

AN ABSTRACT OF THE THESIS OF

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Title: ASSESSMENT OF CHANGES IN SELF CONCEPT, MARITAL
ROLE EXPECTATION, AND BEHAVIORAL UNDERSTANDING IN
HIGH SCHOOL FAMILY LIFE STUDENTS

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The purpose of this study was to assess change in self concept, marital role expectation, and behavioral understanding in high school students enrolled in a family life course.

The subjects were two groups of high school students from an only senior high school in a school district. The experimental group was made up of 25 boys and 28 girls enrolled in a one semester family life course, and a control group made up of 25 boys and 28 girls enrolled in a modern problems course. The groups were matched on sex, age, socioeconomic level, and grade point average.

Data from the subjects were collected in a one semester pre-test and posttest situation using the following instruments: the Interpersonal Check List as a measure of self concept, Dunn Marriage Role Expectation Inventory as a measure of marital role

expectancy, and the Film Test for Understanding Behavior as a measure of behavioral understanding.

The analysis of covariance was used, with the pretest scores serving as a covariant, to test the following hypotheses:

Hypothesis I: There are no differences in changes in self concept for family life education students and their controls.

Hypothesis II: There are no differences in marital role expectation for family life education students and their controls.

Hypothesis III: There are no differences in behavioral understanding for family life education students and their controls.

Each hypothesis was considered for an experimental-control comparison, a male experimental-control comparison, and a female experimental-control comparison.

The analysis of covariance provided information for testing the null hypotheses as well as establishing whether or not differences in the initial scoring patterns influenced the distribution of difference scores of the experimental and control group.

Results of Hypothesis I indicated that the tests of significance of difference for both the Dominance and Love dimensions of self concept were not significant for either the experimental-control comparison or the sex comparisons. The non-significant results indicated the changes in self concept, recorded for any comparison

of the experimental and control groups were not significantly different. The null hypothesis was not rejected for any of the comparisons.

The test of Hypothesis II yielded significant results in each of the three comparisons: total group, male, and female. One consistent difference throughout these groups was with respect to the subscale Incorrect on the DMREI. In each instance the scores of the experimental subjects reflected a significant decrease on the Incorrect subscale which indicated a decrease in authoritarian views of marital roles after exposure to the family life course. In addition, the females in the experimental group showed a significant difference in change on Correct subscale which indicated an increase in the equalitarian views.

Therefore, the null hypothesis was rejected for the total group comparison and for the male group comparison for the subscale Incorrect. For female group comparison, the null hypothesis was rejected for both the Incorrect and Correct subscales.

In testing Hypothesis III, the only significant finding was for the male experimental-control comparison on the subscale Guidance. The male experimental group recorded a significantly greater increase on the Guidance subscale than did their controls.

Possible explanations for observed sex differences were discussed. In particular, the significant findings for males on Guidance subscale, and the trend toward increased equalitarian views were noted.

Limitations of the study and suggestions for further research were provided.

Assessment of Changes in Self Concept,
Marital Role Expectation, and Behavioral
Understanding in High School Family Life Students

by

Nancy Gigoux Hutchins

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ASSESSMENT OF CHANGES IN SELF CONCEPT,
MARITAL ROLE EXPECTATION, AND BEHAVIORAL
UNDERSTANDING IN HIGH SCHOOL FAMILY LIFE STUDENTS

INTRODUCTION

It is possible that education for marriage and family life has always been a part of civilized man's activities. Informally, the "wisdom of the elders" has been passed on by setting examples for the young to emulate and through direct conversation; more formally, through puberty rights, initiations, and "coming of age" ceremonies. Currently, the elders, in the presence of parents and older family members, still play a central and important role in this aspect of educating the young; and in addition, the formal school setting has emerged as a means for marriage and family life education.

In recent years, however, there has been much concern regarding the placement of responsibility for educating youth for family life with a controversy centering particularly on delineating the role of the parents and that of the school. In general, there appear to be two main issues involved in this controversy: 1) should the responsibility remain solely with the parents, or 2) should families be given assistance in this responsibility of educating youth. The latter consideration has focused on the role of public education as a possible supporting unit.

Support for families to be solely responsible for the education

of youth for family life has been given by some professional educators, parents, and various private groups. One basis for argument is that of fearful experimentation. For example, the concern has been expressed that knowledge in an area such as sex education without special moral overtones which the family would impose will lead to greater experimentation in premarital sexual activities.

