time.



## EXPLANATION OF RESEARCH TO POTENTIAL SUBJECTS

My name is Elizabeth Misko. I am a graduate student at The University of Akron, College of Nursing, in Akron, Ohio. I am completing a master's degree in Family Health Nursing and I am studying interpersonal distance preferences in Anglo and Black-American families.

If you agree to participate in this study, I will ask you to complete a questionnaire about yourself and to mark your degree of comfort with other members of your family on an interpersonal distance scale. It should take about ten minutes. Your participation is voluntary. Anonymity will be assured since a numerical coding system will be used on the forms you will complete. The results of the questionnaire and scale will be presented as group data and no attempt will be made to identify individuals.

When you are finished, place your completed form in the attached manila envelope and leave it with the investigator. If you should decide not to complete the survey, you are free to return your incomplete form.

Your participation in this research may help in determining how Anglo- and Black-American families use space. If requested, I will be happy to share the results of this survey with your group.

Thank you for your assistance.

# INSTRUMENTS FOR DATA COLLECTION

## Introduction

There are two sections for data collection. Section I is a questionnaire relating to personal data. Section II is the Comfortable Interpersonal Distance Scale by Lake and Nowicki.<sup>4</sup>

## Section I: Personal Questionnaire

Directions: Place a number in the box ( ) that best describes your answer.

1. Church

1. Church A

2. Church B

3. Church C

4. Church D

5. Church E

2. Age

1. 45-47

2. 50-54

3. 55-59

4. 60+

3. Sex

1. Male

2. Female

3. No response

<sup>4</sup>Marshall E. Lake and Stephen Nowicki, "A New Measure and Social-Learning Model for Interpersonal Distance," Journal of Experimental Research in Personality, 1972, 6, 119-132.

## INSTRUMENTS FOR DATA COLLECTION

Introduction

There are two sections for data collection.  
 Section I is a questionnaire relating to personal data.  
 Section II is the Comfortable Interpersonal Distance Scale  
 by Duke and Nowicki.\*

Section I: Personal Questionnaire

Directions: Place a number in the box ( ☐ ) that  
 best describes your answer.

☐ 1. Church

1. Church A
2. Church B
3. Church C
4. Church D
5. No Response

☐ 2. Age

1. 45-49 years
2. 50-54 years
3. 55-59 years
4. 60-65 years
5. No response

☐ 3. Sex

1. Male
2. Female
3. No response

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\*Marshall P. Duke and Stephen Nowicki, "A New Measure and Social-Learning Model for Interpersonal Distance," Journal of Experimental Research in Personality, 1972, 6, 119-132.

## Section II: The Comfortable Interpersonal Distance Scale

☐ 4. Present Marital Status

1. Married
2. Divorced
3. Widowed
4. Separated
5. Other

☐ 5. Education

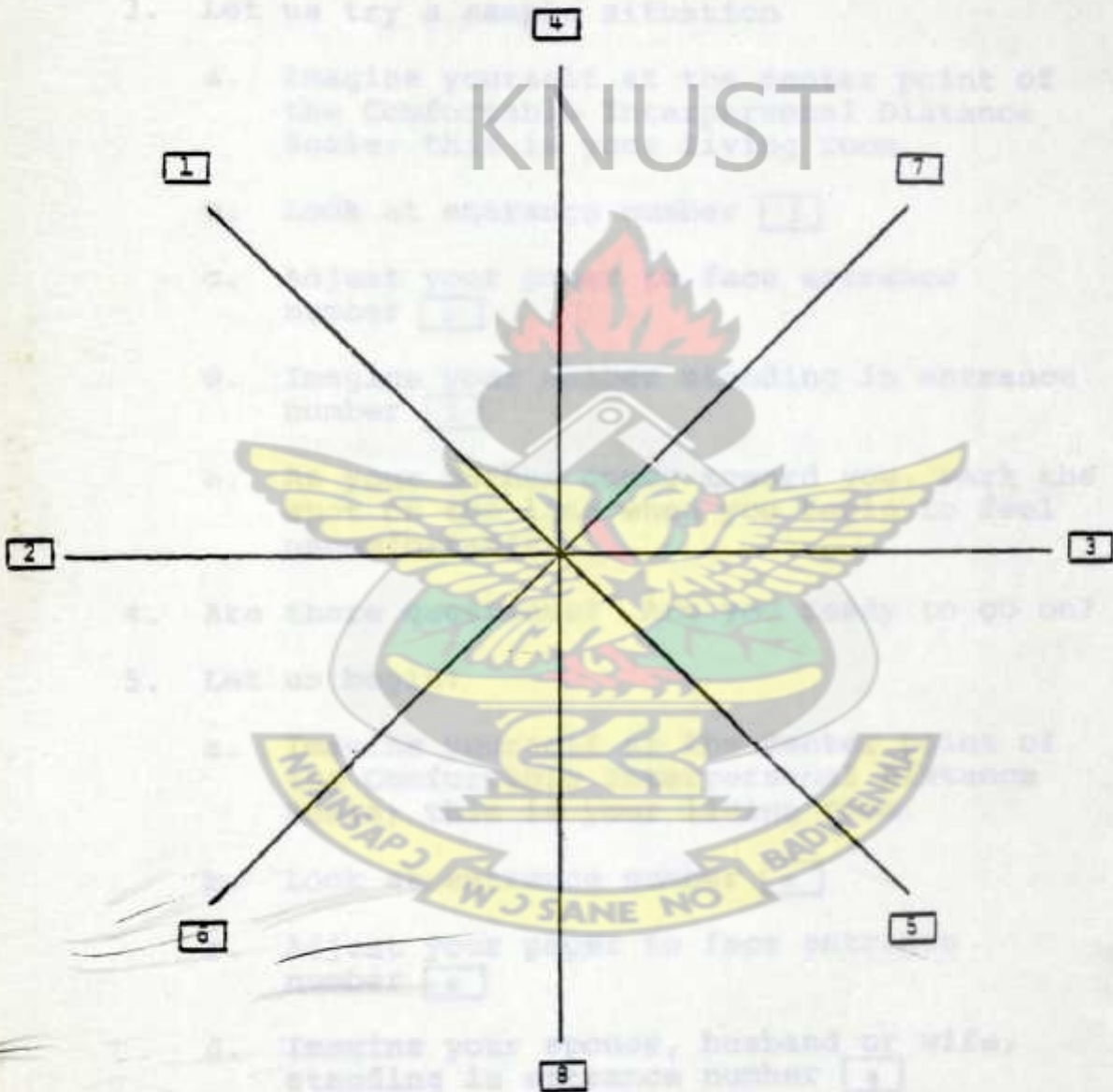
What is the school you have completed?

