ARMSTRONG, Barbara Nottingham, 1936—
A COMPARISON OF THE ATTITUDES AND ADJUSTMENT OF MIDDLESSENT MOTHERS AND THEIR NINTH AND TENTH GRADE ADOLESCENTS.

The Ohio State University, Ph.D., 1970
Home Economics

University Microfilms, A XEROX Company, Ann Arbor, Michigan
A COMPARISON OF THE ATTITUDES AND ADJUSTMENT OF MIDDLESENG MOTHERS
AND THEIR NINTH AND TENTH GRADE ADOLESCENTS

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

Barbara Ni Armstrong, B.S., M.S.

The Ohio State University
1970

Approved by

D. Leon Salmore
Adviser

Charita, M. Taylor
Co-Adviser
School of Home Economics
ACKNOWLEDGMENTS

Findings from the study have convinced the writer that the family, as an institution, is here to stay. Without the tireless efforts of three major families, this student's personal and professional acculturation would have been incomplete.

To my family of orientation goes my deepest gratitude for providing the milieu in which my attitudes and adjustment could be developed in a positive manner. It was my mother who, with her unlimited faith in human potential, gave me the opportunity, courage and often the psychological strength to venture forward into new endeavors. Thus, it is with love and appreciation that this manuscript is dedicated to my mother, Mrs. Bruce K. Nottingham. It was she, who, as did the mother in the study, served as a most effective and believable model.

Members of my family of procreation, John, Debbie and Scott, have given their enthusiastic support to the study, which became a family project. I am deeply grateful for their continued love and tolerance during the many weeks of professional involvement.

Many members of the professional family have shared of their time, energy, knowledge and enthusiasm to the conduct and completion of the study. It is with sincere appreciation that the following colleagues and friends are recognized for their substantial contributions:

Dr. Claribel Taylor, whose valuable guidance as co-adviser of the study and whose faith in the professional potential of this student provided a constant source of strength and encouragement,

Dr. Lois Gilmore, whose regular encouragement and skillful chairmanship of my graduate committee helped to make these years of study a
challenging and enjoyable experience,

Dr. Helene Heye, who provided initial and continued direction for my course work at The Ohio State University and whose suggestions greatly improved the manuscript,

Dr. Julia Dalrymple for her supportive guidance, tireless efforts in reading the manuscript, and many recommendations which contributed measurably to the methodological strength of the study,

Dr. George G. Thompson for his patient and stimulating suggestions for the formulation of the research design,

Dr. Robert Ullman, Mr. Jack Deem and Mr. Jack Turner for their statistical expertise,

Dr. Milton C. Mussman whose doctoral study pertaining to middlecence generated much thought relative to the theoretical and practical aspects of attitude measurement,

Mrs. Barbara Turner for her support and encouragement throughout the project and especially for the tireless effort given to the typing of the manuscript at each stage of its development,

Students, faculty and administrators in the Newark City Schools and to the mothers for their participation in the study,

Mr. and Mrs. Phil Nelson whose dedication to the care of our children greatly facilitated the long hours of research and study,

And the many students who have stimulated my interest in, and excitement for, research, teaching and continued study in the realm of family and child development.
VITA

May 23, 1936...........................Born -- Durbin, West Virginia

1958..................................B.S., West Virginia University
Morgantown, West Virginia

1958-1960.............................4-H Club Agent, Agricultural
Extension Service, Lewis County
West Virginia

1961..................................M.S., West Virginia University
Morgantown, West Virginia

Association of Greater
Cleveland, Cleveland, Ohio

1962-1966.............................Instructor and Director of the
Home Management House, West
Virginia University, Morgantown,
West Virginia

1968-1969.............................Teaching Assistant, Division of
Family and Child Development, The
Ohio State University, Columbus,
Ohio

1969-1970.............................Lecturer, Division of Family and
Child Development, The Ohio State
University, Columbus, Ohio

1970-1971.............................Instructor, Division of Family
and Child Development, The Ohio
State University, Columbus, Ohio

FIELDS OF STUDY

Major Field: Family and Child Development

Studies in Family and Child Development. Professor Claribel
M. Taylor

Studies in Developmental Psychology. Professor George G.
Thompson

Studies in Family Sociology. Professor Alfred E. Clarke
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>VITA</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Background and Purpose</td>
<td></td>
</tr>
<tr>
<td>The Family in Perspective</td>
<td></td>
</tr>
<tr>
<td>Attitudes as an Index of Adjustment and</td>
<td></td>
</tr>
<tr>
<td>Familial Influence</td>
<td></td>
</tr>
<tr>
<td>Statement of Problem</td>
<td></td>
</tr>
<tr>
<td>Hypotheses</td>
<td></td>
</tr>
<tr>
<td>Assumptions</td>
<td></td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td></td>
</tr>
<tr>
<td>II. REVIEW OF LITERATURE.</td>
<td>13</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Overview of Mental Health</td>
<td></td>
</tr>
<tr>
<td>Mental Health and the Individual</td>
<td></td>
</tr>
<tr>
<td>Mental Health Within the Family</td>
<td></td>
</tr>
<tr>
<td>Mental Health and Individual Adjustment</td>
<td></td>
</tr>
<tr>
<td>Mental Health and the Concept of Stress</td>
<td></td>
</tr>
<tr>
<td>Overview of Adolescence and Middlescence</td>
<td></td>
</tr>
<tr>
<td>Adolescence</td>
<td></td>
</tr>
<tr>
<td>Middlescence</td>
<td></td>
</tr>
<tr>
<td>Importance of the Family in Adolescent</td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
</tr>
<tr>
<td>Importance of Mother-Child Relationships in</td>
<td></td>
</tr>
<tr>
<td>Adolescent Adjustment</td>
<td></td>
</tr>
<tr>
<td>Effects of Employment Status of the Mother</td>
<td></td>
</tr>
<tr>
<td>Effects of Maternal Childrearing Practices</td>
<td></td>
</tr>
<tr>
<td>The Adolescent Self -- An Hypothesized Identity</td>
<td></td>
</tr>
<tr>
<td>Effect of Parental Maladjustment Upon Identity</td>
<td></td>
</tr>
<tr>
<td>Acquisition</td>
<td></td>
</tr>
<tr>
<td>Attitude Measurement and its Relationship to</td>
<td></td>
</tr>
<tr>
<td>Adjustment</td>
<td></td>
</tr>
<tr>
<td>Attitude Intensity as a Measure of Adjustment</td>
<td></td>
</tr>
</tbody>
</table>
The Semantic Differential as a Measuring Instrument

Summary

III. DESIGN OF THE STUDY ........................................ 54

Introduction
Research Design
  Criteria for Sample Selection
  Description of the Sample
Measurement
  Development of the Attitude Scale
  Test-Retest Establishment of Instrument
  Reliability
  Validation of the Attitude Scale
  Coding of Responses for Comparative Analysis
  Procedure for Administration of the Attitude Scale
Data Analysis Plan

IV. PRESENTATION AND ANALYSIS OF DATA ..................... 64

Introduction
  Plan for Presentation and Analysis of Data
Findings in Relation to the Null Hypotheses
  Null Hypothesis 1
  Null Hypothesis 2
  Null Hypothesis 3
  Null Hypothesis 4
  Null Hypothesis 5
  Null Hypothesis 6
  Null Hypothesis 7

V. SUMMARY AND IMPLICATIONS ................................. 94

Summary
  General Findings
  Findings in Relation to the Null Hypotheses
Implications
  General Implications
  Implications for Family Life Education
  Suggestions for Further Study

APPENDIX

A .......................................................... 105
B .......................................................... 108
SELECTED BIBLIOGRAPHY ................................. 111

vi
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Description of Respondents on the Adolescent-Middlescent Attitude Scale</td>
<td>56</td>
</tr>
<tr>
<td>II. Educational Level of Maternal Participants</td>
<td>57</td>
</tr>
<tr>
<td>III. T-Ratios Depicting Differences Between Mean Attitude Scores for Students and Mothers As Measured by the Adolescent-Middlescent Attitude Scale</td>
<td>67</td>
</tr>
<tr>
<td>IV. Correlation Coefficients Between Attitude Scores of Mothers and Their Adolescent Sons and Daughters as Measured by the Adolescent-Middlescent Attitude Scale</td>
<td>68</td>
</tr>
<tr>
<td>V. Correlation Coefficients Between the Attitude Scores of Ninth Grade Students and their Mothers as Measured by the Adolescent-Middlescent Attitude Scale</td>
<td>71</td>
</tr>
<tr>
<td>VI. Correlation Coefficients Between the Attitude Scores of Tenth Grade Students and Their Mothers as Measured by the Adolescent-Middlescent Attitude Scale</td>
<td>74</td>
</tr>
<tr>
<td>VII. Mean Attitude Scores of Respondents to the Adolescent-Middlescent Attitude Scale</td>
<td>77</td>
</tr>
<tr>
<td>VIII. Correlation Coefficients Between the Attitude Scores of Mothers and Sons as Measured by the Adolescent-Middlescent Attitude Scale</td>
<td>83</td>
</tr>
<tr>
<td>IX. Correlation Coefficients Between the Attitude Scores of Mothers and Daughters as Measured by the Adolescent-Middlescent Attitude Scale</td>
<td>85</td>
</tr>
<tr>
<td>X. Correlations of Mothers' Ages with the Attitudes of Respondents on the Adolescent-Middlescent Attitude Scale</td>
<td>88</td>
</tr>
<tr>
<td>XI. Correlation of Family Size with Attitudes of Respondents on the Adolescent-Middlescent Attitude Scale</td>
<td>89</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>XII. Correlation of the Number of Years Which the Respondents had</td>
<td>91</td>
</tr>
<tr>
<td>Lived in the Geographic Area Sampled with his Attitudes as Measured</td>
<td></td>
</tr>
<tr>
<td>by the Adolescent-Middlescent Attitude Scale</td>
<td></td>
</tr>
<tr>
<td>XIII. Effect of the Employment Status of the Mother Upon Her</td>
<td>92</td>
</tr>
<tr>
<td>Attitude Intensity as Measured by the AMAS</td>
<td></td>
</tr>
<tr>
<td>XIV. Calculations for Validation of Instrument Used to Obtain</td>
<td>110</td>
</tr>
<tr>
<td>Attitude Scores of Mothers and Their Children Using the Spearman</td>
<td></td>
</tr>
<tr>
<td>Coefficient of Rank Correlation</td>
<td></td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A Comparison of Attitude Scores of Ninth and Tenth Grade Students and Their Mothers as Measured by the Adolescent-Middlecent Attitude Scale</td>
<td>79</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

How well the family of the 1970's and in the ensuing decades will fulfill the limited and remaining functions it performs is of central concern both to the family theoretician and practitioner. Of particular importance is the relative significance of parental influence upon the individual in the adolescent stage of development during which his principal developmental task is that of establishment of a self-concept. Is adolescence a time of rebellion when individuals reject parental attitudes, values and authority or, in fact, does the individual on the threshold of adulthood mirror the precepts held by his parents?

According to Horrocks:

\[...\text{of all the factors involved in the character of most homes, the single most important factor, one transcending all others, is parental attitudes.}\]

Two diverse and potentially stressful stages co-exist in most households of which the adolescent is an integral part -- that of the adolescent and his mother or mother substitute. One might suspect that the two interacting individuals would tend to reflect the attitudes and something of the relative adjustment of each other in their actions and in general personality composition. It is possible, therefore, that adjustment to a specific period of life for one of these individuals could be facilitated or made more difficult by the adjustment of the other to his or her immediate environment.

**Background and Purpose**

Wide support has been offered for the supposition that adolescence is a potentially traumatic period in the life of an individual. While adolescents in all cultures do not show stress level similarities, there is some evidence to indicate that stress at this age level is culture related. In the United States, the difficulty of adjustment on the part of the adolescent is heightened by the increasing length of his dependency upon others. Menninger wrote in relation to the adolescent that:

...their challenging behavior is a reaction of frustration to the failure of society to make a reasonable and sensible and appropriate place for them.²

Thus, resulting incongruities in the role of the American adolescent have rendered his passage from childhood to the world of the adult a

---

relatively difficult and frustrating journey.

Similarly frustrated by the ambiguities associated with her complex of roles has been the woman who assumes the dual responsibilities of homemaker and employee in the Nation's labor market. According to Christensen, the American female has been undergoing her most perilous time since the last decades of the Roman Empire. These difficulties were attributed largely to what he described as:

...the incessant demands of the educational system which subject her to standards of academic excellence presumably geared to occupations other than wife-mother.

The well-educated mother has tended to be particularly vulnerable in the societal disparity of the wife-mother role versus that of a professional nature. The early middle years, therefore, may well be traumatic for the professionally trained and oriented married woman. By sheer virtue of her advanced education and knowledge of the world at large, the college-trained female is likely to see beyond the walls of home and family even though these remain foremost in her interest and effort.

The professionally oriented woman who has experienced role frustration during her child-rearing years may be especially susceptible to psychological trauma during the years of the emancipation of the adolescent. This total crisis potential can be magnified if she is also affected adversely by biological or psychological aspects of the aging process.

---


4 Ibid.
Thus, both the adolescent child and the middle-teen mother are affected by the changing cultural conditions which yield inadequately defined and confusing role requirements. There exists, therefore, the possibility that adjustment requirements for each one are extensive, yielding the probability of stress producing outcomes and circular reactions between the two with each other and with their total environment. However, since the adolescent self-image remains in a state of flux, there is reason to believe that the major benefactor of positive parent-adolescent relationships would be the adolescent. As the adolescent searches for self identity, he sets into motion the mechanism for attitude and personality formation — dynamic processes which he will use throughout his life.

The Family in Perspective

Empirical data compiled in the 1920's by Ogburn\(^5\) set the stage for an era of speculation about the future of the American family which was to bridge nearly three decades. Major decreases in the traditional functions of the family were depicted in his well-documented theory of social change. Sorokin\(^6\) and Zimmerman\(^7\) interpreted the decline in the assumption of traditional family functions as a sign of its decay or


deterioration as an institution. In 1941, Sorokin postulated that:

The family as a sacred union of husband and wife, of parents and children will continue to disintegrate...The main socio-cultural functions of the family will further decrease until the family becomes a mere overnight parking place mainly for sex relationships.8

Interpretations of the changing family functions assumed a more optimistic outlook in the 1940's than they had in the preceding decades. Burgess and Locke described the family as changing from an institutional to "companionship" model and suggested that the changing functions of the family were necessary for its implementation.9 Miller and Swanson coined the term "colleague family" to describe the type of familial unit important in an urban-industrial society.10

Few writers have been more influential than Parsons in creating optimism about the survival and increasing importance of the family system in the United States. He has referred to the family as "differentiated" rather than disorganized.11 Portraying the family as specialized in its functions, Parsons predicted that the family would become increasingly important in the performance of its remaining functions of which high priority would be given to the socialization of its members.

8Sorokin, op. cit., p. 776.
Goode has emphasized the mediating function of the family. He described the importance of the family's role as mediator between the individual and his social order. Thus, the ability of the family to assimilate social change has been delineated as a key factor in the maintenance of positive mental health among the masses in a highly technological, urbanized and industrialized society. How well an individual will adjust to the changing demands of society may depend upon the functional acuity of the family in helping each of its members to physically and emotionally equilibrate on a consistent and regular basis.

Relative to the future of the family as an institution, Nye has written:

There is little doubt that the institution of the family is here to stay, not because this basic unit of social structure is valuable per se, but because it is instrumental in maintaining life itself, in shaping the infant into the person, and in providing for the security and affectional needs of people of all ages. In fact, the family is so central to the fulfillment of several intrinsic values, that it is anticipated that the family will become an even more competent instrument for meeting human needs and, as a consequence, will become more highly and generally valued throughout society in that fascinating and ever more rapidly changing world of tomorrow.

Hobart warned that, if our society is to survive, we must undergo

---


a change from materialistic to human values. According to Hobart:

A key to this value change lies in renewed commitment to the family and in thus reestablishing the centrality of the commitment to inefficient, human values which the family relationship symbolizes.15

It would seem that the family has become, as Parsons has suggested, more important than at any other period in history. How really effective or influential the family will be in the socialization of its members remains to be learned. Whether or not the family serves effectively to socialize its members must of necessity be studied.

Attitudes as an Index of Adjustment and Familial Influence

It is the belief of the investigator that attitudes are a valuable index of one's adjustment to his psycho-social milieu. Attitudes represent a predisposition toward action. Therefore, they tend to reveal information relative to one's adjustment to his environment at a particular point in his life's history.

A comparison of the attitudes of mothers with their sons or daughters yields information relative to maternal influence upon the adolescent. In addition, an analysis of attitude scores provides information regarding the circularity of the mother-child relationships. Thus, the effect of the attitudes, and subsequently the adjustment, exerted by two individuals at diverse stages of the life cycle upon each other can be inferred.

Low intensity scores on attitude scales suggest the presence of stress and marginal adjustment while high intensity attitude scores tend to suggest maximal or near-maximal adjustment. Thus, in instances where both parent and adolescent scores are intense, it will be suspected that effective socialization has taken place within the family and that adjustment is favorable. When differences occur between mother and child in the direction and intensity of attitude, it will be surmised that some inadequacies were involved in the socialization processes and that stress or maladjustment were involved.

Within this theoretical framework, an attitude scale becomes useful in gathering data relative to parent-adolescent interaction. Such a scale is a valuable device for the collection of information pertaining to large numbers of individuals in a minimal amount of time. An additional benefit of using an attitude scale is that it may result in less stereotyping of response than that which might occur in the utilization of techniques such as the personal interview.

Concepts considered most appropriate in eliciting basic attitudinal similarities and differences between mothers and adolescents are those central to the rubric of life in general. These include Children, Health, Marriage, Leisure, Future, Community, Friends, School, Parents, Church, Daily Tasks, and Self. The bi-polar terminology deemed useful in relation to these concepts include such adjectives as good-bad, improving-declining, important-unimportant and others designed to evoke attitudes basic to the individual's character and value structure. The concepts and bi-polar terminology utilized in attitudinal measurement for the study are designed to elicit a minimal amount of emotional
response on the part of the participant. (Appendix A). They are primarily non-controversial in nature and are useful in measuring basic attitudes which are reflective of an individual's long range attitudinal orientation. Rather than pertaining to issues of the day such as existing wars, racism, and morality, the concepts are non-emotionalized references to aspects of life which are, in general, valued and regularly encountered aspects of life for both the middle-teen mother and her adolescent son or daughter.