However, the Kinsey studies (1948) offer evidence that the basic determinants of sexual permissiveness are not controlled by sex education information alone, but rather by much more fundamental values. It seems unlikely that young people who refrain from premarital intercourse will be encouraged to participate in such activities merely because they have additional information. On the other hand, those who do choose to indulge will, whether they have adequate information or not.

Some professionals suggest that in many instances parents are ill-equipped to handle the family life and sex education of their children in that they are often confused and/or very apprehensive in these areas. For example, Luckey (1969a) elaborated on her view of this confusion by stating:

. . . they (parents) often support value positions they cannot defend. More often they defend values which may have served them well enough but which are no longer as crucial. They may be verbalizing one ethical position and living by another because they have not confronted themselves honestly. They have not had the opportunity to talk about sex openly (1969, p. 33).

This fear of public reaction to a program in family life is another factor that has worked, perhaps inadvertently, to relegate the sole responsibility of the education of youth to the home. However, Harper and Harper (1957) have suggested that educators exaggerate the opposition of parents and the public to sex education because they want to avoid the problems of building and maintaining an emotionally sound family life program in their school.

Johnson and Schutt (1966) have also pointed out that while many school officials recognize the need for sex education in the public schools ". . . the absence of any programs of sex education--is typical of the situation in the nation rather than atypical, " and the most frequent reasons school officials give for no programs are lack of qualified teachers and fear of public reaction.

General views on the ability of the family to continue total responsibility have been questioned. According to Dreikers (1969), one of the more outspoken professionals, the family has lost its influence on the next generation. Most parents do not know how to raise their children. Today's families are faced with a cultural dilemma created by the fact that autocratic methods are no longer effective in dealing with children; and those effective methods used in a democratic setting are not known to most parents.

Another breakdown in family harmony and morale, according to Dreikurs (1960), is the changed relationship between men and

women. Men and women have gained equality without knowing how to live with each other as equals. He feared that this is true for most American families regardless of ethnic background, economic and social status individual personal qualities and deficiencies; therefore, he concluded that essentially man has no tradition for treating each other with mutual respect, as is necessary among equals.

In addition to these factors dealing with reasons why families need assistance, Luckey (1965) suggested that most parents cannot predict what the future will be like for their children and, therefore, have difficulty in training them for the rapidly changing times. Luckey (1965) described this change when she stated:

In all of history mankind has never been caught in forces of such violent, rapid social change; caught by pressures to conform, to stand pat and preserve the status quo, and, on the other hand, pushed by forces urging us to change, move, grow, question, seek, use our freedom, and keep up with scientific and industrial advances (1965, p. 685-686).

The response of youth has been in support of families having assistance in their educational activity. Youth agreed that they do receive some understanding of marriage and family living from the home, but they felt that this was often inadequate preparation. In a recent, extensive survey of high school and college students, a committee of the American Medical Association (1966) reported that over 70 per cent of the students expressed a need for more information than had been obtained from their home.

This need felt by students for additional preparation outside the home has been documented through the years by many studies at both the high school and college levels. Duvall's study (1965) of 3,499 representative eighth through twelfth graders found less than half of these students wanted their marriages to be like their parents. In the industrial areas, the situation was even more acute in that only four per cent of the boys wanted to reproduce their parents' patterns in their own plans for marriage.

Adolescents' major source of sex information has been age-mates of the same sex. A large survey of youth between sixteen and twenty-four years of age in the middle 1930's revealed that about seventy per cent received their instruction about sex from contemporaries; in this group, however, more girls than boys and more white than Negro youth received sex information from their parents (Bell, 1938). Very similar findings were reported in a more recent study of mid-Western adolescent boys (Ramsey, 1943).

Student's need for family life education has been supported by Dunn (1960) when she found young peoples' unrealistic and inconsistent expectation of marriage fertile ground for conflict in marriage. Dunn, also, found both high school and college students "woefully misinformed" about their own natures.

Observation by Perkins (1959) reported that students need additional education in family life. He concluded that "The

students 'didn't know,' and to make the teaching situation more difficult, the students 'didn't know that they didn't know!'" (1959, p. 41).

A controversy exists as to the placement of responsibility for educating youth for family life. The arguments in favor of the home to be solely responsible are fear of experimentation, parent's confusion and uncertainty about their responsibility in some areas of family life, fear of public reaction, and lack of qualified teachers. On the other hand, the support for shared responsibility in education for family living could be summarized as families experiencing a losing influence on the next generation, a possible breakdown in family harmony and morale, families witnessing an era in time with an unpredictable future for preparing youth, student's reporting a need for additional preparation outside the home, and educator's further supporting the need to assist families in the responsibility of preparing youth for family life.