1. Elementary school
2. High school
3. College
4. Special diplomas institute
5. No response

☐ 6. Annual Income

1. 0 - 9,999
2. 10,000 - 19,999
3. 20,000 - 29,999
4. 30,000 - and over
5. No response

**Section II: The Comfortable Interpersonal Distance Scale**  
by Duke and Nowicki



Directions:

1. Imagine yourself at the center point (•) of the Comfortable Interpersonal Distance Scale. This center is located in your living room.

2. Locate the number  -  in the diagram above. Each of these numbers are entrances to your living room.

3. Let us try a sample situation

- a. Imagine yourself at the center point of the Comfortable Interpersonal Distance Scale; this is your living room.
- b. Look at entrance number
- c. Adjust your paper to face entrance number
- d. Imagine your mother standing in entrance number
- e. As your mother comes toward you, mark the spot on the line when you begin to feel uncomfortable

4. Are there questions? Are you ready to go on?

5. Let us begin!

- a. Imagine yourself at the center point of the Comfortable Interpersonal Distance Scale; this is your living room.
- b. Look at entrance number
- c. Adjust your paper to face entrance number
- d. Imagine your spouse, husband or wife, standing in entrance number
- e. As your spouse, husband or wife, comes toward you, mark the spot on the line when you begin to feel uncomfortable

TABLE 4  
INTERPERSONAL DISTANCE MEASUREMENTS FOR  
GROUPS I, II, III, AND IV

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APPENDIX D

INTERPERSONAL DISTANCE MEASUREMENTS  
FOR GROUP I, II, III, AND IV

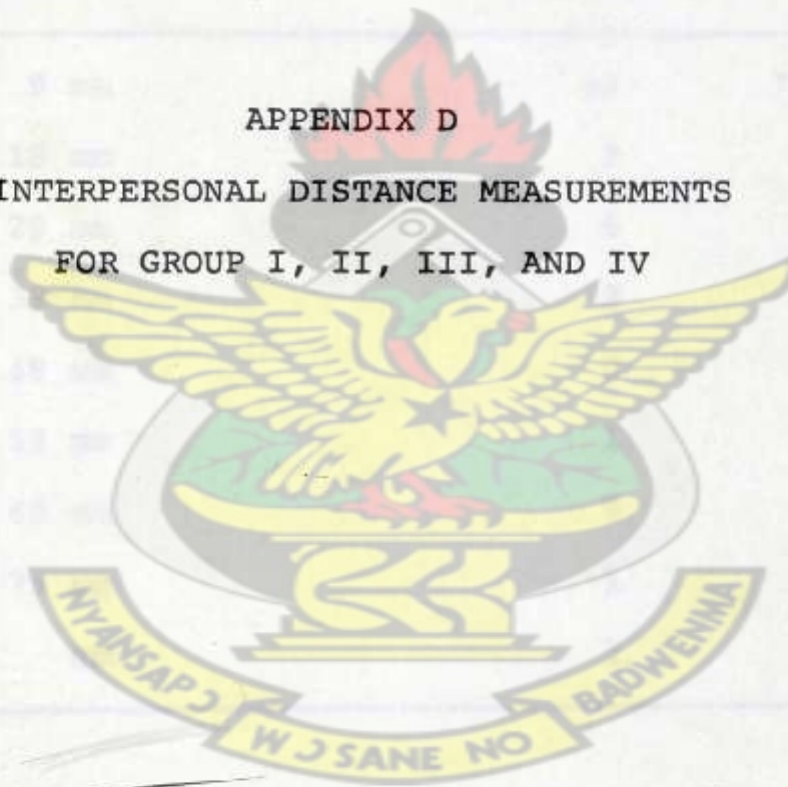


TABLE 4  
 INTERPERSONAL DISTANCE MEASUREMENTS FOR  
 GROUPS I, II, III, AND IV

Interpersonal Distance in Millimeters	Frequency	Percent
0 - 9 mm	49	77.8
10 - 19 mm	3	4.8
20 - 29 mm	5	7.9
30 - 39 mm	3	4.8
40 - 49 mm	0	0
50 - 59 mm	1	1.6
60 - 69 mm	0	0
70 - 79 mm	1	1.6
80 - mm	1	1.6