Thus, for the purpose of the study, attitudes will be viewed as a primary source for the collection of information relative to the effectiveness of the modern American family in fulfilling its adjustive function in the total socializing process of its adolescent and middle-teen maternal members.

Statement of Problem

The study was designed to compare the attitudes of middle-teen mothers, ages thirty-five through fifty-five, inclusive, and their children, grades nine and ten, toward twelve major concepts central to the rubric of life in general for both the adult and adolescent sample. The concepts which were included were primarily non-controversial in nature and included Children, Health, Marriage, Leisure, Future, Community, Friends, School, Parents, Church, Daily Tasks and Self. A secondary purpose of the study was to project from these data the adjustment similarities between mother and child. The following objectives were established to investigate the problem:
1. To determine the attitude similarities of the matched, paired samples of mothers and their adolescent children.
2. To determine the relationship of attitude intensity to the adjustment of the adolescent and maternal samples.

This study was designed to meet these objectives, to develop appropriate methodology and to add to the existing knowledge in the area of parent-adolescent relationships.

### Hypotheses

The following null hypotheses were tested:

1. There will be no differences between the attitude intensity levels of ninth and tenth grade students and those of their middlescent mothers toward concepts central to the rubric of life in general.
2. The adjustment of the mother to her environment will not differ from the adjustment of the adolescent to his or her environment.
3. There will be no differences between the correlations of attitude scores of the mother and son respondent pairs and those including mothers and daughters.
4. There will be no relationship between the age of the mother and the total attitude scores as measured by the Adolescent-Middlescent Attitude Scale for maternal and adolescent participants.
5. There will be no relationship between the size of the family and the total attitude scores as measured by
the Adolescent-Middlescent Attitude Scale for maternal and adolescent participants.

6. There will be no relationship between the length of family residency in the geographic area sampled and the total attitude scores as measured by the Adolescent-Middlescent Attitude Scale for maternal and adolescent participants.

7. There will be no significant relationship between the employment status of the mother and her total attitude score as measured by the Adolescent-Middlescent Attitude Scale.

Assumptions

The need for the proposed research was based in part upon the following assumptions:

1. An attitude represents a predisposition toward action and would therefore reveal information relative to one's adjustments.

2. The mother and her adolescent son or daughter would tend to reveal their relative adjustment to the environment by responding to an attitude scale using the semantic differential technique.

3. The mother-child relationship is circular in nature with the attitude and adjustment of one influencing correspondingly the attitudes and adjustments of the other.
Stress or lack of adjustment can be inferred from changes in attitude intensity and direction from one age level to another and as a result of low intensity scores yielded by semantic differential attitude scales.

Limitations of the Study

Since a high percentage of the selected samples (83 and 82 percent, respectively) responded, the findings from the study were believed to be representative of the sample population.

More than twice as many mothers of adolescent daughters (107) responded to the attitude survey than did mothers of adolescent sons (52). This resulted in an imbalance of data for the male and female samples. Thus, a larger male sample, in all probability, would have resulted in findings of greater significance than those reported.
CHAPTER II
REVIEW OF LITERATURE

Introduction

Reports of studies relative to infancy, early and middle childhood, adolescence, early adulthood and senescence are found annually in a wide variety of biological, psychological and sociological literature. However, the relatively lengthy, complex and potentially stressful period between early adulthood and senescence has assumed a much less prominent place among research priorities. This period, referred to by Mussman as Middlescence,\textsuperscript{1} encompasses an increasingly large segment of the Nation's total population. Thus, increased longevity brought about by medical advances during the twentieth century is thought to have precipitated both the phenomenon of middlescence and the need to better understand individuals in this stage of life. It would follow, therefore, that information relative to the effect of the middlescent adjustment upon that of the adolescent tends to be sparse and entirely inadequate to formulate conclusions. A review of the literature reveals the relative importance of the parental model upon the adjustment of the maturing adolescent and to his total emotional well-being, but little objective evidence exists to support the hypothesis that

adolescents tend to develop attitudes and adjustment patterns similar to those of their parents.

The review of literature will be divided into the following eight major categories: (1) Overview of Mental Health, (2) Overview of Adolescence and Middlescence, (3) Importance of the Family in Adolescent Development, (4) Importance of Mother-Child Relationships in Adolescent Adjustment, (5) The Adolescent Self — An Hypothesized Identity, (6) Adolescent Acquisition of Identity, (7) Effects of Parental Maladjustment Upon Identity Acquisition, and (8) Attitude Measurement and Its Relationship to Adjustment.

Overview of Mental Health

Mental Health programming received a major boost toward its rightful place among the top national priorities with the passing by Congress of Public Law 88-164. This bill authorized the appropriation of $150,000,000 to finance up to two-thirds of the cost of construction of community mental health centers. As a result of this legislation, there has emerged an innovative approach to the treatment of mental illness and to the promotion of mental health in the United States as had been advocated by the late President John F. Kennedy.\(^2\)

The new concept of mental health is focused upon prevention of mental illness rather than treatment-oriented programs provided through

institutionalized care. The antecedents of mental disease are being identified and morbidity reduced through elimination or decrease in causative factors. According to the United States Department of Health, Education and Welfare:

...not since the creation of the National Institute of Mental Health in 1949 has such specific impetus been provided by the Federal Government for the beginning of a new era in treatment of the mentally ill in the community and by the community.  

Hobbs described the shift from a clinical to a public health model as mental health's third revolution. Within the scope of this model, the focus was upon educating individuals and families in the realm of positive mental health rather than concentrating only upon the treatment of the mentally ill. Hobbs identified the first revolution with Pinel in France, Tuke in England and Rush and Dix in the United States. According to Hobbs, the first revolution in mental health was based on:

...the then heretical notion that the mentally disordered are people and should be treated with kindness and dignity, a goal still not fully achieved.  

Very little was accomplished in actual implementation of mental health care and programs as a result of the first revolution. Its significance rested primarily in its philosophical stance which resulted

---

6Ibid.
in the treatment of the mentally disturbed as patients requiring clinical analysis and consideration.

Freud heralded the second revolution with his introspective analyses on the nature and meaning of intrapsychic life. Hobbs suggested Freud's work resulted in a post World War II recognition of the "inappli-
cability of individual psychological treatment to major social problems" and generated many of the innovations of the past two decades. Freud stimulated both speculation and research in the realm of human psychological and emotional adjustment.

There is today a growing consensus that mental illness is not the private misery of single individuals but a social problem for which the whole community shares responsibility. He cites community mental health centers as basic to the implementation of the third revolution in mental health programming.

According to Robinson, et al.:

...the mental health hospital represents the end result of society's failure to cope with, even to care much about, the mental and emotional problems of its members until their illnesses reach such critical proportions that the sufferer is no longer capable of functioning in the wear-and-tear, anxiety producing climate of everyday life...We have neither enough facilities nor professional workers to treat those who are in most need of help; the rest -- millions of them -- are left in a no-man's land, a social vacuum, to fend for themselves.

---

According to the World Health Organization, health should be regarded not just as the absence of disease but as a positive state of well-being.\textsuperscript{11} Thus, the concept of the comprehensive community mental health center heralds a new era in the prevention of mental illness and in the treatment of individuals with varied levels of emotional difficulty. Its usefulness should be particularly influential in assisting individuals in family settings to cope with the stresses and crises with which they are faced. Relative to the status of mental health today, Ackerman writes:

> Although a basic criterion of mental health is accurate perception of external reality, such perception is difficult indeed in our rapidly changing social scene...In disordered relations of person and environment, the first line of defense is to find a realistic solution for conflict within the person while seeking an effective outlet. The second defense is to contain the conflict within the person while seeking an outlet. The third line of defense is irrational acting out. The final defense is progressive emotional retreat leading ultimately to disintegration of personality. We see in current tensions between persons and environment a shift to the third line of defense, acting out. This spells danger.\textsuperscript{12}

\textsuperscript{11}Herbert Dorken, "Administration of Community Mental Health Services in the United States," \textit{International Trends in Mental Health}, ed. by David, \textit{op. cit.}

Mental Health and the Individual

Arsenian theorized that every human being has the capacity for psychological trauma.\(^{13}\) He suggested that:

...everyone is susceptible to intrapsychic disorganization and...people differ significantly in the amount of noxious tension they can withstand.\(^{14}\)

Arsenian suggested that a threshold for irritability and disorganized response is present at birth and that it can be moved up or down depending on experiences in mediating or satisfactorily resolving tension from internal and external stimuli.\(^{15}\) Thus, one's emotional threshold would not be a fixed attribute but one subject to environmental influences.

In view of man's potential susceptibility to mental disequilibrium, it seems essential that family study include extensive research relative to the effect of the family milieu upon the individual. Of particular importance are factors relative to interpersonal relations and the circulatory cause and effect patterns which tend to emerge as various family members seek equilibrium within a complex familial and cultural environment.


\(^{14}\)Ibid., p. 23.

\(^{15}\)Ibid.
Mental Health Within the Family

Cavan suggested that the American family is:

...the place where all the tensions generated by social change come to a focus and it is there that the problems must be resolved. We know enough now about emotional suffering to be able to say that it is a family epidemic. In these circumstances, the malady being widespread in a population approaching 200,000,000, its control cannot be handed over to outside agencies but must be treated by the family itself.16

In the excellent collection of articles edited by Handel under the title of *The Psychosocial Interior of the Family*, an appeal was made relative to the vital role of the family in the prevention and treatment of mental illness.17 Dorken cited the importance of family participants in the treatment of mental health problems encountered by its members.18 He stated emphatically that:

We especially need to learn more about using and developing the strengths and abilities of men instead of eternally studying their weaknesses and sicknesses. A concern with human assets is more in keeping with positive mental health than endless dwelling on the ramifications of psychotherapy.19

Shoben concurred as he stated that:

Clinical practice and the behavioral sciences alike have typically focused on the pathological in their studies of personality and behavior

---


18Dorken, *op. cit.*, p. 112.

dynamics. While much of crucial importance remains to be learned, there is an abundant empirical knowledge and an impressive body of theory concerning the deviant and the diseased, the anxious and the neurotic, the disturbed and the maladjusted. In contrast, there is little information and even less conceptual clarity about the nature of psychological normality.20

Thus, increased investigation of non-clinical populations seems essential in the area of family research. Realizing that the ultimate survival of our society depends upon the quality of our families and that the family more than any other human institution shapes the personality and character of the individual,21 it seems imperative that optimal mental health be fostered within the family.

Mental Health and Individual Adjustment

Ackerman suggested the following elements of mental health:

1. active adjustment or attempts at mastery of environment as distinct both from the ability to adjust and from indiscriminate adjustment through passive acceptance of environmental conditions.

2. unity of personality, the maintenance of stable, internal integration which remains intact, notwithstanding the flexibility of behavior which derives from active adjustment.


3. the ability to perceive the world and self correctly.\textsuperscript{22}

Consideration of these elements can be useful in helping family members to meet the stress which they encounter. It may well be that the American goal of the future in the psychological realm will be the maintenance and/or stimulation of positive and optimal mental health for the mass of its citizenry.

For years writers in the area of the family have described family and individual life cycles and have provided voluminous suppositions and propositions relative to their inherent characteristics and subsequent usefulness.\textsuperscript{23} While the classification designs of these cycle or stage theories vary considerably, much of their utility lies in their predictivity of potentially stressful periods in the individual or family life cycle.

Mental Health and the Concept of Stress

Life is a continuous process which requires constant adjustment of the organism therein, particularly to situations considered to be stressful. Stress, a relatively new term in psychological literature, is a universal human and animal phenomenon which:

\ldots results in intense and distressing experience and appears to be of tremendous influence in behavior... The province of stress is most clearly demarcated when we are dealing with the extremes of disturbance of biological and psychological

\textsuperscript{22}Ackerman, op. cit., p. 5.

\textsuperscript{23}Havighurst, 1952; Erikson, 1959; and Rodgers, 1962. See Bibliography.
functioning, disturbance brought about by unusually threatening, damaging or demanding life conditions.²⁴

Lazarus cited the importance of personality factors in producing stress reactions.²⁵ He suggested the necessity of defining stress in terms of transactions between individuals and situations rather than of either one in isolation. The adjustment of an individual to stress would seem inherently affected by the involvement of others in the situation and their relative ability to adjust to the situation as it affects them. Lazarus further challenged that:

...we must identify the external and internal forces or stimulus conditions of stress reactions, and the intervening structures and processes that determine when and in what form the stress reactions will occur.²⁶

Three central issues in psychological stress have been isolated by Lazarus. These are, in question form:

1. What are the conditions and processes that determine when stress reactions will be produced and when they will not?
2. What happens when a stimulus is reacted to as stressful?
3. What are the patterns of reaction that define the presence of stress?²⁷

²⁵Ibid., p. 5.
²⁶Ibid., p. 13.
²⁷Ibid., pp. 24-25.
Overview of Adolescence and Middlescence

A review of literature pertaining to adolescence and middlescence reveals the potentially stressful nature of these stages and the probable circulatory effect that these individuals experience in their mutual relationships.

Adolescence

Adolescence has its inception with puberty, biologically speaking, and terminates at a much less fixed point in time which occurs usually during the third decade of an individual's life.\(^\text{28}\) The length of adolescence varies from culture to culture with some cultural groups granting by ritual the advent and termination of adolescence.

Perhaps the most extensive early work in the area of adolescence is that of Hall who published his monumental works entitled Adolescence in 1904. Hall proposed therein the storm and stress theory which hypothesized that individuals pass through a series of disequilibrium that can be characterized roughly but consistently by stages. He depicted the advent of puberty or adolescence as an abrupt rather than continuous and gradual process.\(^\text{29}\)

Hollingsworth represented a trend away from the Hall psychology of adolescence. She described previous information as having been based


largely on opinions of professional observers rather than upon quantita
tive researches which gave observation less than the status of scientific fact.\(^30\)

Mead's studies in Samoa seemed to disprove the inevitability of the storm and stress conditions of adolescence. She concluded as a result of these studies that whether or not adolescence is a trouble-
some or trouble-free period of life depends largely on the culture in which one lives.\(^31\) Recent writers on the subject of adolescence such as Jennings (1964), Parsons (1962), Potvin (1964), Friedenberg (1962) and Goodman (1960)\(^32\) have investigated the cultural effects upon the American adolescent. These writers concluded that the American cul-
ture contains many developmental obstacles for the adolescent. Sociologists in particular have described adolescence in America as one of tension, alienation and rebellion.

Horrocks characterized the American culture by:

...bigness leading to lack of privacy and regimen-
tation, rapid social change, mechanization, urban-
ization, family and personal mobility, an educational system focused on industry, an affluent society, socioeconomic discrepancies, and a less cohesive family.\(^33\)

With this general orientation, the American culture both pro-
longs the adolescent's dependency upon his parents and, with the aura


\(^31\) Margaret Mead, *Coming of Age in Samoa*, (New York: Morrow, 1928).

\(^32\) See Bibliography for complete reference for each author.

\(^33\) Horrocks, *op. cit.*, p. 58.
of constant change, makes more difficult his search for self. However, adolescence has been viewed by Horrocks and others as having no monopoly upon adjustment problems.

Finesinger cited security as the basic emotional need of the adolescent. This writer further elaborated that:

Just as in younger children, the feeling of belonging to the family and acceptance by the family and the group plays an important role in maintaining the person's sense of security. Patterns of behavior are developed in light of the special adjustment of the person in respect to feelings of security. These patterns, first developed in connection with intimates within the family are carried along to other contacts. These special problems of adolescence put additional strain upon persons whose adjustment is tentative. The adolescent is groping toward an integration of his various drives, which at times are at loggerheads with each other. He legitimately demands recognition of himself as an independent human being.

Gesell, Ilg and Ames echoed the words of numerous writers when they stated that:

Youth has to find itself through interpersonal relations...The central task of the adolescent is that he must find himself.

Thus, the development of interpersonal competence would seem of high priority for the adolescent whose major task is the formation and solidification of a self-concept as it relates to others in his total

---

34 Horrocks, op. cit.


environment. Competence is a synonym for ability, according to Foote and Cottrell. These writers describe the concept of interpersonal competence as:

...a satisfactory degree of ability for performing certain implied kinds of tasks...Interpersonal competence although based upon inherited potentialities and directly contributing to self-conceptions, may be compared to acquired skills.

Middlescence

While writers have theorized about critical periods during the middle years, little objective evidence exists to support their hypotheses and assumptions. Friedan, author of the controversial best-seller, The Feminine Mystique, has made an expressive appeal for women to develop their interests, horizons and goals beyond the home in order to find fulfillment and promote positive mental health throughout the middle and later years.

A number of writers have likened a phase of middle-age to a second adolescence. A recent survey of the potentially stressful middle


38Ibid.

39Havighurst, 1953; Erikson, 1959; and Neugarten, 1964. See Bibliography.


41Beauvoir, 1953; Bergler, 1957; Ellis, 1962; and Hornick, 1967. See Bibliography.
years was published by Fried (1967). While a review of the available literature relative to Middlescence reveals general agreement on the part of most writers relative to the potential stress associated with this period in the life cycle, still the period would seem, as does adolescence, to have no monopoly upon problematic situations.

Most writers place the age span of middle age somewhere between 40 to 60. However, for the purpose of this study, the limits were set from 35 to 55 in order to utilize a student population which had a maternal counterpart in the selected age range.

Current literature reveals that prior to World War I the role of the woman was almost exclusively that of homemaker (wife and mother). However, with the advent of two explosive world wars and the resultant industrial demands, women joined the work force and became an integral part of the employment market. Writers in the field agree that her role has remained uncertain since the inception of these historical events. Confused about what her role shall be relative to home and the world at large, the American female often displays symptoms of stress in the form of anxiety, frustration, tension and other psychological as well as biological reactions.