Dreikurs (1969), suggesting where families can obtain assistance in preparing youth for family life, stated:

Because of the inability of many parents to promote adequate development for all their children, the community and particularly the schools (must) exert a much stronger influence on the next generation (1969, p. 17).

This present study is an attempt to investigate one small, but necessary aspect in the role of formal educational systems in assuming partial responsibility for the preparation of youth for

family life. Hopefully, as more knowledge is accumulated regarding the factors related to and the dynamics involved in the emergence of the role of the schools, conditions may be identified which will assist in implementing the responsibility of schools.

Purpose of Study

The purpose of this study was to assess changes in self concept, marital role expectation, and behavioral understanding in high school students who had taken a family life course and in a selected group of students who had not taken the course. A more adequate description of the type and extent of changes in the two groups seems to be basic to any attempts to evaluate family life education.

Definition of Terms

Lee (1963) in taking a consensus of opinion from experts arrived at a definition of family life which was used in this study. He defines family life education as that which involves any and all school experiences deliberately and consciously used by teachers in helping to develop the personalities of students to their fullest capacities which equip the individual to solve most constructively the problems unique to his family role.

For purposes of this study the definition was narrowed to the

family life course as offered in the school system in which the study was undertaken.

The following instruments were used:

- 1) Leary's Interpersonal Check List to measure self concept.
- 2) Dunn Marital Role Expectation Inventory to measure marital role expectation.
- 3) Film Test for Understanding Behavior to measure behavioral understanding.

Hypotheses and Analysis

The general hypothesis under consideration is that a student, having taken a family life education course, will evidence a different change in self concept, a more modern marriage role expectation, and a different level of behavioral understanding than a student who has not taken the course in family life education. The differences between pretest and posttest scores for an experimental and control group, matched on age, sex, socioeconomic level, and grade point average were analyzed with respect to the following hypotheses:

1. There are no differences in changes in self concept for family life education students and their controls.

2. There are no differences in changes in marital role expectation for family life education students and their controls.

3. There are no differences in changes in behavioral understanding for family life education students and their controls.

Each hypothesis was tested by the application of analysis of covariance to different scores with pretest data as the covariant. These results are presented in the standard Analysis of Covariance format. Where necessary, summary tables are presented to report adjusted mean values and tests of significance for b-weights. In addition, summary tables are provided to list means and standard deviations for pretests, posttests, and difference scores. Each hypothesis was tested not only for total experimental and control groups, but also for sex differences.

Because scores for some members of both the experimental and control group were negative numbers on the Film Test for Understanding Behavior, it was necessary to add a constant of 40 to every observation in each distribution. This adjustment eliminated negative scores and facilitated analysis. All mean values reported in the tables associated with FUB, therefore, are inflated by 40 points.

REVIEW OF LITERATURE

Because of the diversity of a topic such as family life education, this review is organized into four subsections. The first subsection, the educational setting, is an attempt to provide, in greater depth than the introduction, a view of the elements in the general educational environment which influence current consideration of family life education courses and programs. This is followed by evaluation of family life courses, problems of evaluation, and child development laboratories.

The Educational Setting

It is well accepted that the family is a basic institution in our society. It seems that no other social unit or social organization is able to assume that most important function of the family, the nurture of the young, and since the family is the first social organization into which a child is brought, its stability is important.

Landis (1965) verifies this view in stating that:

All the studies of the growth and development of children and of the functioning of adults in society show a close relationship between the individual's functioning in society and the quality of the relationships within his family. Statistical studies of delinquency, crime, illegitimacy, suicide, alcoholism and mental illness show that all these indices of personal failure that create problems for society are closely associated with the damaged relationships in failing families. Similarly, studies of those who are able to

develop competence in coping with their personal problems and to handle their own crises in life are more likely to come from families which have been able to develop a climate of good mental health. (1965, p. 16).

Although the tone of Landis' statement appears quite strong in suggesting a causal relationship, it is more probable that he views high quality family relationships as necessary but not sufficient factors in the equation. But, if success of the family as a basic institution is necessary, as Landis suggests, to lessen the incidence of crime, alcoholism, illegitimacy, suicide, and mental illness, then the evidence of family failure cannot help but appear threatening to society.