Importance of the Family in Adolescent Development

An infant learns early in his life to imitate others in his environment. Just as behavior is learned from parents and/or significant models, so it is postulated that attitudes are similarly taken on by the child who utilizes the attitudes or behavioral patterns as he learns them from others or in a somewhat modified form. According to Horrocks:

...children tend to imitate their parents and to ingest within their own personality structure and their defense mechanisms and manner of coping with the world the behaviors and attitudes they have witnessed in their parents.43

The acquisition of attitudes and subsequently of values would seem a particularly vital area of development for a child of any age, but particularly, for the adolescent who is solidifying his own identity. It is not surprising that the adolescent's home situation and, in particular, his relations with his parents, have been cited frequently as having important effects upon his own later marital adjustment and the kind of parent he will become.44 Stagner believes that the relationship with parents serve as a prototype for relationships with industry, government, religion and other institutions.45

Gottlieb and Ramsey suggest that many problems which individuals

43 Horrocks, op. cit., p. 151.
44 Terman, 1938; Burgess and Cottrell, 1939; Porter, 1955; and Ackerman, 1962. See Bibliography.
experience during adulthood are precipitated by adolescent development inappropriate to the demands of adulthood. These writers analyzed the relationship between adolescent development and the ability to accept adult roles based upon a modification of a list of developmental tasks offered initially by Havighurst. Most, if not all, of these tasks are affected by parent-child relationships. Included in the vital development task list proposed by Gottlieb and Ramsey were:

(1) accepting one's physique
(2) accepting a masculine or feminine role and proper relations with both sexes
(3) emotional independence of parents and other adults
(4) achieving assurance of economic independence in selecting and preparing for an occupation
(5) developing intellectual skills and concepts necessary for civic competence
(6) preparing for marriage and family life.

Studies reported by Musgrove cast doubt upon the common assumption that late adolescence is a period in which parents rapidly decline in importance as reference persons in the eyes of the adolescent children. Musgrove's studies pointed to the apparent significance of the parents as reference individuals and models for the adolescent. According to Douvan and Gold:

A majority of eighteen-year olds choose their adult ideal within the family; comply on a projective question with a parental request to give

---


47 Ibid.

up a job and return home, and resolve another projective conflict, between a commitment to parents and pressure from peers, in a parent-oriented way.\(^9\)

Since it is commonly found that the adolescent tends to choose his model within the family setting, it seems important to cite the following factors which are thought to influence identification and thereby are vital to interpersonal or parent-child relationships. The ten factors cited by Stoke as probable factors influencing identification are:

1. the biological fact of sex and its predisposition to some form of behavior
2. the social pressures upon children to identify with their own sex.
3. the degree of affection accorded to the child by the person with whom identification is attempted
4. the extent to which the child's needs are gratified by the person with whom identification is attempted
5. the degree of acquaintance which the identifier has with the identified person
6. the clarity of the role of the person with whom identification is attempted
7. the attitude of influential persons toward the person with whom identification is attempted
8. the capacity of the child to be like the person with whom identification is attempted

(9) the temperament of the child in relation to the person with whom identification is attempted

(10) the existence of strong needs on the part of the child which conflict or coincide with the requirements and patterns of the person with whom identification is attempted.\(^50\)

A careful analysis of these ten factors reveals the potential impact of adjustment or maladjustment of the parent or model upon the child who attempts to identify with the significant adult.

In a study of 50 boys, Mittal found that a large number of problems checked by the respondents related to home life.\(^51\) These included the attitudes of parents, sibling-sibling relationships and mother-father relations. The main social problems which the subjects reported (shyness, feelings of being rejected and fear of loss of confidence) also reflect in a very direct way actual home experience and either potential or real maladjustment.

According to MacLennan, adolescents tend to be highly resistive to admitting that they have problems and to accepting treatment when problems prevail.\(^52\) He suggests, however, that such resistance can be reduced to a considerable degree if problems are dealt with as normal


aspects of family living where treatment can be built into regular
activities and focused upon ego functioning. Inherent in such proposals
is the postulation that parent-child interactions are positive or can
be moved in that direction. Thus, the adjustment status of parents
and their subsequent mental health are of primary importance in their
being able to deal flexibly in potentially traumatic situations.

Kinnane's and Pable's investigations of family background and
work value orientation produced evidence to confirm the hypothesis
that family influences are critical in the development of work values.
This conclusion is strengthened by the observation that most of the
values were found to have little significant relation to either general
intelligence or school curriculum.\textsuperscript{53} Parental attitudes about school
and its importance are a major influence on the child's record of
school attendance, according to Verville.\textsuperscript{54} The adolescent encounters
school problems similar to those of his elementary years but they are
more serious in their confirmation of personal maladjustment or in
cementing attitudes of defeat and failure.\textsuperscript{55}

Alcorn reported from his studies that while the mother remains
the central figure in the child's life until the age of ten, the father
becomes at least equally important, with a strong possibility that his

\textsuperscript{53}John F. Kinnane and Martin W. Pable, "Family Background and
Work Value Orientation," \textit{Journal of Counseling Psychology}, Vol. IX,
No. 9, (1962), pp. 320-325.

\textsuperscript{54}Elinor Verville, \textit{Behavior Problems of Children}, (Philadelphia:

\textsuperscript{55}\textit{Ibid.}. 
long-term influence surpasses the mother's influence between the ages of 10 and 16. Alcorn's position was reinforced by McNasser who noted that the adolescent years require a strong masculine influence. These studies would tend to further suggest the possibility that the mother who works outside the home or who participates in other activities considered to have masculine tendencies in this culture may tend to display attitudes more similar to those of her adolescent child than one who is more feminine in attitude and behavior.

Importance of Mother-Child Relationships in Adolescent Adjustment

Child development literature tends to support the importance of the mother-child relationship in the personality development of the child. However, factors isolated in relevant studies as significant in personality formation have not been consistent. Thus, problems of both methodological and theoretical nature exist and have contributed to the lack of clarity in this area of study. Further refinement of both technique and theory in the study of interpersonal relationships is needed.

Prolific attempts at research involving the pre-middle-teen parent in general have supported the importance of the mother-child relationship in the personality development of the pre-adolescent child. However, actual studies utilizing a sample limited to the adolescent and

---


the early middlescent or middlescent mother have been less readily
available. Stagner suggests that:

...the mother who is herself emotionally well-
adjusted is likely to be able to provide just
the proper amount of protection; warning of
dangers and preventing the child from entering
very dangerous situations, yet allowing the
child some freedom to experience and learn
his powers and limitations for himself.58

Effects of Employment Status of the Mother

The most extensive investigations in the area of adolescent-
middlescent adjustment have related primarily to the effects of the
employment status of the mother upon her adolescent child as well as
its relativity to her own perceived adjustment. While Nye's studies
(1952, 1957) stand as the classics in this area, there are a number
of other studies which have added measurably to the existing empirical
and theoretical information. (Lundberg and Farnham, 1947; Parsons, 1955;
Komarovsky, 1953; Landis, 1953; Myrdal and Klein, 1956; Nye and Hoffman,

In relation to the difficulties involved in maternal adjustment
to the dual roles of homemaker and employee, Lundberg and Farnham de-
scribed the latter role as basically masculine and suggested that the
woman employed outside the home would be placed in the difficult position
of playing a masculine role during the day and one of a feminine nature
in the morning and evening.59

58Stagner, op. cit., p. 278.
59Ferdinand Lundberg and Marynia F. Farnham, Modern Woman: The
Parsons took an opposing stand to that of Lundberg and Farnham. Work done outside the home was described by Parsons as being little different from that done in the home and as being primarily supportive and nurtural. He further suggested that women tended to be infrequently employed in executive positions in which they would be required to play roles associated with masculinity in our society.

Komarovsky and Landis have cited the frustrations which ambitious and talented women experience when marriage and parenthood prevent their involvement in the occupational world. According to Myrdal's and Klein's studies, the roles of the non-employed married woman were not sufficiently productive to be satisfying to her during the most of her adult life.

Nye studied adolescent adjustment using size of family, broken or intact homes and employed mothers as variables. His study was initiated in 1946 as a result of a wave of vandalism and of insubordination and absenteeism in schools. Teachers in those schools declared that the adolescent's school adjustment frequently could be traced to

---


unsatisfactory adjustment in the home. Nye drew his sample from the Michigan public schools and administered questionnaires to 1,472 adolescents. Nye found that the families in which mothers were employed part-time (1 – 32 hours per week) tended to show better adjustment than either families where the mother worked full-time or not at all.

Whitmarsh concurred with Nye's findings. Her study indicated that the adolescent daughters of employed mothers had fewer recognized problems than the daughters of full-time homemakers.

According to Bossard the children whose mothers were employed outside the home tended to feel lonely. He further warned that the child's supervision and training would be neglected by the mother who was not a full-time homemaker. Komarovsky, on the other hand, saw no reason why the employment of the mother should affect the children adversely.

In perhaps the most comprehensive report concerning maternal employment and its subsequent effects, The Employed Mother in America, Nye and Hoffman cited a study involving large numbers of randomly selected students of both sexes in grades nine through twelve. Data from this research revealed that school performance, psychosomatic symptoms and affectional relationships to the mother appeared unrelated.

---
to the employment status of the mother. Nye and Hoffman reported findings to support the hypothesis that:

...the working woman who gains pleasure from her work shows the child more affection and uses milder discipline. Although she is emotionally involved in the discipline situation, the involvement is to a great extent one of sympathy for the child. The working mother who does not enjoy her work, and whom we would expect to be relatively guilt-free thereby, also shows a tending toward mild discipline. However, here it is not part of a larger pattern which includes affection and sympathy toward the child. Instead, it seems to be part of a general pattern of less involvement with the child. This suggests that the dislike work group tends to withdraw from her maternal role.

Employed mothers, according to Nye, showed more self-acceptance and fewer physical symptoms of distress than full-time homemakers. However, the employed mothers cast more frequent doubts upon their adequacy as mothers than their non-employed neighbors.

Size, sibling ages and spacing and other family composition factors have served as variables in a number of studies pertaining to familial or individual adjustment. Among the most significant of those studies are ones reported by Nye (1952) and Reddi (1967). Nye found that insofar as adolescent parent relations are concerned, the smallest families scored the highest. As was expected, Nye found poorer

---


69 Ibid., p. 99.

70 Ibid., p. 340.

71 Ibid., p. 330.
adolescent-parent adjustment in broken homes than those which were intact.

Reddi\textsuperscript{72} administered the Adolescent Adjustment Inventory to 629 fourteen to twenty year old subjects. Data revealed that boys from large families were significantly more maladjusted than those from medium sized families who, in turn, were more maladjusted than those from small families.

Effects of Maternal Childrearing Practices

Maternal indulgence and neglect as they related to adolescence and the relative adjustment therein was investigated by Nikelly\textsuperscript{73} who administered a rating scale dealing with aspects of pampering and neglect to 111 college students applying for psychotherapy and 161 students enrolled in mental hygiene courses. Mothers of patients applying for psychotherapy were viewed by the subject as showing less tolerance and concern for their child's welfare and as being more overprotective and pampering than mothers of students in the mental hygiene course.

Livson\textsuperscript{74} conducted a longitudinal study of 100 families in which


he found that boys and girls tended to develop high involvement with mothers who were highly affectionate and involved with their children.

Research initiated by Heilbrun, Orr and Harrell\textsuperscript{75} suggests the importance of maternal childrearing control and nurturance. Utilizing a sample of 63 college males, these investigators found that the subjects who rated their mothers as highly controlling-low nurturant (rejecting patterns) tended to be poorer in conceptual performance than subjects whose mothers were rated as low controlling-highly nurturant (accepting patterns). It is interesting to note that the same results were obtained when a sample of 74 males were rated upon paternal childrearing patterns and their conceptualization analyzed.\textsuperscript{76}

In a study reported by Heilbrun and Orr, the same general results were obtained for the sample of 61 college males.\textsuperscript{77} Hartup\textsuperscript{78} reported a study in which he found that nurturance-withdrawal stimulated faster learning than nurturance alone on simple cognitive tasks for girls and probably also for boys.


\textsuperscript{76} \textit{Ibid}.


In a study of college freshmen, Medinnus\textsuperscript{79} found that adolescents high in self-acceptance and adjustment perceived their parents as loving and not neglectful or rejecting. The self-regard of the subject tended to be more closely related to their mother's rather than their father's attitudes pertaining to childrearing. Medinnus found the correlations between self-regard measures and evaluations of parents' childrearing attitudes to be higher for boys than for girls.\textsuperscript{80}

Writers in the field concur generally that the manner in which childrearing practices are administered is ultimately more important than the actual practices employed. The literature reveals the importance of parental stimulation of the child's striving for independent achievement and exploration in the hope that his later attitudes and behavior will be affected in positive ways. Foote and Cottrell agree with Mussen and others that:

\begin{quote}
Intimate presence of adequate models which enable the growing child to form correct sex identification is indispensable for the development of autonomy.\textsuperscript{81}
\end{quote}

Douvan and Gold cited the following to be the family conditions that encourage autonomy in the adolescent: parental warmth and concern, a democratic level of control, consideration, and consistency in rule


\textsuperscript{80}Ibid.

\textsuperscript{81}Foote and Cottrell, \textit{op. cit.}, p. 81.
enforcement. As was suggested by Douvan and Gold:

Autonomy and self-direction are consistently found among those adolescents whose parents allow and encourage their children to detach themselves gradually from the family... The more autonomous children portray parents as concerned, guiding but not restrictive.

The literature supports the general thesis that developing autonomy and learning to handle responsibility are important to the adolescent in the search for self and identity. Adolescents thrive on responsibility according to Gallagher and Harris. They write in relation to responsibility that:

The more you give them, the better they learn to handle it. It is only when they are given too much too soon, when without any preparation too much is expected of them, or when responsibility is too long withheld and then thrown at them all at once that they become a cropper.

Gallagher and Harris suggest that such a "cropper" may be solved or the tension alleviated by loosening, not by tightening, the reins on the adolescent. They conclude that the most important procedure in working with adolescents is the establishment of a positive relationship.

Douvan and Gold, op. cit., p. 489.
Ibid., p. 490.
Ibid., p. 62.
Ibid.
Parents who severely restrict their child's freedom of movement may suppress his tendencies to explore and to investigate, and thus inhibit the development of motivation for autonomy and independence.\textsuperscript{87}

Marcia\textsuperscript{88} found among his 86 college male sample that subjects high in ego identity performed best on concept attainment tasks. The students who adhered primarily to parental wishes tended to set goals unrealistically high and to subscribe to authoritarian values. According to Marcia, overprotected children manifest emotional immaturity, shyness and withdrawal from difficult situations.

The Adolescent Self -- An Hypothesized Identity

If, as Horrocks\textsuperscript{89} suggested, the only reality man has is the self, it would be logical for him to be involved from birth to death in the perception of that self and the adaptation or adjustment of his behavior and/or attitudes to meet life's demands within the parameters of the pertinent perceptual or value realm. Within the context of this paper, self shall be visualized as that hypothesized identity as it is verbalized by the individual to himself and to others. Identity, therefore, becomes the self's own construct of itself.\textsuperscript{90}


\textsuperscript{89}Horrocks, op. cit., pp. 124-125.

\textsuperscript{90}Ibid., p. 127.
Since identity is conceptualized herein as an hypothesis formulated by the organism about itself, it is important to understand the child's capacity for hypothesizing. The studies of Inhelder and Piaget\(^1\) suggest that the child exists in a simple, concrete world during the chronological age period from 7 to 11. According to these writers, it is not until the child is about 11 or 12 that he begins to develop the ability to reason by hypothesis; a process which reaches a peak at 14 or 15. As an hypothesizing being, he is able to proceed from theory to establish relationships between things.

Thus, it is during adolescence that the child begins the mammoth and vital task of hypothesizing about and determining who he is and how he relates to the rest of the world. One's ability to perceive accurately his relationships to his environment would seem related to both intelligence and conditioning within the family.

**Adolescent Acquisition of Identity**

Peck and Havighurst (1960) cite mutual trust and approval, consistency in family life, democratic control and lack of severity of parental punishment as the four major factors which they found to be associated with the highest level of character development among their 10 to 16 year old sample.\(^2\) An analysis of these factors would suggest

---


the importance of a consistent, dependable milieu in which they could, with reasonable accuracy, predict the actions of others within their environment. This would seem basic to their being able to realistically perceive themselves as they fit in that total environment and to make the necessary adjustments therein.

Learning and portraying the appropriate characteristics of one's masculine or feminine role in a given cultural setting is essential to the development of a healthy personality. This takes place primarily through a process known as identification. Identification breaks down or never occurs when a lack of predictability and orderliness prevails in the life of the child. In such cases, an individual in the early years of his development may judge his environment to be lacking in dependability. Thus, as Christensen suggests, he may decide that trusting people is not a desirable practice.

If identification takes place initially and then the order of life changes drastically, a child may experience considerable frustration and anxiety as a result of attempting to adapt. In relation to this Christensen states that:

If the identification process is chronically changed so that a series of adaptations are followed by a series of changes, again in the early years when the child is unable to understand them except from an egocentric point of view (Piaget, 1928; Piaget, 1932), the result is a lack of orderliness and predictability and subsequent lack of ability to identify with any other.

---

94Ibid., p. 755.
Parental identification and the subsequent level of adolescent adjustment was studied by Heilbrun and Fromme. They found that the identification with a more masculine father for boys or with a more masculine mother for girls was associated with the best adolescent adjustment. Mussen stated that:

The development of a strong conscience, another consequence of identification, also appears to be based on satisfactory parent-child relationships. The results of one study show that maternal warmth is positively correlated with strength of conscience, and boys with accepting fathers are more likely to develop strong consciences than boys who are rejected by their fathers. Conscience appears to be a consequence of an identification based on the child's fear of loss of love of an otherwise warm and loving parent.

The impact of identity acquisition upon the health of the adolescent was emphasized by Foote and Cottrell who found that:

During adolescence health is favorably affected by the development of clear-cut vocational identity through models and confirming groups.