Apparently a large cross-section of professionals do recognize this threat because among the eight general recommendations of the 1960 White House Conference on Children and Youth, the following recommendation was most specific:

That it be recognized that in our complex society no family can be entirely responsible for its own destiny, and that marriage is a joint career requiring preparation to achieve success (1961, p. 27).

One can deduce that a number of educators (White, 1950; Duvall, 1965; Force, 1964; House, 1945; Landis, 1965) and researchers (McNeill, 1944 ; Stiles, 1950; Morgan and Ojeman, 1942; Walters, 1959) feel that it is both logical and feasible for the public school system to play a significant part in assisting the education of young people with respect to increasing their

understanding of behavior in the family, social relationships, and marriage. Others are very outspoken regarding the role of the schools. For example, Force (1964) has stated that the responsibility of the school in educating for family life is no longer a matter of debate. He believes that the tasks of the school in supplementing and complementing those of the home and of the social structure in which children and youth are developing their attitudes, character, and capacities for relating themselves to other people, are now recognized as inescapable in total, balanced education.

Currently, some lay groups are responding quite negatively to such statements. They label these views as idealistic and infer that educators merely view this "new" bandwagon as a "cure-all" for increased divorce rates, illegitimacy rates, incidences of venereal disease and drug abuse among adolescents, and other social problems affecting family stability. Actually, the reverse is true. Educators involved in this area are quick to remind us, as Bigelow and Bond (1934) did some 30 years ago, that:

Education for marriage certainly does not prevent or solve all family problems, but there is evidence that it leads to decided improvement in the understanding and attitudes of those contemplating marriage and those who are members of family groups (1934, p. 325).

To a large degree educators are united with respect to what could be done with adequate family life education programs; however, they are not so convinced of the major objectives of the

program. This is reflected in the various statements in the literature regarding the role of the school, and the value of family life programs to the individual and to society. It may also reflect that family life education will be different things to different people, but in any event, such diversity of opinion does present a formidable obstacle when attempting to identify the goals which have been set for family life education.

Among the basic goals of family life education are those to support favorable attitudes toward marriage and the family and to provide information concerning those factors which can contribute to individual and marital competence. Many educators feel that success in marriage and family life is among the most important and exacting of all interpersonal relationships, and in this setting they tend to emphasize the need for skills in communication and knowledge of human personality. An increase in the understanding of family roles has also been mentioned as a goal, together with basic understandings of the uniqueness of men and women. These understandings, hopefully, will dispell some of the myths and stereotypes which block sympathetic and meaningful communication between the sexes.

White (1950) suggests that this education should help youth learn how to adapt to the process of living and, perhaps more

important, help them learn how to adapt to a manner in which one should live. The "unfulfilled task" of education, he states, is to give young people a vision of the wider role of the family.

House (1945) emphasized the need for schools to assist with the education for family life when he stated that men and women are approaching marriage with little knowledge and no experience. Marriages should be recognized as one of the most exacting tasks in which one can engage and parents require accurate knowledge, wisdom, and training to guide the growth and personality development of children. Without doubt, in parenthood there is tremendous potential for life to achieve meaning; however, many youth are inadequately prepared for parenthood.

There is obviously a need for more concise conceptualization of the parameters of family life education which, in turn, should assist in formulating a more understandable explanation of the goals of such educational programs. The lack of a clear statement of goals impedes to some degree the evaluation of available information assessing the impact of such programs as well as attempts to systematically plan future evaluation attempts.

Evaluation of Family Life Education

In view of the degree of controversy surrounding the implementation of some family life education programs, educators have

been wise to stress research focusing on evaluation of such programs and to ask for empirical evidence of the contributions to various aspects of personal and family development. In general, such evidence has been collected by three main sources: assessment of change over time in relation to enrollment in courses, evaluations of the impact of courses by students in the course, and ex post facto assessments of the "long term" benefits as perceived by former students. The focus of such studies, as indicated by the dependent variables utilized, has been as varied as the conceptual frameworks from which personal and family development are viewed. Gambill (1961) has cited several positive benefits of marriage courses, such as helping to prevent premature marriages, and Wetzel (1965) has reported that participation in a marriage course aids significantly in the modification of personality traits in a positive direction. Other researchers have used changes in scores on standardized instruments in reporting on the "effectiveness" of coursework. Some of these earlier studies have reported reductions in the numbers of personal problems perceived by the subjects (Gillies and Lastrucci, 1954) and significant positive changes in knowledge and all studies associated with enrollment in family life education courses (Walters, 1959; Womble, 1955; Moses, 1956).

More recently, pretest and posttest designs have been utilized to evaluate change. Rogers (1964) used the Dunn Marriage Role

Expectation Inventory with students in the marriage course at Ohio University along with a matched control group. Pretest and posttest scores of both groups of students indicated significantly more change in the direction of more equalitarian marital role expectations by the marriage course students than by the controls (significant at the .001 level).

Walters (1959) recorded pretest and posttest scores on the University of Southern California Parent Attitude Survey (Shoben) and the Child Guidance Survey (Wiley) for students enrolled in a child development class and a control group. He found that the students in the experimental group made significantly greater gains on these instruments than those in the control group. His findings indicated that attitudes toward child guidance can be modified.

In another study Bardis (1963) administered the Sex Knowledge Inventory, Form Y, on the first and last days of a college marriage course, and to a control group of students from the same college. On the first day of the semester, both groups made almost equal mean scores. On the last day, the students who had taken the course scored significantly higher than the control group, which had remained unchanged.

In another assessment of knowledge, Moses (1956) administered tests to 212 students currently enrolled in a one semester course at Syracuse University and to 50 students in a control group. The tests

were designed to reveal students' understanding of a sampling of topics dealing with family relationships. She found that students enrolled in the course made significantly greater gains than those in the control group in these areas: childbirth, money management, mixed marriage, the meaning of successful marriage, and the meaning of love.

After analyzing questionnaire responses of 593 married experimentals and 111 married controls, Dyer (1959) concluded that the preparation for marriage course had been instrumental in developing a point of view, an attitude or insight that influenced the experimental group toward greater satisfaction in marriage.

In the same realm Hill (1964) concluded that persons who have had marriage education are somewhat more realistic in their anticipation of problems and in their general marriage expectation. Marriage education, also, seems to result in an ability to verbalize somewhat more freely about marriage, its problems, solutions, and natures.

Another method of assessing the value of family life education course work has been by students' reactions. In a number of cases, young people believe that instruction in marriage and family living is highly desirable. Their recommendations for topics to be considered tend to center around problems of human relations rather than

material resources, and they ask for a realistic consideration of sex, premarriage problems, accord in family relations, and family economics. Children in the family and adjustment between generations are of moderate concern, while there appears to be relatively little interest in family discord, religion, and the family as an institution.

Students' evaluations of course work they have taken have also been favorable. Bee (1951), reporting on the ratings of two groups of different university students at the end of a marriage course, found one-third of the Utah students and one-half of the Kansas students "strongly favorable" and no students at either university unfavorable toward the course.

In reviewing student responses to the "Marriage Course Evaluation Form" used routinely at Stephens College, Ellzey (1964) found student responses 98 percent favorable and 2 percent unfavorable toward the course. More than one-half (51 percent) of the students said that it was one of the three best courses they had taken and 27 percent rated the course the best that they had taken. The greatest values of the course mentioned were insight into oneself and others, understanding parents, and a more realistic view of marriage. Almost one-third (31 percent) said that their plans changed after beginning the course, and 41 percent said that the marriage course influenced their decision regarding when to marry.

A number of evaluations have come from alumni who have had a marriage course, graduated, and since married. Abramson and Martin (1964) analyzed questionnaires from married graduates of the marriage course at Hamline University and found them saying that the course gave them a more realistic approach to love, marriage, and roles of men and women.

Behlmer (1961) surveyed 394 graduates of the family living course at Arsenal Technical High School in Indianapolis. Of the graduates who elected Family Living, 48 percent said that it was highly useful in everyday living; 68 percent said that the information received in this course had not been received in any other course; and 98 percent said that the course should be continued in the curriculum. These high school graduates mentioned especially their appreciation for help in understanding self and others, sex education, and mate selection.

Ellzey (1949), reporting on 1,587 alumnae who had had the marriage course at Stephens College, found 1,428 (90 percent) saying that they were better able to discuss marriage, 1,382 (87 percent) mentioning awareness of factors other than "love" in marriage, 1,308 (83 percent) reporting more wholesome attitudes toward sex, 1,441 (91 percent) thinking the course included problems vital to the success of marriage, and 1,300 (83 percent) feeling that they were better prepared for marriage.