Data reported by Peck and Havighurst suggest that moral values may be learned equally well or equally badly from either parent. These writers state that the child's morality depends largely upon the moral qualities of the parent chosen to be the model.

---


96 Mussen, op. cit., p. 78.

97 Foote and Cottrell, op. cit., p. 67.

98 Peck and Havighurst, op. cit., p. 123.
Effect of Parental Maladjustment Upon Identity Acquisition

An interesting investigation of children of schizophrenic mothers was reported by Mednick (1968). The following synopsis of the study was offered in Psychological Abstracts:

Techniques ranging from biochemistry to social history were used to study 207 children of schizophrenic mothers and a matched control sample. A home environment marked by frequent parental quarrels and an over-reacting autonomic nervous system were among the factors differentiating experimental from control Ss. In addition, children of schizophrenic mothers learn to escape from autonomic arousal by drifting off into withdrawal and idiosyncratic thought.99

In the text, Adolescent Aggression, Bandura and Walters (1959)100 proposed a theory of antisocial aggression which assumes that such a disorder originates primarily from the disruption of a child's dependency relations from his parents. Bandura and Walters suggest that while rejection is irritating to the youngster it may become acutely painful to the adolescent.101 Based upon data collected in case studies, Bandura and Walters state that:

When a child develops a consistently aggressive pattern of behavior, one may suspect that in some way his aggression has been encouraged and reinforced...In the aggressive boys' families,


101 Ibid., p. 85.
one or other of the parents almost invariably encouraged aggression.\textsuperscript{102}

According to Bandura and Walters\textsuperscript{103} an outstanding characteristic of aggressive antisocial boys dealt with in clinical setting is an absence of, or defective, conscience development. Studies reported by Bandura and Walters suggest that weak internal controls may stem from lack of internalization of parental standards.\textsuperscript{104}

In studies conducted in 1960, it was found that the sample delinquents in contrast to the controls felt more loved by mothers than by the fathers.\textsuperscript{105} The delinquents expressed dissatisfaction with the reasonableness of parental punishment and felt that their fathers were especially defective in the use of praise.

Schonfeld\textsuperscript{106} studied the influence of family attitudes and psychopathology upon body image disturbances in adults. The following patterns were found in an analysis of intra-family attitudes of more than 2,000 young people with perceived body-image disturbances:

1. both conscious and unconscious derogatory and rejecting parental attitudes toward youth.

\textsuperscript{102}Bandura and Walters, \textit{op. cit.}, p. 94.

\textsuperscript{103}\textit{Ibid.}

\textsuperscript{104}\textit{Ibid.}


2. parental attempts to solve their own psychopathology or their own attitudes toward each other through their children.

3. parental projection of anxieties over their own inadequacies, and parental concern over both physical and sexual development.107

Horney postulated the following relative to parent-child relations:

The more difficult are his experiences in the family, the more will a child be inclined to develop not only a reaction of hatred toward the parents and other children but a distrustful or spiteful attitude toward everyone. The more a child covers up his grudge against his family, as for instance, by his conforming with his parents' attitudes, the more he projects anxiety to the outside world.108

According to Cleveland and Longaker:

Numbers of members of several different large family groups have appeared as patients in a community psychiatric clinic where a characteristic pattern of their relationship to one another, and to non-treated family members has been perceived as a vitally predisposing element in neurotic development... The child, then suffering from difficulties in identification with a mature, consistent role model and from poorly integrated patterns of value, develops severe vulnerabilities in one or more important phases of life.109

Verville similarly described problem parents as dangerous to the developing personality of the child. This author stated that:

107 Schonfeld, op. cit.


As the child subjected to the unpredictable, senseless and impulsive behavior of the immature, psychotic or alcoholic parents suffers anxiety, and his own actions become inconsistent, he is unable to learn with any certainty which kinds of behavior will result in a just reward or punishment, and he approaches others in a trial and error fashion, using inept and unsuccessful techniques for seeking their acceptance. He fails to acquire appropriate behavior for his own sex because he has no admired model to imitate, and this also makes him a misfit. 110

Attitude Measurement and Its Relationship to Adjustment

Attitude Intensity as a Measure of Adjustment

It is the general consensus of opinion among attitude theorists that an attitude is an evaluative feeling-type reaction directed toward social objects. 111 Newcomb, et al., visualize attitudes as acting in the service of motives and as "generalized states of readiness for motivated behavior." 112 According to Katz, attitudes perform the following four functions in the service of motives: (a) adjustment, (b) ego-defense, (c) value-expression and (d) knowledge accrual. 113

Newcomb et al. wrote:


111 Newcomb, Turner and Converse, 1965; Osgood, Suci and Tannenbaum, 1957; Shaw and Wright, 1967. See Bibliography.


It is true almost by definition that the attitudes important in understanding the psychological organization of any given individual over long periods of time are those whose objects are, for him, relatively inconclusive and relatively central.\textsuperscript{114}

In discussing the direction and intensity of attitudes, Mussman wrote:

A score on an attitude continuum scale that deviates from the middle is a fair representation of the intensity of the attitude.\textsuperscript{115}

In their review of studies exploring the usefulness of the semantic differential which measures positive or negative direction and the intensity of attitudes, Osgood et al. (1957) found that since attitudes act in the service of motives, a motivational disequilibrium involving central social objects would lead to an attitudinal disequilibrium involving those objects. Osgood et al. postulated that:

Psychologically, far judgments mean lack of conflicts, judgments nearer the center position mean increasing response conflict, and the judgments on the center position mean maximum conflict.\textsuperscript{116}

According to psychological literature, attitudes tend to become more intense with increased age. Kuhlen\textsuperscript{117} attempted to explain his

\textsuperscript{114}Newcomb et al., op. cit., p. 66.

\textsuperscript{115}Mussman, p. 10.


phenomenon as resulting from increased anxiety while Newcomb et al.\textsuperscript{118} cited the time factor which provides for integration and repeated reinforcement as the cause. Thus, low intensity attitude ratings may well indicate the presence of stress for mothers as well as for their adolescent children. However, it would be expected that mothers would tend to register the more intense attitudes than would their teen-age offspring.

The Semantic Differential as a Measuring Instrument

Osgood et al.\textsuperscript{119} used immediate test-retest data with 100 subjects and a 40-item instrument in ascertaining the reliability of the differential type scale. As a result, they concluded that the scores obtained from the second testing were significantly predictable from the initial testing. They further found that an item score deviation by an individual respondent varied no more than two scale units at the 95 per cent level of confidence.

In a similar study reported by Osgood et al. using 112 subjects and a test-retest interval of 30 minutes, the average respondent was found to vary no more than one scale unit at the 95 per cent level of confidence.\textsuperscript{120} According to Shaw and Wright, the semantic differential procedure has been used often enough to establish its validity in terms

\textsuperscript{118}Newcomb, et al., op. cit.

\textsuperscript{119}Osgood, op. cit.

\textsuperscript{120}Osgood, op. cit.
of correlations with other attitude scales.\textsuperscript{121}

While it is agreed that attitude scores alone are not sufficient to predict behavior,\textsuperscript{122} it is believed that attitudes with their close kinship to motivation can be predictive of adjustment. Thus, attitudes may be viewed as essential in one's predisposition to act or to adjust. Actions are determined largely not by a single attitude, but by a number of attitudes or attitude clusters, wants and situational conditions.\textsuperscript{123}

Attitudes were early described by writers\textsuperscript{124} as serving mainly irrational ego-defensive functions. According to Rokeach:

Students of personality and culture and of sociology further emphasize the adjustive function of an attitude -- the adjustment of primitive and modern man to their specific cultures and sub-cultures.\textsuperscript{125}

\textbf{Summary}

A review of the literature relative to the middle-lescent and adolescent stages of life and to mental health suggests the need for extensive study relative to the potential impact these two groups have upon each other. Of particular importance in such an inquiry is


\textsuperscript{124} Fromme, 1944; Maslow, 1943; and Adorno et al., 1950. See Bibliography.

\textsuperscript{125} Rokeach, p. 129.
information pertaining to the role played by the mother and her effectiveness in communicating attitudes to her adolescent son or daughter. Whether or not mothers evolve as the major perpetuator of attitudes and subsequently, of values important in the total personality development of their adolescent children remains to be determined. Thus, the collection of empirical data and their analysis relative to attitude and adjustment similarities between middlesex mothers and their adolescent sons or daughters were deemed important as a contribution to existing knowledge in the realm of interpersonal relationships.
CHAPTER III

DESIGN OF THE STUDY

Introduction

The design and conduct of the study were for the purpose of investigating attitude and adjustment similarities of middlescent mothers, ages 35 through 55, and their adolescent sons and daughters who were ninth or tenth grade students. The major null hypothesis formulated for the study was that there would be no differences between the attitude intensity levels of middlescent mothers and those of their adolescent sons or daughters.

An attitude scale based upon the semantic differential was designed, tested, validated and found reliable for use with adolescents and their mothers. The instrument, hereafter referred to as the Adolescent-Middlescent Attitude Scale or AMAS, was administered to the 85 pairs of ninth grade students and their mothers and to 74 pairs of tenth grade students and their mothers. Central to the problem being investigated was the ascertainment of the influence of the mother upon the adolescent's attitudes and adjustment to his environment.

Since an attitude is thought to be a predisposition of an individual toward action, it was hypothesized that a motivational disequilibrium involving social concepts important to the individual would result in an attitudinal disequilibrium in relation to those concepts.
Thus, the direction (positive or negative) or intensity of response to an attitude scale may provide valuable information relative to one's adjustment. High attitude intensity scores suggest lack of conflict while those near the middle or neutral point suggest maximal conflict or lack of adjustment.

**Research Design**

**Criteria for Sample Selection**

Subjects selected for the study were to be ninth and tenth grade students who were members of intact families (unbroken by separation, divorce, desertion or death of a parent or parents). Participants were selected from Central Ohio Schools which draw students largely from families with urban middle-class background. Higher than average educational level was desirable for the matching sample of mothers in order to involve those with at least some advanced education or training (college or post high school specialization) and with a complex of potentially conflicting roles to perform. The age parameters for participating mothers were 35 through 55.

**Description of the Sample**

All subjects met the requirements established for the study. Adolescent participants were ninth or tenth grade students enrolled in urban schools in a Central Ohio city with a population of approximately 50,000.

Mean ages for the participants were 14.71 years for the ninth
grade students; 42.29 years for their mothers; 15.53 years for the
tenth grade students; and 42.72 for the mothers of tenth grade respon-
dents.

TABLE I

Description of Respondents on the
Adolescent-Middlescent Attitude Scale

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ninth Grade Sample</th>
<th>Tenth Grade Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students</td>
<td>Mothers</td>
</tr>
<tr>
<td></td>
<td>Mean   St.Dev.</td>
<td>Mean   St.Dev.</td>
</tr>
<tr>
<td>Age of Participant</td>
<td>14.71   0.72</td>
<td>42.29   5.29</td>
</tr>
<tr>
<td>Years of Residency in Sample Area</td>
<td>12.22   1.42</td>
<td>27.48   15.61</td>
</tr>
<tr>
<td>Size of Family</td>
<td>3.62    1.57</td>
<td>3.62    1.57</td>
</tr>
</tbody>
</table>

Adolescent respondents had lived in the Licking County area a
mean of 12.22 years for the ninth grade students and 14.00 for the
tenth grade students. Ninth grade mothers had resided in the Licking
County area for a mean of 27.48 years as compared to a residency period
of 23.58 for the tenth grade mothers. The mean number of children in
the families represented was 3.62 for both the ninth and tenth grade
samples (Table 1).
The mean for the educational level of the mother was approximately at grade twelve. However, since a number of respondents checked the ambiguous category labeled "other," the resultant mean was not considered accurate. It was undetermined just how much education beyond high school level the respondents to the "other" category had actually completed. Thus, the numerical weight given to the tenth or "other" category caused a skewing of the mean. The distribution of individuals at the various educational levels is viewed by the investigator as being a more accurate picture of the participants than would be provided by the mean educational level (Table 2).

TABLE II

Educational Level of Maternal Participants

<table>
<thead>
<tr>
<th>Highest Level Attained</th>
<th>Mothers of Ninth Grade Students ¹</th>
<th>Mothers of Tenth Grade Students ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Grades 4 - 7</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Eighth Grade</td>
<td>3</td>
<td>3.57</td>
</tr>
<tr>
<td>Ninth Grade</td>
<td>3</td>
<td>3.57</td>
</tr>
<tr>
<td>Tenth Grade</td>
<td>3</td>
<td>3.57</td>
</tr>
<tr>
<td>Eleventh Grade</td>
<td>4</td>
<td>4.76</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>55</td>
<td>65.48</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>8</td>
<td>9.52</td>
</tr>
<tr>
<td>Masters Degree</td>
<td>3</td>
<td>3.57</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>5.95</td>
</tr>
</tbody>
</table>

¹ 84 Respondents

² 75 Respondents
In the ninth grade maternal sample, 58 (64.4 percent) were full-time homemakers, 14 (15.6 percent) were employed part-time outside the home and 18 (20 percent) were full-time employees. The tenth grade maternal sample analysis revealed that 40 (54.1 percent) of the mothers were full-time homemakers, 11 (14.9 percent) were employed part-time outside the home and 23 (31 percent) were full-time employees (Table 13).

**Measurement**

**Development of the Attitude Scale**

Thirty-four matched pairs (34 mothers and 34 adolescents) were pretested with an attitude instrument utilizing the semantic differential technique which was prepared initially by Mussman\(^1\) for use with an adult sample.

Data from the questionnaires were tabulated and analyzed by statisticians at the Computer Center at The Ohio State University. The maternal-adolescent attitude scores were found to be significant at the .05 level of confidence on two vital concepts — that of Children and Marriage. While parents and children held similar attitudes relative to other concepts, no other ones were significant at the above level of confidence.

Following the analysis of the data from the attitude questionnaire pre-test, the instrument was extensively revised to include bi-polar

terminology which would be more in keeping with family development research than that designed by Mussman.

The revised attitude scale next underwent evaluation in the realm of semantics. Six ninth grade students at a Central Ohio School completed the survey, making notes of terminology which was confusing to them. Following this evaluation, numerous changes were made in the bi-polar adjectives used to describe the twelve selected concepts. The revised instrument was comprehensible to the lowest grade level of students for whom it was designed (ninth graders).

The attitude scale was then multilithed on forms prepared by the Office of Evaluation and was designed to be machine scored. In its revised form the attitude scale included twelve concepts which were selected on the basis of the general relevance to the rubric of life-in-general to both the adolescent and middle-teen sample. The concepts included were Children, Health, Marriage, Leisure, Future, Community, Friends, School, Parents, Church, Daily Tasks, and Self. Each concept appeared three times on the questionnaire, in each instance with a different set of bi-polar adjectives such as happy-unhappy, desirable-undesirable, important-unimportant and with a rating continuum of five units. The most positive response (V) was given a score of four points, (Q) quite positive = 3 points, neutral (N) = 2 points, (Q) quite negative = 1 and completely negative (V) = 0. Thus, the total score for each of the twelve concepts was 12, (4 x 3 responses toward each concept) or a total attitude intensity potential of 144 (36 conceptual responses x maximum score of 4 points for each). A participant revealed by his response on the continuum the direction (positive or negative) as well
as the intensity of his attitudes toward concepts with which he comes into contact with some regularity.

**Test-Retest Establishment of Instrument Reliability**

Seventy-one ninth-grade students at a Central Ohio high school participated in a test-retest reliability check of the attitude scale with a one-week interval between administration of the instrument. Total scores for the pre- and post-tests were correlated for each student and for the total group by the Office of Evaluation at The Ohio State University. A mean of 69.56 was obtained for the pre-test and a mean of 67.76 on the post-test. The coefficient of reliability was .87. Completion of the attitude survey took approximately fifteen minutes.

**Validation of the Attitude Scale**

Interview technique was used in the validation of the attitude scale. Taped interviews averaged one hour in duration and were conducted with nine adolescent and middlescent individuals. These participants responded to open-ended questions pertaining to the twelve conceptual categories upon which the instrument was based.

Two independent raters scored the taped responses. Mean scores derived by two independent raters of the tapes were compared to the actual scores made by the respondents on the scale at an earlier date. The Spearman technique of rank correlation was applied to a comparison of actual and rater scores for the respondents yielding a coefficient of .91 indicating high validity \( p < .01 \) for the instrument. (See Appendix B for validity calculations.)
Coding of Responses for Comparative Analysis

The attitude scales, designed to be anonymous, were coded so that an adolescent response would bear the same code number as that of the parent with the exception of the first of four digits which would indicate whether the respondent was adolescent or middle-teen. Scales coded 1001 through 1250 would designate a ninth grade adolescent while 2001 - 2250 would designate mothers of the ninth graders. Tenth grade students were coded from 1300 through 1450 for the adolescent sample and 2300 through 2450 for maternal respondents of the tenth graders. A code file was retained by the investigator for follow-up efforts.

Procedure for Administration of the Attitude Scale

Ninth grade students at a junior high school in a Central Ohio city who were enrolled in required courses during the sixth period of the school day completed attitude scales. Seventeen of the surveys had to be eliminated because the students were from families broken by separation, desertion or death of a parent.

Coded attitude scales were mailed within ten hours following its administration to students to the mothers of the 110 students completing usable responses. Ninth grade students had complied with the investigator's request to give the names and mailing addresses of the mothers on 3 x 5 cards. Students were urged by the administrator of the survey to encourage their mothers to respond to the scale, citing the importance of the study and the necessity of having a completed response from the mothers before that of the student could be included in tabulation of
results. Ninety-one or eighty-three percent of the parents of the ninth grade students returned completed scales. Six of the instruments were rejected for analysis because of incomplete data. (See Appendix A for initial letter explaining details of the study to maternal participants and the follow-up letter.)

The tenth grade sample was drawn from the total population of students attending a Central Ohio high school and enrolled in required American History courses. Ninety-two usable responses were completed by tenth grade students. Within ten hours following the administration of the attitude scale to tenth grade participants, coded instruments were mailed to their mothers accompanied by a letter of explanation and a self-addressed envelope for convenient return. Seventy-five or eighty-two percent of the mothers of tenth grade students returned usable responses. One scale was rejected due to the incomplete nature of the responses. (See Appendix A for the original and follow-up letter to the middle-"equent sample.)

Data Analysis Plan

The attitude scales were scanned and computer analyzed at the Office of Evaluation at The Ohio State University.

A correlation matrix was derived for each of four groups for which data were available. These included ninth grade students and their mothers; tenth grade students and their mothers; daughters in both the ninth and tenth grade samples and their mothers; and the total groups of adolescent sons and their mothers. Each matrix included inter-correlations among the twelve concept scores, the total scores and such
variables as age of the mother, size of family, length of family residency in geographic area sampled and employment status of the mother.

The t-test was used to determine whether or not significant differences existed between mother and adolescent on each of the twelve selected concepts and on the total attitude scores.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The study was designed and conducted to investigate attitude and adjustment similarities of middlescent mothers, ages 35 through 55, and their adolescent sons and daughters who were either ninth or tenth grade students. Specific objectives formulated to give guidance for the study were (1) to determine the attitudes of matched pairs of mothers and their adolescent sons and daughters using the semantic differential technique and (2) to predict from attitude intensity and direction the adjustment similarities between the adolescent and maternal samples.

Seven null hypotheses gave direction to the study. They were as follows:

(1) That there will be no differences between the attitude intensity levels of ninth and tenth grade adolescents and those of their middlescent mothers.

(2) That the adjustment of the mother to her environment will not differ from the adjustment of the adolescent to his environment.

(3) That there will be no differences in the correlations of attitude scores of the mother and son respondent pairs and those including mothers and daughters.
(4) That there will be no relationship between the age of the mother and the total attitude scores for maternal and adolescent participants.

(5) That there will be no relationship between the size of the family and the total attitude scores for maternal and adolescent participants.

(6) That there will be no relationship between the length of family residency in the geographic area sampled and the total attitude scores for maternal and adolescent participants.

(7) That there will be no relationship between the employment status of the mother and her total attitude score.

Plan for Presentation and Analysis of Data

The findings were treated in relation to the null hypotheses with the following plan being utilized for the presentation and analysis of the data. **Null hypothesis 1** included a summary of the findings in relation to the attitude scores for the total sample of adolescents and their mothers; attitude similarities and differences between ninth grade adolescents and their mothers; attitude similarities and differences between the tenth grade adolescents and their mothers; and intercorrelations between the attitude scores by concept for both the ninth and tenth grade adolescent samples and their mothers.

Findings in relation to **null hypothesis 2** were presented under two major headings including a summary of adjustment similarities and differences between the total sample of adolescents and their mothers.
and a comparison of mean attitude scores for twelve concepts as measured by the AMAS.

Information relative to null hypothesis 3 included a comparison of attitude similarities and differences between adolescent boys and their mothers; a comparison of attitude similarities and differences between adolescent girls and their mothers; and intercorrelations between the concept scores for the mother-son and the mother-daughter samples.

Findings pertaining to null hypotheses 4, 5, 6 and 7 were presented in relation to each of the hypotheses with information relating a specific variable (mother's age, size of family, length of family residency in the sample area and the employment status of the mother) to the attitude intensity of the participants.

Findings in Relation to the Null Hypotheses

Null Hypothesis 1: That there will be no differences between the attitude intensity levels of ninth and tenth grade adolescents and those of their mothers.

Summary of Attitude Similarities and Differences Between Adolescents And Their Middle-teen Mothers

The t-test was applied to the mean scores of the parent and student samples to determine whether or not significant differences existed between the various adolescent and middle-teen groups (Table 3). No significant differences existed between the total attitude scores for the ninth grade students and their mothers or for the total sample of ninth and tenth grade daughters and their mothers resulting in failure
to reject null hypothesis 1 for these two groups. Significant differences did occur for the tenth grade students and their mothers and for the ninth and tenth grade sons and their mothers. Thus, null hypothesis 1 was rejected for those groups.

**TABLE III**

T-Ratios Depicting Differences Between Mean Attitude Scores For Students and Mothers as Measured by the Adolescent-Middlescent Attitude Scale

<table>
<thead>
<tr>
<th>Concept</th>
<th>Ninth Grade Students and Mothers</th>
<th>Tenth Grade Students and Mothers</th>
<th>Mothers and Sons</th>
<th>Mothers and Daughters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(85 Pairs)</td>
<td>(74 Pairs)</td>
<td>(52 Pairs)</td>
<td>(107 Pairs)</td>
</tr>
<tr>
<td>Children</td>
<td>.91</td>
<td>3.56*</td>
<td>3.10*</td>
<td>1.67</td>
</tr>
<tr>
<td>Health</td>
<td>2.96*</td>
<td>.68</td>
<td>.00</td>
<td>1.58</td>
</tr>
<tr>
<td>Marriage</td>
<td>.04</td>
<td>.65</td>
<td>1.68</td>
<td>.54</td>
</tr>
<tr>
<td>Leisure</td>
<td>1.42</td>
<td>1.18</td>
<td>.94</td>
<td>1.54</td>
</tr>
<tr>
<td>Future</td>
<td>2.59*</td>
<td>.80</td>
<td>.98</td>
<td>2.12*</td>
</tr>
<tr>
<td>Community</td>
<td>1.63</td>
<td>2.39*</td>
<td>2.70*</td>
<td>1.62</td>
</tr>
<tr>
<td>Friends</td>
<td>1.79</td>
<td>2.45*</td>
<td>3.06*</td>
<td>1.66</td>
</tr>
<tr>
<td>School</td>
<td>1.44</td>
<td>3.79*</td>
<td>2.92*</td>
<td>2.47*</td>
</tr>
<tr>
<td>Parents</td>
<td>.20</td>
<td>2.06*</td>
<td>1.11</td>
<td>.94</td>
</tr>
<tr>
<td>Church</td>
<td>2.87*</td>
<td>4.99*</td>
<td>3.42*</td>
<td>4.29*</td>
</tr>
<tr>
<td>Daily Tasks</td>
<td>4.99*</td>
<td>3.56*</td>
<td>3.04*</td>
<td>5.18*</td>
</tr>
<tr>
<td>Self</td>
<td>.83</td>
<td>.41</td>
<td>1.05</td>
<td>1.19</td>
</tr>
<tr>
<td>Total Score</td>
<td>1.25</td>
<td>3.50*</td>
<td>3.25*</td>
<td>1.85</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Correlation coefficients were derived for four major sub-groups including comparisons of attitude scores for ninth grade students and their mothers, tenth grade students and their mothers, the total sample of adolescent boys and their mothers and the total sample of adolescent girls and their mothers (Table IV). Significant correlations were obtained between the total attitude scores for the adolescents and their mothers in each of the four sample groups for which data were analyzed. Significance was at the .05 level of confidence.

**TABLE IV**

Correlation Coefficients Between Attitude Scores of Mothers And Their Adolescent Sons and Daughters as Measured by The Adolescent-Middlescent Attitude Scale

<table>
<thead>
<tr>
<th>Concept</th>
<th>Ninth Grade Students and Mothers (85 Pairs)</th>
<th>Tenth Grade Students and Mothers (77 Pairs)</th>
<th>Mothers and Sons (52 Pairs)</th>
<th>Mothers and Daughters (107 Pairs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>.06</td>
<td>.30*</td>
<td>.30*</td>
<td>.18</td>
</tr>
<tr>
<td>Health</td>
<td>.12</td>
<td>.15</td>
<td>.09</td>
<td>.17</td>
</tr>
<tr>
<td>Marriage</td>
<td>.32*</td>
<td>.17</td>
<td>.20</td>
<td>.28*</td>
</tr>
<tr>
<td>Leisure</td>
<td>.16</td>
<td>.11</td>
<td>.04</td>
<td>.22*</td>
</tr>
<tr>
<td>Future</td>
<td>.14</td>
<td>.21</td>
<td>.07</td>
<td>.23*</td>
</tr>
<tr>
<td>Community</td>
<td>.23*</td>
<td>.14</td>
<td>.19</td>
<td>.19*</td>
</tr>
<tr>
<td>Friends</td>
<td>.21*</td>
<td>-.13</td>
<td>.13</td>
<td>.02</td>
</tr>
<tr>
<td>School</td>
<td>.14</td>
<td>.29*</td>
<td>.16</td>
<td>.25*</td>
</tr>
<tr>
<td>Parents</td>
<td>.17</td>
<td>.22*</td>
<td>.19</td>
<td>.28*</td>
</tr>
<tr>
<td>Church</td>
<td>.37*</td>
<td>.12</td>
<td>.21</td>
<td>.26*</td>
</tr>
<tr>
<td>Daily Tasks</td>
<td>.04</td>
<td>.08</td>
<td>.01</td>
<td>.10</td>
</tr>
<tr>
<td>Self</td>
<td>.20</td>
<td>.16</td>
<td>.13</td>
<td>.23*</td>
</tr>
<tr>
<td>Total Score</td>
<td>.30*</td>
<td>.24*</td>
<td>.27*</td>
<td>.31*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level
Attitude Similarities and Differences Between Ninth Grade Adolescents and Their Mothers

While rather significant similarities were found between adolescents and mothers on total attitude scores, interesting variations existed within conceptual categories. In the following analyses 85 ninth grade students were compared with a matching number of maternal participants.

Results of t-tests revealed that ninth grade students and their mothers showed high similarity on total attitude scores and on attitudes toward such concepts as Children, Marriage, Leisure, Community, Friends, School, Parents, and Self while indicating significant differences in attitudes toward the concepts Health, Future, Church and Daily Tasks (Table 3).

Significant correlations were derived between the attitude scores of ninth grade students and their mothers on the concepts Marriage, Community, Friends and Church (Table 4). In addition, the total attitude scores for ninth grade students and their mothers correlated at the .01 level of confidence.

Attitude Similarities and Differences Between Tenth Grade Adolescents and Their Mothers

The sample upon which this segment of the analysis was based included 74 tenth grade students and a matching number of maternal respondents. Significance was cited at the .05 level of confidence.

Data from t-tests revealed that no significant differences existed between tenth grade students and their mothers on the concepts Health, Marriage, Leisure, Future and Self (Table 3). However, mothers and adolescents in this group differed significantly in their attitudes.
toward Children, Community, Friends, School, Parents, Church and Daily Tasks. Results from the t-tests indicated that significant differences existed between the total attitude scores of tenth grade students and their mothers.

Attitude scores for tenth grade students and their mothers correlated significantly in relation to the concepts Children, School, and Parents. Correlation coefficients between total scores for tenth grade students and their mothers were significant at the .05 level of confidence (Table 4).

Intercorrelations Between Concept Scores for Ninth Grade Adolescents And Their Mothers as Measured by the AMAS

The mothers' attitudes toward Health correlated significantly with the attitudes held by the ninth grade adolescents toward the concepts Children and Parents and the adolescents' Total Score (Table 5).

The way the mothers viewed Marriage was correlated with the manner in which their children viewed the concepts Marriage, Future, Parents and with the adolescents' Total Score.

Correlation coefficients were found to be significant between the mothers' attitudes toward Leisure and the ninth grade adolescents' attitudes toward Health, Community, Friends, School and to the adolescents' Total Score.

A significant correlation was found in relation to the attitude scores of the ninth grade maternal sample for the concept Future and the adolescents' conceptualization of Parents.
TABLE V

Correlation Coefficients Between the Attitude Scores of Ninth Grade Students and Their Mothers as Measured by the Adolescent-Middlesecent Attitude Scale (N = 85 Matched Pairs)

<table>
<thead>
<tr>
<th>Attitude Scores for Ninth Grade Students</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
<th>(12)</th>
<th>(13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concepts</td>
<td>.06</td>
<td>.21*</td>
<td>.16</td>
<td>.02</td>
<td>-.01</td>
<td>-.00</td>
<td>.04</td>
<td>.11</td>
<td>.16</td>
<td>-.04</td>
<td>.16</td>
<td>.12</td>
<td>.14</td>
</tr>
<tr>
<td>Health</td>
<td>.07</td>
<td>.12</td>
<td>.17</td>
<td>.23*</td>
<td>.18</td>
<td>.04</td>
<td>.14</td>
<td>-.16</td>
<td>.18</td>
<td>-.12</td>
<td>.07</td>
<td>.25*</td>
<td>.18</td>
</tr>
<tr>
<td>Marriage</td>
<td>.07</td>
<td>.00</td>
<td>.32*</td>
<td>.13</td>
<td>.02</td>
<td>-.08</td>
<td>.21*</td>
<td>.01</td>
<td>-.06</td>
<td>.14</td>
<td>.12</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Leisure</td>
<td>-.15</td>
<td>.12</td>
<td>.10</td>
<td>.16</td>
<td>.12</td>
<td>.02</td>
<td>.13</td>
<td>.11</td>
<td>.09</td>
<td>-.12</td>
<td>.04</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Future</td>
<td>.07</td>
<td>-.00</td>
<td>.27*</td>
<td>.18</td>
<td>.14</td>
<td>.03</td>
<td>.01</td>
<td>.00</td>
<td>.30*</td>
<td>.12</td>
<td>.10</td>
<td>.21*</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>.01</td>
<td>.15</td>
<td>.17</td>
<td>.21*</td>
<td>.19</td>
<td>.23*</td>
<td>.06</td>
<td>-.01</td>
<td>.26*</td>
<td>.08</td>
<td>.11</td>
<td>.15</td>
<td>.15</td>
</tr>
<tr>
<td>Friends</td>
<td>-.02</td>
<td>.20</td>
<td>.16</td>
<td>.25*</td>
<td>.19</td>
<td>.05</td>
<td>.21*</td>
<td>.02</td>
<td>.06</td>
<td>.09</td>
<td>.13</td>
<td>.24*</td>
<td>.24*</td>
</tr>
<tr>
<td>School</td>
<td>.13</td>
<td>.07</td>
<td>.15</td>
<td>.22*</td>
<td>.16</td>
<td>.07</td>
<td>.10</td>
<td>.14</td>
<td>.08</td>
<td>.17</td>
<td>.15</td>
<td>.21*</td>
<td>.25*</td>
</tr>
<tr>
<td>Parents</td>
<td>-.13</td>
<td>.27*</td>
<td>.23*</td>
<td>.17</td>
<td>.22*</td>
<td>.06</td>
<td>.19</td>
<td>.12</td>
<td>.17</td>
<td>.13</td>
<td>-.04</td>
<td>.22*</td>
<td>.23*</td>
</tr>
<tr>
<td>Church</td>
<td>.03</td>
<td>.07</td>
<td>.11</td>
<td>-.03</td>
<td>-.07</td>
<td>.10</td>
<td>-.16</td>
<td>.10</td>
<td>.07</td>
<td>.37*</td>
<td>.10</td>
<td>-.00</td>
<td>.12</td>
</tr>
<tr>
<td>Daily Tasks</td>
<td>-.14</td>
<td>.14</td>
<td>.09</td>
<td>-.04</td>
<td>.02</td>
<td>.12</td>
<td>-.09</td>
<td>.06</td>
<td>.08</td>
<td>.08</td>
<td>.04</td>
<td>.08</td>
<td>.06</td>
</tr>
<tr>
<td>Self</td>
<td>-.07</td>
<td>.10</td>
<td>.20</td>
<td>.19</td>
<td>.17</td>
<td>.06</td>
<td>.20</td>
<td>-.13</td>
<td>.25*</td>
<td>.17</td>
<td>.01</td>
<td>.20</td>
<td>.21*</td>
</tr>
<tr>
<td>Total Score</td>
<td>-.02</td>
<td>.21*</td>
<td>.31*</td>
<td>.22*</td>
<td>.17</td>
<td>.14</td>
<td>.09</td>
<td>.09</td>
<td>.20</td>
<td>.19</td>
<td>.14</td>
<td>.24*</td>
<td>.30*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level of confidence or better
A correlation coefficient significant at the .05 level of confidence was obtained between the mothers' attitudes toward Community and ninth grade students' attitudes toward the concept Friends.

The mothers' attitudes toward School were related significantly to the adolescents' conceptualization of Marriage.

The manner in which mothers of the ninth grade sample viewed the concept Parents was significantly related to the way in which the adolescents responded to the concepts Community and Self.

Attitudes of mothers of the ninth grade sample toward Church correlated significantly with those of the adolescents on the concepts Future and Church.

A correlation coefficient significant at the .05 level was found between the mothers' attitudes toward Daily Tasks and the adolescents' attitudes toward Marriage.

The way the mothers of the ninth grade student population viewed the concept Self was related to a significant degree to the manner in which the adolescents viewed the concepts Health, Friends, School and Parents. In addition, the mothers' attitudes toward the concept Self was significantly related to the adolescents' total attitude score.

Significant correlation coefficients were derived by a comparison of the mothers' Total Score and the attitudes of the ninth grade students toward the concepts Future, Community, Friends, School, Parents, and Self. A significant coefficient was obtained by correlating the total attitude scores of the ninth grade students with those of their mothers.
Intercorrelations Between Concept Scores for Tenth Grade Adolescents And Their Mothers as Measured by the AMAS

The way in which the mothers viewed the concept Children was significantly related to the way their own children viewed the concepts Children, Marriage, Leisure, and Parents (Table 6). The adolescents' total attitude score was also significantly related to the mothers' conceptualization of Children.

The mothers' attitude toward Health correlated significantly with their tenth grade children's attitudes toward Children, Marriage, Leisure, School, Parents and the adolescents' Total Score.

The way in which mothers of tenth grade students viewed Marriage was significantly related to the attitudes their children held toward the concept Parents. Tenth grade maternal attitudes toward the concept Future were correlated at a significant level with the children's attitudes toward Children, Leisure, School, Parents and the adolescents' Total Score.

The mothers' attitudes toward School were significantly correlated with the tenth grade adolescents' attitudes toward the concepts Children, Marriage, Leisure, School and the adolescents' Total Score.

Significant correlation coefficients were obtained from a comparison of the attitudes of mothers of tenth grade students on the concept Parents and the adolescents' attitudes toward Leisure and Parents.

The attitudes held by the mothers toward the Church were significantly correlated with the adolescents' attitudes toward Children and Marriage.
TABLE VI

Correlation Coefficients Between the Attitude Scores of Tenth Grade Students and Their Mothers as Measured by the Adolescent-Middlescent Attitude Scale (N = 74 Matched Pairs)

<table>
<thead>
<tr>
<th>Attitude Scores for Students</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
<th>(12)</th>
<th>(13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concepts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Children</td>
<td>.30*</td>
<td>.25*</td>
<td>.12</td>
<td>.08</td>
<td>.25*</td>
<td>.00</td>
<td>.07</td>
<td>.24*</td>
<td>.07</td>
<td>.25*</td>
<td>.13</td>
<td>.04</td>
<td>.24*</td>
</tr>
<tr>
<td>(2) Health</td>
<td>-.11</td>
<td>.15</td>
<td>-.03</td>
<td>-.15</td>
<td>.10</td>
<td>-.11</td>
<td>-.09</td>
<td>.15</td>
<td>.04</td>
<td>-.10</td>
<td>-.13</td>
<td>.00</td>
<td>-.03</td>
</tr>
<tr>
<td>(3) Marriage</td>
<td>.35*</td>
<td>.27*</td>
<td>.17</td>
<td>.06</td>
<td>.14</td>
<td>.14</td>
<td>.04</td>
<td>.25*</td>
<td>.13</td>
<td>.31*</td>
<td>.17</td>
<td>.23*</td>
<td>.27*</td>
</tr>
<tr>
<td>(4) Leisure</td>
<td>.35*</td>
<td>.31*</td>
<td>.14</td>
<td>.11</td>
<td>.28*</td>
<td>.01</td>
<td>.08</td>
<td>.25*</td>
<td>.39*</td>
<td>.17</td>
<td>.12</td>
<td>.07</td>
<td>.31*</td>
</tr>
<tr>
<td>(5) Future</td>
<td>-.04</td>
<td>.17</td>
<td>.03</td>
<td>-.02</td>
<td>.21</td>
<td>-.03</td>
<td>-.12</td>
<td>.20</td>
<td>.01</td>
<td>-.12</td>
<td>.03</td>
<td>.01</td>
<td>.02</td>
</tr>
<tr>
<td>(6) Community</td>
<td>.07</td>
<td>.11</td>
<td>.07</td>
<td>.09</td>
<td>.01</td>
<td>.14</td>
<td>-.03</td>
<td>-.01</td>
<td>-.01</td>
<td>.00</td>
<td>.12</td>
<td>.17</td>
<td>.10</td>
</tr>
<tr>
<td>(7) Friends</td>
<td>.07</td>
<td>.11</td>
<td>-.07</td>
<td>-.06</td>
<td>.12</td>
<td>-.14</td>
<td>-.13</td>
<td>.04</td>
<td>-.09</td>
<td>.02</td>
<td>.01</td>
<td>.13</td>
<td>-.05</td>
</tr>
<tr>
<td>(8) School</td>
<td>-.01</td>
<td>.26*</td>
<td>.04</td>
<td>.02</td>
<td>.26*</td>
<td>.02</td>
<td>-.06</td>
<td>.29*</td>
<td>.07</td>
<td>-.12</td>
<td>.02</td>
<td>-.04</td>
<td>.08</td>
</tr>
<tr>
<td>(9) Parents</td>
<td>.32*</td>
<td>.27*</td>
<td>.36*</td>
<td>.17</td>
<td>.36*</td>
<td>.18</td>
<td>.11</td>
<td>.16</td>
<td>.22*</td>
<td>.18</td>
<td>.26*</td>
<td>.40*</td>
<td>.41*</td>
</tr>
<tr>
<td>(10) Church</td>
<td>.20</td>
<td>.18</td>
<td>.00</td>
<td>.15</td>
<td>.14</td>
<td>.03</td>
<td>-.07</td>
<td>.05</td>
<td>.03</td>
<td>.12</td>
<td>.19</td>
<td>.05</td>
<td>.15</td>
</tr>
<tr>
<td>(11) Daily Tasks</td>
<td>.02</td>
<td>.03</td>
<td>-.03</td>
<td>-.08</td>
<td>-.05</td>
<td>-.06</td>
<td>-.09</td>
<td>.00</td>
<td>-.01</td>
<td>.08</td>
<td>.14</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>(12) Self</td>
<td>-.10</td>
<td>.19</td>
<td>.18</td>
<td>.09</td>
<td>.21</td>
<td>.07</td>
<td>.04</td>
<td>.13</td>
<td>.02</td>
<td>-.03</td>
<td>.09</td>
<td>.16</td>
<td>.15</td>
</tr>
<tr>
<td>(13) Total Score</td>
<td>.22*</td>
<td>.32*</td>
<td>.14</td>
<td>.07</td>
<td>.28*</td>
<td>-.00</td>
<td>-.01</td>
<td>.23*</td>
<td>.12</td>
<td>.16</td>
<td>.16</td>
<td>.16</td>
<td>.24*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level of confidence or better
A significant relationship resulted between the attitudes of the mothers toward the concept Self and the responses given by their children in relation to Marriage and Parents.

The Total Score of the mothers of the tenth grade sample correlated significantly with the adolescents' attitudes toward Children, Marriage, Leisure, Parents and with the Total Score of the adolescent sample.

Null Hypothesis 2: That the adjustment of the mother to her environment will not differ from the adjustment of the adolescent to his environment.

Summary of Adjustment Similarities and Differences Between Adolescents And Their Mothers

The adjustment of the adolescent and middle-teen samples was inferred from the direction and intensity of attitude scores. Scores near the middle or neutral point of the attitude continuum were interpreted as representing the existence of psychological conflict or marginal adjustment. Far judgments (those varying away from neutral or mid-point on the continuum) were interpreted as depicting better than marginal adjustment. The more intense or farther away from neutral was the score, the better was the adjustment of the individual to his environment. Thus, attitude similarities between mother and adolescent were suggestive of adjustment similarities between the two.

From the findings of the study it was inferred that the adjustment of both ninth and tenth grade students was similar to that of their mothers. Correlation coefficients between the total attitude scores for the adolescents and their mothers were significant at the .05 level of
Comparisons were made of the mean attitude scores for ninth grade students, mothers of ninth grade students, tenth grade students, mothers of tenth grade students, ninth and tenth grade sons, ninth and tenth grade daughters, mothers of sons and mothers of daughters (Table 7). While differences existed between scores for the twelve conceptual categories, the total attitude scores were quite similar with the only major variation being found for tenth grade students and male adolescent scores. Total mean attitude scores were 111.71 for ninth grade students, 114.28 for mothers of ninth grade students, 101.04 for tenth grade students, 110.66 for mothers of tenth grade students, 104.39 for the total adolescent male sample, 107.89 for the total adolescent female sample, 114.21 for mothers of sons and 111.81 for mothers of daughters.

Thus, null hypothesis 2 was rejected for the sample of tenth grade students and for the total sample of adolescent boys who registered significant differences between their own adjustment and that of their mothers. The total sample of adolescent girls and the ninth grade student sample showed high similarity of adjustment to that of their maternal parents resulting in failure to reject null hypothesis 2.

An analysis of the various concept scores reveals similarities and differences among the groups for which data were treated (Table 7). Of particular importance are the findings relative to the concept Self. Mean scores for the four major groups on the concept Self were 9.47 for ninth grade students and 9.24 for their mothers; 8.88 for tenth grade students and 9.03 for their mothers. Since self identity or the
TABLE VII

Mean Attitude Scores of Respondents to the Adolescent-Middle Adolescent Attitude Scale*

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Ninth Grade Students</th>
<th>Mothers of Ninth Grade Students</th>
<th>Tenth Grade Students</th>
<th>Mothers of Tenth Grade Students</th>
<th>Ninth &amp; Tenth Grade Sons</th>
<th>Mothers of Sons</th>
<th>Ninth &amp; Tenth Grade Daughters</th>
<th>Mothers of Daughters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(85)</td>
<td>(85)</td>
<td>(74)</td>
<td>(74)</td>
<td>(52)</td>
<td>(52)</td>
<td>(107)</td>
<td>(107)</td>
</tr>
<tr>
<td>(1) Children</td>
<td></td>
<td>8.94</td>
<td>9.20</td>
<td>7.41</td>
<td>8.76</td>
<td>7.58</td>
<td>8.96</td>
<td>8.56</td>
</tr>
<tr>
<td>(2) Health</td>
<td></td>
<td>10.42</td>
<td>9.77</td>
<td>9.43</td>
<td>9.65</td>
<td>9.79</td>
<td>9.79</td>
<td>10.05</td>
</tr>
<tr>
<td>(4) Leisure</td>
<td></td>
<td>8.78</td>
<td>8.33</td>
<td>8.00</td>
<td>7.54</td>
<td>8.54</td>
<td>8.12</td>
<td>8.36</td>
</tr>
<tr>
<td>(6) Community</td>
<td></td>
<td>7.47</td>
<td>8.07</td>
<td>6.91</td>
<td>7.95</td>
<td>6.94</td>
<td>8.23</td>
<td>7.34</td>
</tr>
<tr>
<td>(7) Friends</td>
<td></td>
<td>9.44</td>
<td>10.01</td>
<td>8.95</td>
<td>9.82</td>
<td>8.73</td>
<td>9.89</td>
<td>9.44</td>
</tr>
<tr>
<td>(8) School</td>
<td></td>
<td>10.31</td>
<td>10.71</td>
<td>9.37</td>
<td>10.72</td>
<td>9.58</td>
<td>10.81</td>
<td>10.02</td>
</tr>
<tr>
<td>(9) Parents</td>
<td></td>
<td>10.21</td>
<td>10.15</td>
<td>8.49</td>
<td>9.34</td>
<td>9.31</td>
<td>9.79</td>
<td>9.46</td>
</tr>
<tr>
<td>(10) Church</td>
<td></td>
<td>8.57</td>
<td>9.74</td>
<td>7.28</td>
<td>9.53</td>
<td>8.14</td>
<td>9.90</td>
<td>7.87</td>
</tr>
<tr>
<td>(11) Daily Tasks</td>
<td></td>
<td>7.21</td>
<td>8.81</td>
<td>6.89</td>
<td>8.34</td>
<td>7.17</td>
<td>8.60</td>
<td>7.01</td>
</tr>
<tr>
<td>(13) Total Score</td>
<td></td>
<td>111.71</td>
<td>114.28</td>
<td>101.04</td>
<td>110.66</td>
<td>104.39</td>
<td>114.21</td>
<td>107.89</td>
</tr>
</tbody>
</table>

*Maximal score in each category was 12 on a total attitude score potential of 114
development of a realistic self-concept is the primary developmental
task of the adolescent, it is noteworthy that the two groups of adoles­
cents participating in the study reflected to a high degree the
attitudes of their mothers toward the concept Self. Thus, adjustment
relative to this concept was virtually identical for mother and adol­
escent.

Comparison of Mean Attitude Scores For Adolescents and Their Mothers on
Twelve Concepts as Measured by the AMAS

A comparison by concept of the mean attitude scores and standard
deviations for ninth grade students, mothers of ninth grade students,
tenth grade students and the mothers of tenth grade students yielded
variations in relation to the adjustment of the individuals involved
(Figure 1). While the total mean attitude scores were thought to be
representative of the adjustment of the sample groups to their environ­
ment, the plotting by concept of the group scores suggested the conceptual
areas in which parent-adolescent conflict or adjustment similarities
existed.

A clustering of means suggesting attitudinal similarity between
adolescents and middlescents occurred in relation to the concepts
Marriage, Future, Parents and Self. This was indicative of adjustment
similarity on the part of the maternal and adolescent samples within
those conceptual realms. In relation to the concepts Church and Daily
Tasks, the mothers showed better adjustment than that of their adolescent
sons or daughters. As was expected mothers showed better adjustment in
relation to the concepts Children, Community, Friends and School.
A Comparison of Attitude Scores of Ninth and Tenth Grade Students and their Mothers as Measured by the Adolescent-Middlesex Attitude Scale

Figure 1

- Mean for ninth grade students
- Mean for mothers of ninth grade students
- Mean for tenth grade students
- Mean for mothers of tenth grade students

±1 Standard deviation

--- Marginal adjustment
Scores on the various concepts indicated that the adjustment of the ninth grade students was consistently better than that registered by the tenth grade students. It was within the conceptual realms labeled Children, Leisure, Community, Church and Daily Tasks that respondents tended to register marginal adjustment. However, marginal adjustment was indicated for only a small portion of the participants on the Adolescent-Middlescent Attitude Scale. Most of the participants in the study registered better than marginal adjustment.

Null Hypothesis 3: That there will be no differences in the correlation of attitude scores of mother-son respondent pairs and those involving mothers and daughters.

Attitude Similarities and Differences Between Adolescent Boys and Their Mothers

A total sample of 52 adolescent males and a matching number of mothers composed the mother-son sample. Results from the t-test indicated that sons in the ninth and tenth grade samples held no significant attitudinal differences from their mothers on the concepts Health, Marriage, Leisure, Future, Parents and Self. The sons and their mothers did, however, differ significantly on their attitudes toward Children, Community, Friends, School, Church and Daily Tasks (Table 3). Significant differences occurred between mothers and their sons on total attitude score.

Only one correlation coefficient of significant magnitude was found for the sons and their mothers on the twelve concepts. This was in relation to the concept Children (Table 4). However, the total
attitude scores for mothers and sons correlated at the .05 level of confidence.

Attitude Similarities and Differences Between Adolescent Girls and Their Mothers

The mother-daughter sample consisted of 107 ninth and tenth grade adolescent girls and an equal number of mothers. Results from the t-tests for ninth and tenth grade daughters and their mothers showed no significant differences existing between the attitudes of mothers and daughters on the concepts Children, Health, Marriage, Leisure, Community, Friends, Parents and Self. Mothers and daughters showed significant differences in attitudes toward Future, School, Church and Daily Tasks. No significant differences were found between the total attitude scores for the mothers and their adolescent daughters.

Significant correlations were found between the total attitude scores for the mothers and daughters. In addition, significant correlation coefficients were obtained in a comparison of maternal and adolescent female scores on the concepts Marriage, Leisure, Future, School, Parents, Church and Self.

Findings indicated that the adolescent daughters showed considerably greater similarity to the attitudes of their mothers than did the adolescent sons. Thus, null hypothesis 3 was rejected.

Intercorrelations Between Concept Scores for Adolescent Boys and Their Mothers

The attitudes of the mothers toward Children were significantly related to sons' attitudes toward Children and Marriage. The correlations
between the maternal attitudes toward Health were significantly related to the sons' attitudes toward Marriage and Parents (Table 8).

Maternal attitudes toward Marriage correlated significantly with the adolescent sons' views toward Children, Health and Parents.

The attitudes of the mothers toward Leisure were significantly related to the attitudinal responses of the sons in the categorical realm of Marriage.

Significant correlation coefficients were obtained for the maternal attitudes toward the concept Future and the adolescent male response toward Marriage.

The attitudes of the mothers toward the Community related significantly to their sons' attitudes toward Children and to the total attitude score of the adolescent sons.

A significant correlation coefficient was derived from a comparison of the attitudes of the mothers toward the concept Friends and the attitudes of the sons toward Parents. Thus, there is a possibility that the mothers' acceptance of others may have been related to the adolescent sons' acceptance of their parents.

The way in which mothers viewed the concept Parents was found to be significantly related to the attitudes held by the sons relative to Leisure.

The attitudes held by the mothers toward Daily Tasks correlated significantly with the attitudes of their sons toward the concepts Children and Community.

Significant relationships were found between the mothers' attitudes toward Self and the sons' attitudes toward Marriage, Friends and
<table>
<thead>
<tr>
<th>Concept</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
<th>(11)</th>
<th>(12)</th>
<th>(13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Children</td>
<td>.30*</td>
<td>.19</td>
<td>.27*</td>
<td>.19</td>
<td>.21</td>
<td>.29*</td>
<td>.15</td>
<td>.17</td>
<td>.08</td>
<td>.05</td>
<td>.27*</td>
<td>.19</td>
<td>.33*</td>
</tr>
<tr>
<td>(2) Health</td>
<td>-.05</td>
<td>.09</td>
<td>.28*</td>
<td>.01</td>
<td>.03</td>
<td>.21</td>
<td>-.03</td>
<td>-.19</td>
<td>-.00</td>
<td>.07</td>
<td>.19</td>
<td>.24</td>
<td>.14</td>
</tr>
<tr>
<td>(3) Marriage</td>
<td>.28*</td>
<td>.29*</td>
<td>.20</td>
<td>.44*</td>
<td>.29*</td>
<td>.08</td>
<td>.17</td>
<td>.13</td>
<td>-.08</td>
<td>-.09</td>
<td>.21</td>
<td>.35*</td>
<td>.31*</td>
</tr>
<tr>
<td>(4) Leisure</td>
<td>.11</td>
<td>.19</td>
<td>.11</td>
<td>.04</td>
<td>.13</td>
<td>.18</td>
<td>.12</td>
<td>.25</td>
<td>.31*</td>
<td>-.05</td>
<td>-.04</td>
<td>.06</td>
<td>.18</td>
</tr>
<tr>
<td>(5) Future</td>
<td>-.08</td>
<td>-.07</td>
<td>.03</td>
<td>.12</td>
<td>.07</td>
<td>.15</td>
<td>.03</td>
<td>-.10</td>
<td>-.11</td>
<td>-.20</td>
<td>.06</td>
<td>-.16</td>
<td>-.31*</td>
</tr>
<tr>
<td>(6) Community</td>
<td>.01</td>
<td>.09</td>
<td>.14</td>
<td>-.07</td>
<td>.18</td>
<td>.19</td>
<td>.05</td>
<td>-.18</td>
<td>.06</td>
<td>.02</td>
<td>.27*</td>
<td>.25</td>
<td>.15</td>
</tr>
<tr>
<td>(7) Friends</td>
<td>-.01</td>
<td>.18</td>
<td>.10</td>
<td>-.07</td>
<td>.14</td>
<td>.17</td>
<td>.13</td>
<td>.03</td>
<td>-.05</td>
<td>-.10</td>
<td>.20</td>
<td>.29*</td>
<td>.14</td>
</tr>
<tr>
<td>(8) School</td>
<td>.12</td>
<td>-.13</td>
<td>.05</td>
<td>.25</td>
<td>.13</td>
<td>.10</td>
<td>.16</td>
<td>-.15</td>
<td>-.12</td>
<td>.15</td>
<td>.13</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>(9) Parents</td>
<td>.11</td>
<td>.34*</td>
<td>.40*</td>
<td>.19</td>
<td>.26</td>
<td>.21</td>
<td>.29*</td>
<td>.06</td>
<td>.19</td>
<td>.14</td>
<td>.25</td>
<td>.38*</td>
<td>.39*</td>
</tr>
<tr>
<td>(10) Church</td>
<td>.07</td>
<td>.15</td>
<td>-.00</td>
<td>.17</td>
<td>-.04</td>
<td>.09</td>
<td>-.05</td>
<td>-.00</td>
<td>-.08</td>
<td>.21</td>
<td>.03</td>
<td>-.13</td>
<td>.06</td>
</tr>
<tr>
<td>(11) Daily Tasks</td>
<td>-.14</td>
<td>.10</td>
<td>-.11</td>
<td>-.07</td>
<td>-.16</td>
<td>.05</td>
<td>-.05</td>
<td>-.01</td>
<td>.02</td>
<td>-.16</td>
<td>.01</td>
<td>.03</td>
<td>-.07</td>
</tr>
<tr>
<td>(12) Self</td>
<td>.04</td>
<td>.15</td>
<td>.20</td>
<td>.04</td>
<td>.17</td>
<td>.22</td>
<td>.19</td>
<td>-.08</td>
<td>.22</td>
<td>-.06</td>
<td>.14</td>
<td>.13</td>
<td>.18</td>
</tr>
<tr>
<td>(13) Total Score</td>
<td>.12</td>
<td>.22</td>
<td>.23</td>
<td>.17</td>
<td>.20</td>
<td>.27*</td>
<td>.15</td>
<td>.04</td>
<td>.05</td>
<td>-.03</td>
<td>.25</td>
<td>.24</td>
<td>.27*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level of confidence
Parents.

The total attitude scores of the mother correlated significantly with the sons' attitudes toward Children, Marriage and Parents. Thus, the mother did seem to exert attitudinal influence upon her son in relation to three major concepts.

Intercorrelations Between Concept Scores for Adolescent Girls and Their Mothers

Maternal attitudes toward Children were significantly correlated with the daughters' attitudes relative to the concept Marriage (Table 9).

The way the mothers viewed the concept Health was related significantly to the daughters' views toward Children, Leisure, Future, School, Parents and to the daughters' Total Scores. Thus, the mothers' physical and mental health seemed to be importantly related to the manner in which the daughters perceived a number of concepts vital to their developmental realm.

Correlation coefficients of significance resulted from a comparison of the maternal attitudes toward Marriage and daughters' attitudinal responses to the concepts Marriage, Future, Parents, Church, Self and the daughters' Total Score.

Maternal responses to Leisure correlated significantly with the adolescent female responses to Leisure, Community, Friends, Parents, Self and to the daughters' Total Score.

Correlation coefficients of significant magnitude were obtained in a comparison of the attitudes of the mothers toward the concept Future and the attitude scores of the daughters on the concepts Future, Leisure, Friends, School, Parents, Self and to the daughters' Total Score.
### TABLE IX

Correlation Coefficients Between the Attitude Scores of Mothers and Daughters as Measured by the Adolescent-Middlescent Attitude Scale
(N = 107 Matched Pairs)

<table>
<thead>
<tr>
<th>Attitude Scores for Daughters</th>
<th>Attitude Scores for Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concepts</td>
<td>(1)</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Children</td>
<td>.18</td>
</tr>
<tr>
<td>Health</td>
<td>.03</td>
</tr>
<tr>
<td>Marriage</td>
<td>.23*</td>
</tr>
<tr>
<td>Leisure</td>
<td>.16</td>
</tr>
<tr>
<td>Future</td>
<td>.07</td>
</tr>
<tr>
<td>Community</td>
<td>.07</td>
</tr>
<tr>
<td>Friends</td>
<td>.05</td>
</tr>
<tr>
<td>School</td>
<td>.05</td>
</tr>
<tr>
<td>Parents</td>
<td>.16</td>
</tr>
<tr>
<td>Church</td>
<td>.17</td>
</tr>
<tr>
<td>Daily Tasks</td>
<td>-.01</td>
</tr>
<tr>
<td>Self</td>
<td>-.05</td>
</tr>
<tr>
<td>Total Score</td>
<td>-.16</td>
</tr>
</tbody>
</table>

*Significant at the .05 level of confidence
The mothers' responses to Community correlated significantly with the daughters' attitudes toward that same concept.

The way in which mothers viewed School was found to be significantly related to the manner in which the daughters responded to the concepts Children, Marriage, Future and School. A significant relationship also existed between the mothers' conceptualization of School and the daughters' total attitude scores.

The attitudinal responses given by the mothers in relation to the concept Parents correlated significantly with those given by the daughters toward Children, Health, Marriage, Leisure, School and Parents. Similarly, the adolescent females' total attitude scores were significantly related to the way mothers viewed the concept Parents.

The attitude of the mothers toward the Church correlated significantly with the daughters' views toward Children, Marriage, Future, Church and the daughters' Total Score.

The manner in which mothers viewed Daily Tasks correlated significantly with the attitude responses of their daughters on the concepts Marriage and Church.

Maternal attitudes toward Self correlated significantly with attitudes in relation to the concepts Future, Parents, Self and the adolescent daughters' Total Score.

The mothers' Total Score correlated at the .05 level of confidence with the adolescent daughters' attitudes toward nine of the twelve conceptual categories. The mothers' Total Scores were significantly related to the daughters' attitudes toward the concepts Children, Marriage, Leisure, Future, Parents, Community, School, Church, Self and to the
Total Score of the daughters. Thus, the possibility exists that an effective modeling process has occurred during which the adolescent daughter has internalized many of the attitudes and perhaps the values of her mother.

Null Hypothesis 4: That no relationship will exist between the age of the mother and the total attitude scores for maternal and adolescent respondents on the Adolescent-Middlescent Attitude Scale.

Relationship of Mothers' Ages to Attitude Intensity

No correlation coefficients of significant magnitude (at the .05 level of confidence) existed between the mothers' ages and the total attitude scores obtained either by the mothers or by the adolescents. This resulted in failure to reject null hypothesis 4 (Table 10).

In relation to the age variable, only one significant correlation coefficient was obtained in an analysis of the ages of the mothers of the ninth grade sample. Maternal participants in this group registered a significant negative correlation between their ages and the way they responded to the concept Future.

In the tenth grade sample, the mothers' ages correlated positively with their own attitudes toward Leisure and Community and negatively with their responses to Future and School.

A significant negative correlation was found to exist between the ages of the mothers and the attitudes of ninth grade students toward the concept Friends. No correlations significant at the .05 level of confidence were obtained between the age of the mother and the attitudes
of the tenth grade students toward the twelve concepts.

TABLE X

Correlation of Mothers' Ages with the Attitudes of Respondents On the Adolescent-Middlescent Attitude Scale

<table>
<thead>
<tr>
<th>Concept</th>
<th>Ninth Grade Students (N = 85)</th>
<th>Tenth Grade Students (N = 74)</th>
<th>Mothers of Ninth Graders (N = 85)</th>
<th>Mothers of Tenth Graders (N = 74)</th>
<th>Total Sample of Boys (N = 52)</th>
<th>Total Sample of Girls (N = 107)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>-.07</td>
<td>.01</td>
<td>.07</td>
<td>-.16</td>
<td>-.11</td>
<td>-.00</td>
</tr>
<tr>
<td>Health</td>
<td>-.16</td>
<td>.07</td>
<td>-.08</td>
<td>-.20</td>
<td>.00</td>
<td>-.04</td>
</tr>
<tr>
<td>Marriage</td>
<td>-.09</td>
<td>-.21</td>
<td>-.14</td>
<td>-.16</td>
<td>-.20</td>
<td>-.15</td>
</tr>
<tr>
<td>Leisure</td>
<td>-.01</td>
<td>-.08</td>
<td>-.07</td>
<td>.06</td>
<td>-.15</td>
<td>.01</td>
</tr>
<tr>
<td>Future</td>
<td>-.13</td>
<td>-.02</td>
<td>-.24*</td>
<td>-.27*</td>
<td>.00</td>
<td>-.10</td>
</tr>
<tr>
<td>Community</td>
<td>-.10</td>
<td>-.19</td>
<td>.10</td>
<td>.23*</td>
<td>-.08</td>
<td>-.17</td>
</tr>
<tr>
<td>Friends</td>
<td>-.23*</td>
<td>-.11</td>
<td>.05</td>
<td>.01</td>
<td>.03</td>
<td>-.25*</td>
</tr>
<tr>
<td>School</td>
<td>-.11</td>
<td>-.07</td>
<td>.15</td>
<td>-.23*</td>
<td>.07</td>
<td>-.17</td>
</tr>
<tr>
<td>Parents</td>
<td>-.11</td>
<td>-.09</td>
<td>-.08</td>
<td>-.09</td>
<td>-.08</td>
<td>-.09</td>
</tr>
<tr>
<td>Church</td>
<td>-.00</td>
<td>-.16</td>
<td>.03</td>
<td>-.07</td>
<td>-.09</td>
<td>-.06</td>
</tr>
<tr>
<td>Daily Tasks</td>
<td>-.18</td>
<td>.13</td>
<td>.15</td>
<td>-.34*</td>
<td>.08</td>
<td>-.07</td>
</tr>
<tr>
<td>Self</td>
<td>-.16</td>
<td>.03</td>
<td>-.02</td>
<td>-.05</td>
<td>-.11</td>
<td>-.03</td>
</tr>
<tr>
<td>Total Score</td>
<td>-.19</td>
<td>-.11</td>
<td>-.01</td>
<td>-.10</td>
<td>-.09</td>
<td>-.16</td>
</tr>
</tbody>
</table>

*Significant at the .05 level of confidence

Null Hypothesis 5: That no relationship will exist between the size of the family and the total attitude scores for maternal and adolescent participants.
Relation of Family Size to Attitude Intensity

No significant relationships were found between total attitude scores for the maternal or adolescent samples and the number of children in the family (Table 11). Thus, null hypothesis 5 failed to be rejected.

TABLE XI

Correlation of Family Size with Attitudes of Respondents
On the Adolescent-Middlescent Attitude Scale

<table>
<thead>
<tr>
<th>Concept</th>
<th>Ninth Grade Students (N = 85)</th>
<th>Tenth Grade Students (N = 74)</th>
<th>Mothers of Ninth Graders (N = 85)</th>
<th>Mothers of Tenth Graders (N = 74)</th>
<th>Total Sample of Boys (N = 52)</th>
<th>Total Sample of Girls (N = 107)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>-.05</td>
<td>.04</td>
<td>.11</td>
<td>.02</td>
<td>.02</td>
<td>-.04</td>
</tr>
<tr>
<td>Health</td>
<td>-.13</td>
<td>.06</td>
<td>-.18</td>
<td>.03</td>
<td>.10</td>
<td>-.09</td>
</tr>
<tr>
<td>Marriage</td>
<td>.09</td>
<td>.05</td>
<td>-.07</td>
<td>-.01</td>
<td>.10</td>
<td>-.03</td>
</tr>
<tr>
<td>Leisure</td>
<td>-.23*</td>
<td>.12</td>
<td>-.25*</td>
<td>-.15</td>
<td>-.03</td>
<td>-.03</td>
</tr>
<tr>
<td>Future</td>
<td>-.14</td>
<td>.03</td>
<td>-.30*</td>
<td>-.05</td>
<td>.11</td>
<td>-.12</td>
</tr>
<tr>
<td>Community</td>
<td>-.08</td>
<td>-.17</td>
<td>.07</td>
<td>-.11</td>
<td>.01</td>
<td>-.12</td>
</tr>
<tr>
<td>Friends</td>
<td>-.19</td>
<td>.20</td>
<td>-.17</td>
<td>-.08</td>
<td>.06</td>
<td>-.03</td>
</tr>
<tr>
<td>School</td>
<td>-.08</td>
<td>.00</td>
<td>.08</td>
<td>-.10</td>
<td>.21</td>
<td>-.19*</td>
</tr>
<tr>
<td>Parents</td>
<td>-.15</td>
<td>-.21</td>
<td>-.04</td>
<td>.03</td>
<td>.06</td>
<td>-.27*</td>
</tr>
<tr>
<td>Church</td>
<td>-.03</td>
<td>-.01</td>
<td>.02</td>
<td>.08</td>
<td>.24</td>
<td>-.13</td>
</tr>
<tr>
<td>Daily Tasks</td>
<td>-.04</td>
<td>-.06</td>
<td>-.02</td>
<td>-.33*</td>
<td>.03</td>
<td>-.09</td>
</tr>
<tr>
<td>Self</td>
<td>-.22*</td>
<td>-.09</td>
<td>-.19</td>
<td>-.17</td>
<td>-.08</td>
<td>-.19*</td>
</tr>
<tr>
<td>Total Score</td>
<td>-.17</td>
<td>.01</td>
<td>-.18</td>
<td>-.10</td>
<td>.13</td>
<td>-.17</td>
</tr>
</tbody>
</table>

*Significant at the .05 level of confidence
The attitude intensity toward certain concepts related significantly to the size of the family. Negative correlations were derived between the size of the family and the attitudes of the mothers of the ninth grade students toward the concepts Leisure and Future. The number of children in the family correlated negatively with the tenth grade maternal responses to the concept Daily Tasks.

The attitudes of ninth grade students toward the concept Leisure and Self correlated negatively with the size of the family. A significant negative coefficient was obtained from a correlation of the size of family with the daughters' attitudes toward School and Parents.

Null Hypothesis 6: That no relationship will be found between the length of family residency in the geographic area sampled and the total attitude scores for maternal and adolescent participants in the study.

Relation of Length of Residency in Sample Area to Attitude Intensity

No significant relationship was found to exist between the number of years the participants had lived in the sample geographic area and their total attitude scores (Table 12). This finding resulted in failure to reject null hypothesis 6.

A significant negative correlation was found between the attitudes of the ninth grade maternal sample toward the concept Future and the number of years the family had lived in the same geographic area. The ninth grade mothers' attitudes toward the Community correlated positively with the residency variable.
Tenth grade students' attitudes toward the concept Parents correlated positively with the number of years the family had resided in the same locality.

The attitudes of the ninth and tenth grade girls toward the Church correlated positively with the residency variable.

**TABLE XII**

Correlation of the Number of Years Which the Respondents Had Lived in the Geographic Area Sampled with his Attitudes as Measured By the Adolescent-Middlescent Attitude Scale

<table>
<thead>
<tr>
<th>Concept</th>
<th>Ninth Grade Students (N = 85)</th>
<th>Tenth Grade Students (N = 74)</th>
<th>Mothers of Ninth Graders (N = 85)</th>
<th>Mothers of Tenth Graders (N = 74)</th>
<th>Total Sample of Boys (N = 52)</th>
<th>Total Sample of Girls (N = 107)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>-.04</td>
<td>.20</td>
<td>.03</td>
<td>-.04</td>
<td>.08</td>
<td>.12</td>
</tr>
<tr>
<td>Health</td>
<td>-.21*</td>
<td>.12</td>
<td>-.09</td>
<td>-.11</td>
<td>-.09</td>
<td>.05</td>
</tr>
<tr>
<td>Marriage</td>
<td>-.03</td>
<td>-.01</td>
<td>-.17</td>
<td>-.06</td>
<td>-.12</td>
<td>.05</td>
</tr>
<tr>
<td>Leisure</td>
<td>-.06</td>
<td>.06</td>
<td>-.17</td>
<td>-.03</td>
<td>-.04</td>
<td>.06</td>
</tr>
<tr>
<td>Future</td>
<td>.05</td>
<td>.16</td>
<td>-.26*</td>
<td>-.09</td>
<td>.05</td>
<td>.16</td>
</tr>
<tr>
<td>Community</td>
<td>-.11</td>
<td>.21</td>
<td>.21*</td>
<td>.21</td>
<td>.08</td>
<td>.03</td>
</tr>
<tr>
<td>Friends</td>
<td>-.06</td>
<td>-.05</td>
<td>-.03</td>
<td>.04</td>
<td>.02</td>
<td>-.08</td>
</tr>
<tr>
<td>School</td>
<td>-.04</td>
<td>.10</td>
<td>.11</td>
<td>-.10</td>
<td>-.18</td>
<td>.17</td>
</tr>
<tr>
<td>Parents</td>
<td>-.12</td>
<td>.23*</td>
<td>-.01</td>
<td>.04</td>
<td>-.00</td>
<td>.13</td>
</tr>
<tr>
<td>Church</td>
<td>.14</td>
<td>.20</td>
<td>.05</td>
<td>.07</td>
<td>.03</td>
<td>.27*</td>
</tr>
<tr>
<td>Daily Tasks</td>
<td>.04</td>
<td>.08</td>
<td>-.04</td>
<td>.13</td>
<td>.09</td>
<td>.06</td>
</tr>
<tr>
<td>Self</td>
<td>-.07</td>
<td>-.16</td>
<td>-.07</td>
<td>-.01</td>
<td>-.05</td>
<td>.13</td>
</tr>
<tr>
<td>Total Score</td>
<td>-.06</td>
<td>.21</td>
<td>-.05</td>
<td>.03</td>
<td>.02</td>
<td>.16</td>
</tr>
</tbody>
</table>

*Significant at the .05 level of confidence
Null Hypothesis 7: That no relationship will exist between the employment status of the mother and her total attitude score.

Relation of Employment Status of the Mother to her Attitude Intensity

Data relative to the mothers of the ninth grade sample revealed little if any effect of the employment status of the mother upon her total attitude score (Table 13). Most (N = 58) of the mothers of the ninth grade students were not employed outside the home. Their mean attitude score was 115 which was quite similar to the mean for total ninth grade maternal sample (114). Both the mothers of this group who were employed part-time (N = 14) and full-time (N = 18) out of the home obtained mean attitude scores of 112.

TABLE XIII

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Mothers of Ninth Grade Students</th>
<th>Mothers of Tenth Grade Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>58</td>
<td>64.4</td>
</tr>
<tr>
<td>Employed Part-Time</td>
<td>14</td>
<td>15.6</td>
</tr>
<tr>
<td>Employed Full-Time</td>
<td>18</td>
<td>20.0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Major differences did occur, however, in an analysis of the attitude scores for mothers of tenth grade students in relation to their employment status. A mean attitude score of 106 was derived for the mothers of the tenth grade sample unemployed at the time of their participation in the study (N = 40). Mean scores for mothers in this sample were 120 for those employed part-time outside the home (N = 11) and 113 for those employed full-time (N = 23). The scores compared with a mean for the mothers in the sample grouping (tenth grade mothers) of 111. Thus, mothers who were employed part-time outside the home tended to be better adjusted than did those employed full-time or those who were full-time homemakers.

Findings in relation to the employment status of the mother prompted the failure to reject null hypothesis 7 for mothers of ninth grade students and its subsequent rejection for the tenth grade maternal population.
CHAPTER V

SUMMARY AND IMPLICATIONS

Summary

The study was undertaken to compare the attitude similarities of middlescent mothers, ages 35 through 55, and their children, grades nine and ten, toward twelve major concepts central to the rubric of life in general for both the adult and adolescent samples. A secondary purpose was to project from these data the relative adjustment similarities between mother and child.

The sample population for which data were analyzed included 85 ninth grade students and their mothers and 74 tenth grade students with a matching maternal sample, a total of 318 participants. All adolescents participating in the study were from urban, intact families unbroken by divorce, separation or death of a spouse. Most of the respondents were of middle or upper-middle class status.

An attitude scale utilizing the semantic differential technique (Appendix-A) was developed utilizing concepts such as marriage, church, daily tasks and others basic to life in general for the middlescents and adolescents. The instrument was subjected to numerous analyses and revisions. Prior to the administration of the instrument (Adolescent-Middlescent Attitude Scale) its reliability was established at .87, utilizing the test-retest method with a one-week interval between
administrations of the instrument to 71 adolescents.

Validation of the Adolescent-Middlescent Attitude Scale was established by comparing actual scores made by respondents to the instrument and the mean attitude scores derived by two independent raters of tapes made during which the participants responded to open-ended questions pertaining to the twelve concepts included in the Adolescent-Middlescent Attitude Scale. The Spearman technique of rank correlation was applied to a comparison of actual and rater attitude scores yielding a coefficient of .91, a figure suggesting high instrument validity (p = .01). See Appendix B for validity calculations.

The adolescents completed attitude surveys in their own school settings. Coded questionnaires were mailed to and returned by 82 percent of the mothers of the participating students.

Data from the matching maternal-adolescent samples were analyzed yielding correlation coefficients for scores in relation to each of the twelve concepts included on the attitude scale and for total attitude scores. The t-test was applied to correlated means to determine whether or not the attitude scores for the mother were significantly different from those of the adolescent son or daughter.

**General Findings**

Coefficients derived for the four groups for which data were analyzed showed that significant correlations existed between the total attitude score for the mothers and the adolescents in each of the groups. A coefficient of .30 was obtained for the total attitude score for the ninth grade students and their mothers (significant at the .01 level of
confidence). Attitude scores for the tenth grade students and their mothers correlated at .24, a coefficient significant at the .05 level of confidence. An analysis of the responses of the adolescent boys and their mothers yielded a coefficient of .27 (significant at the .05 level of confidence). The coefficient of .31 obtained for the maternal-daughter sample was significant at the .01 level of confidence.

The high correlation between the attitude scores for the mothers and daughters suggested that there was, in all probability, a circular reaction between the middle- and adolescent females. As had been cited earlier in the study, attitudes tend to increase in intensity as one's age increases. Thus, the potential lowering of the mother's score to approximate the level of the adolescent's score is thought to have resulted from the fact that she was experiencing stress from both adjusting requirements of her own stage of life as well as the diverse but equally stressful period through which her daughter was passing. Or, on the other hand, if the circular reaction was involved, the daughter's attitude scores, and thereby her adjustment level, may have been elevated beyond that of other adolescents because of effects from superior adjustment of the influential mother.

Results of the t-test revealed that no significant differences between total attitude scores of the ninth grade students and their mothers existed. Similarly, no significant differences were found between the total attitude scores for ninth and tenth grade daughters and their mothers. Differences of a significant nature did occur in a comparison of the attitude scores of tenth grade students with those of their mothers and in an analysis of the scores of the ninth and tenth
grade sons and those of their mothers.

It might be argued from summation of the findings that the maternal participants in the study had to a large measure infringed upon the individuality of the adolescent by imposing her attitudes upon the child, producing robot-like replicas of her own self. However, the reader is cautioned to note the conservative and non-controversial nature of the concepts upon which the attitude survey was built (Appendix A). Mother and adolescent might have responded quite differently to an opinionnaire concerning dress, length of hair or to personal behavioral parameters.

The data suggest that the similarities which existed between mother and adolescent formed an attitudinal base or threshold from which the emerging adult would tend to develop his own premises; formulate his own decisions; and endeavor to establish behavior appropriate to his own generational era. The similarities were viewed by the investigator as a secure base for the necessary exploration from the potentially comfortable realm of childhood into the complicated milieu of the adult. The dissimilarities found among tenth grade students and sons and their mothers are interpreted to represent the affect caused by the search for self and one's "fit" into the world of adult privilege and responsibility. Findings from the study portray the mother as a positive and influential model for the adolescent rather than the prototype for mass replication of human personality.
Findings in Relation to the Null Hypotheses

Null Hypothesis 1: The lack of significant differences had been predicted by the first null hypothesis between the attitude intensity levels of the mother and those of her adolescent son or daughter. The finding from an application of the t-test that significant differences did occur in the total attitude scores for the tenth grade students and their mothers and for the sons and their mothers prompted the rejection of null hypothesis 1 for these groups. No significant differences were found between the mean attitude scores of the ninth grade students and their mothers and for the total sample of daughters and their mothers. Thus, these findings resulted in the failure to reject null hypothesis 1 for these two sample groups.

Correlation coefficients significant at the .05 level of confidence were obtained for the ninth grade sample, the tenth grade sample, the mother-daughter sample and the mother-son sample.

Null Hypothesis 2: In null hypothesis 2 it was predicted that the adjustment of the mother to her environment would not differ from the adjustment of the adolescent to his or her environment. Findings resulted in the failure to reject null hypothesis 2 for the sample including ninth grade students and their mothers and for the total mother-daughter sample. Null hypothesis 2 was rejected for the samples including tenth grade students and their mothers and for the ninth and tenth grade sons and their mothers. The total attitude scores within each of these groups suggested the existence of significant differences (Table 7).
Null Hypothesis 3: Null hypothesis 3 was rejected as a result of the application of the t-test which revealed significant differences between the total attitude scores of mothers and sons. Similar statistical treatment of the data for the mother-daughter sample revealed that no significant differences existed between the attitude scores of the adult and adolescent female populations participating in the study.

Null Hypotheses 4, 5 and 6: No correlations of a significant magnitude (.05 or greater) were found between the total attitude scores for the mother or the adolescent and such variables as the age of the mother, the size of the family or the length of family residency in the sample area. These findings resulted in the failure to reject null hypotheses 4, 5 and 6 which alluded to the lack of significant relationship between these variables and the total maternal and adolescent attitude scores.

Null Hypothesis 7: The employment status of the mother did not significantly affect the attitude scores of the mothers of the ninth grade sample. Mean attitude scores were 115 for full-time homemakers; 112 for those employed part-time and 112 for those employed full-time out of the home.

The employment status of mothers of tenth grade students showed significant relationship to their total attitude scores. The lowest mean score (106) was obtained for those who were full-time homemakers. Those employed part-time outside the home compiled a total mean attitude score of 120 while those working full-time outside the home revealed an attitude intensity of 113. Thus, the respondents in the tenth grade
sample who indicated the best adjustment were those employed part-time out of the home.

Thus, null hypothesis 7 failed to be rejected for the ninth grade sample where no relationship was found between the employment status of the mother and her total attitude score. The finding that the employment status of mothers of tenth grade students related measurably to their attitude intensity caused the rejection for that group of null hypothesis 7.

Implications

A number of implications have resulted from the study of attitude and adjustment similarities of mothers and their adolescent sons and daughters. These have been treated under the headings General Implications and Implications for Family Life Education.

General Implications

1. Increased attention given to the study of whole families could facilitate both individual adjustment and family stability.

2. Increased impetus given to the translation of the concept of comprehensive community health centers into action might prove worthy of consideration.

3. Treatment of troubled individuals within the confines, and with the help, of the entire family whenever possible could be studied further.
Emphasis upon promoting positive mental health and optimal adjustment at all age and ability levels rather than the treatment of the mentally ill might prove to be a valuable directive.

The potential of increased and improved guidance in the elementary schools could be investigated for its potential in aiding the early adjustment of the individual to his environment.

The need for giving increased guidance to help the adolescent become an active part of both community and home endeavors was inferred from the findings of the study. The giving of responsibility commensurate with the adolescent's age and developmental level within the family, church, community and in the processes of local, state and federal government are viewed as a possibility. An earlier vote than presently prescribed by law could be considered.

The attention of the church, family, school and community could be addressed to alternatives to church attendance and membership which could enable the individual to find meaning and reason in his psycho-social milieu. In addition, such an alternative might be important in helping the individual build a faith that is servicable as a bridge from crisis to adjustment.

The possibility exists that improved recreation facilities at the community level could aid in individual adjustment.
Implications for Family Life Education

1. Emphasis upon the positive rather than the negative might be considered a major directive for family life education programs.

2. It is possible that family life education given early in the elementary years and regularly throughout one's life could be beneficial. Such education could enable the individual to develop the ability to understand self and others, assume responsibility, make decisions and accept consequences, develop a culturally appropriate value structure and formulate both long- and short-term goals.

3. The possibility that the adolescent should be given increased guidance in bridging the psycho-social gap between junior and senior high school could be investigated. At least one course at the junior high level in family development or psychology directed toward helping the individual understand himself and others in a changing social order is offered for consideration.

4. Increased effort might be considered for the improvement of maternal-adolescent communications. Training sessions involving both mother and adolescent could be explored as a method of sharpening communicative acuity.

5. Consideration could be given to educating parents in the art of interpersonal relations. The development of competencies which facilitate interpersonal relationships such as empathy, creativity, autonomy, health and judgment is an
area worthy of further study.

6. It is a possibility that family life education could include information relative to adjustment technique useful during the stages during which disenchantment has most frequently occurred (i.e., after 15 or 20 years of marriage).

7. Educating women for the multiplicity of roles they likely will play both in and out of the home during their adult life time may aid in their adjustment to the expanded years of middlescence. In addition, the resultant modeling effect might be one of a positive nature for their offspring, particularly during adolescence.

8. Attention might be given in the direction of addressing continuing education programs, literature for consumption by the public and education at all age levels to helping the mother gain and/or maintain a positive and stable self-concept.

9. The possibility of placing increased emphasis upon educating people of all ages in the utility of leisure time needs further study. Increased quantity and quality of parent education through individual counseling, group training and mass dissemination of popular literature devoted to the creative use of leisure time could be considered.

**Suggestions for Further Study**

Findings from the study have resulted in the following suggestions for further investigation:
1. That studies be made of the attitude and adjustment similarities of fathers and their adolescent sons and daughters.

2. That studies be made utilizing middle-teen parents and adolescents of a broad age range (i.e., ages 13-20) in order to isolate the age or grade ranges with the highest probability of producing or involving stress. It is further suggested that attention in the analysis of data be given to the isolation of age period of maximal stress for the middle-teen period.

3. That the reported design be replicated using samples of varied socio-economic background and with rural and large-city (100,000 population or greater) orientation as well as with the type of urban population utilized in the study (population approximately 50,000).

4. That continued and intensified research efforts be initiated in the realm of peer group interaction and its impact upon the attitude and adjustment of the adolescent.
May 25, 1970

Mrs. James W. Burke
721 West Church Street
Newark, Ohio 43055

Dear Mrs. Burke:

Have you ever wondered how much your son or daughter is like you? How similarly or differently do you view the world in which you live? These are two of the questions for which we are trying to find answers with the enclosed attitude survey.

Your adolescent son or daughter has already completed a survey at school which is identical to the one enclosed. However, in order for your student's survey to be counted, we must have one completed by you so that we can compare the two responses. Won't you please support the efforts of your child and our search to learn more about parent child relations by completing the survey? It will take approximately 15 minutes to complete.

This study is being done as a part of a doctoral research program under the direction of faculty members in the School of Home Economics and the Departments of Psychology and Sociology at The Ohio State University. All responses will be completely confidential. Surveys will be identified by number only in order that we might compare your score with that of your own child.

Directions for completing the survey are on back of page two of the survey sheets. Please complete the information section at the top of page one and then respond to the 36 word concepts as indicated in the directions. When you have completed the survey, would you please return it to us in the self-addressed, stamped envelope?

Your help can broaden existing knowledge in this important realm so that we can better educate parents and future-parents for their key roles in society. If you would like to have a copy of the general results of this study, please enclose a self-addressed stamped envelope with your completed survey sheets.

Thank you for your valuable help.

Sincerely,

Claribel M. Taylor, Ph.D.
Chairman, Family and Child Development Division

Barbara N. Armstrong
Instructor, Family and Child Development Division
June 24, 1970

Mrs. James W. Burke
721 West Church Street
Newark, Ohio 43055

Dear Mrs. Burke:

The response to the attitude survey which we are conducting in Newark has been most gratifying. However, in order to increase the significance of the results, we need your help. Will you take ten minutes of your time to complete the survey which we sent at an earlier date? All responses will be completely confidential. If you have misplaced the two-page survey, please call me at 344-1376 and I will send you another by return mail.

Sara Sue and other eleventh grade students at Newark High School were most enthusiastic about the study. I do appreciate their excellent assistance as well as the generous cooperation given by Mr. R. P. DeBenedictis and Mr. E. George Roberts. In addition, it must be noted that this survey would not have been possible without the kind assistance of Mrs. Carol Prior, Mrs. Betty Burke, Mr. James Dawson and Mr. James Wenner, members of the faculty at Newark High School.

Your response will make possible the completion of my four years of doctoral study at The Ohio State University. As you can imagine, I am most anxious to spend more time at home in Newark, to devote more time to being a mother to our two children and to continue teaching in the field of family and child development. Please know that I am very grateful for your interest and participation.

As you may recall, the purpose of the study is to compare attitudes of mothers and their adolescents so that we might better understand the impact that the family and peer groups have upon our children in a rapidly changing and fast-paced society. With your help this can become a classic study, one which may well serve as a foundation for much needed research in this vital area.

Our job as mothers is not an easy one. Through studies such as this we can learn more about parent-child relations and increase our effectiveness in this important realm in the years to come.

Sincerely yours,

Barbara N. Armstrong
(Mrs.) Barbara N. Armstrong
Instructor
Family and Child Development

BNA:bjt
The Adolescent-Middlescent Attitude Scale

The instrument developed for the measurement of attitudes for the study of adolescent-middlescent attitude similarities and differences (Adolescent-Middleseent Attitude Scale) has been withheld from the report pending its further refinement.

Findings pertaining to the twelve concepts utilized on the AMAS were reported throughout the paper pertaining to the investigation.

The following were selected as examples of the bi-polar terminology utilized on the Adolescent-Middlescent Attitude Scale:

\[ V Q N Q V \]

<table>
<thead>
<tr>
<th>Concept</th>
<th>Desirable</th>
<th>Undesirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>desirable</td>
<td>undesirable</td>
</tr>
<tr>
<td>Church</td>
<td>important</td>
<td>unimportant</td>
</tr>
<tr>
<td>Future</td>
<td>hopeful</td>
<td>hopeless</td>
</tr>
<tr>
<td>Self</td>
<td>happy</td>
<td>unhappy</td>
</tr>
</tbody>
</table>

The complete scale may be obtained by written request directed to the investigator.
TABLE XIV

Calculations for Validation of Instrument Used to Obtain Attitude Scores of Mothers and Their Children Using the Spearman Coefficient of Rank Correlation

<table>
<thead>
<tr>
<th>Subject Interviewed</th>
<th>Rank $X_1$</th>
<th>Rank $Y_1$</th>
<th>Difference $d$</th>
<th>$d^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>A₁</td>
<td>139 (1)</td>
<td>130 (1)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A₂</td>
<td>134 (2)</td>
<td>128 (2)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A₃</td>
<td>120 (3)</td>
<td>118 (3)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A₄</td>
<td>114 (4)</td>
<td>112 (5)</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>A₅</td>
<td>113 (5)</td>
<td>117 (4)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A₆</td>
<td>111 (6)</td>
<td>107 (8)</td>
<td>-2</td>
<td>4</td>
</tr>
<tr>
<td>A₇</td>
<td>100 (7)</td>
<td>109 (6)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A₈</td>
<td>107 (8)</td>
<td>108 (7)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>A₉</td>
<td>89 (9)</td>
<td>89 (9)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

$\sum d^2 = 8$

$X_1$ = Score obtained by individual on an attitude survey taken prior to the interview.

$X_2$ = Mean attitude score derived by two independent raters of the one-hour taped interview of each individual response to questions pertaining to the concepts included on the attitude survey.

Formula used:

$$p = 1 - \frac{6\sum d^2}{N - (N^2 - 1)}$$

$$p = .91 < .01$$
SELECTED BIBLIOGRAPHY
SELECTED BIBLIOGRAPHY

Books


**Periodicals**


Nye, F. Ivan. "Number, Broken Homes, and Employed Mothers as Variables," Marriage and Family Living, XIV (1952), 327-332.


Bulletins


Unpublished Materials