When 100 former students at the University of Nebraska were asked what college instruction had functioned most, little, or not at all in their lives, and what additional instruction they wished they had had, they replied that Personality Development, Child Development, and Family Relationship were most functional and they wished they had had more work in these areas.(Spafford, 1940).

Recently, Duvall (1965) summarized her review of more than 80 studies assessing the effectiveness of marriage courses by reporting that such courses have been subject to evaluation measures of various types, ranging from collecting students' subjective reaction to the use of standardized instruments in pretests and post-tests of control and experimental groups. Her findings revealed that, in every reported instance, the course being evaluated was found effective in bringing about measurable changes in students' understanding, attitudes, expectation, and/or the abilities being tested. Duvall further states:

Students' attitudes toward love and sex, marriage and family life, as well as toward themselves and the significant people in their lives, shift as a result of their experiences in a marriage course. Their attitudes change in the direction of being more flexible, more realistic, and more responsible as they proceed through a course that deals with these areas. They become more able to talk about many of the aspects of personal and family living that previously they had found too embarrassing or difficult to discuss. This increased competence in openly facing interpersonal conflicts augurs well for their ability to better handle tensions that infuse intimate relationships over a period of time (1965, p. 183).

The present study focuses on assessing changes in students' attitudes toward themselves, measured by reports of self concept, and changes in selected attitudes toward marriage, measured by changes in marital role expectations. A brief review of these dimensions is presented next.

Self Concept

The self concept has a number of definitions, but in essence refers to an individual's feelings and attitudes about himself. Thus an individual's self concept encompasses that which he believes himself to be, that which he aspires to be, that which he hopes he is now, that which he fears he is now, as well as his perception of how others see him (Brownfain, 1952). According to Brownfain, whenever an individual is evaluating himself he inevitably makes reference to a system of central meaning that he has about himself and his relations to the world about him which is called his self concept. Therefore, every evaluative statement a person makes about himself may be considered an example of his self concept. These evaluative statements made by the individual are part of his conscious; therefore, an individual's conscious self concept contains only the perceptions of and feelings about himself which he allows into his awareness. While students of self concept suggest that the self concept may be considered as having both conscious and unconscious elements, the lack

of instruments for measuring the unconscious elements of the self has necessitated that most studies of adolescent self concept focus on the conscious level (Douvan and Gold, 1966).

Although there are a number of aspects of the self concept, recent literature has suggested two bases of self concept: the social roles and the body image (Medinnus and Johnson, 1969). The social roles of the self concept refer to what has sometimes been called the "looking glass self", reflections of how others see one, or what is expected of an individual because of his assigned roles. The dimension of body image is closely related to physical reality and an individual's feelings about his body.

The adolescent years are usually considered ones of rapid change with respect to physical changes of the body and changes in social rules, and for the adolescent these fundamental changes appear to generate a central developmental problem. The adolescent discovers that he is looking different and feeling different, that he responds to situations in a different manner, and that others respond differently to him. Erikson (1950) referred to this problem as the crisis of identity and suggested that the integration of these changing aspects is a major developmental task for the adolescent. Because an individual's feelings about himself are directly related to his changing body and changing role expectations, it would seem reasonable to expect changes in self concept during the adolescent period.

However, the stability of the self concept during adolescence has been studied by a number of authors and apparently it is difficult to document a change during adolescence. For example, Engel (1959) found that over a two year period, from eighth to tenth grade, the self concept of 172 middle class students remained relatively stable. In her study the self concept was measured by a rank ordering of personality traits. Findings in a study by Carlson (1963) were consistent with Engel's data in indicating that self-esteem is a relatively stable dimension of the self. In his study of a group of students over a six year period between the sixth and twelfth grades the median self-esteem scores for boys and girls were the same at the preadolescent and adolescent level, although the social-personal orientation emerged as an independent dimension of the self image. In addition, Piers and Harris (1964) compared the stability of the self concept among third, sixth, and tenth grade students and found that over a four month period the self concept remained relatively stable at all three age levels.

This finding in itself does not completely offset the possibility of change during this time. Part of the difficulty of accepting these indications of stability as definitive stems from the fact that measures of the self concept are usually obtained by responses to descriptive statements by the individuals being tested. In evaluations of this type of measurement, it has been suggested that the social desirability of

a descriptive item has an affect on the subject's responses.

Edwards (1957) found .83 and .87 product-moment correlations between the probability of endorsement and the social desirability of items on the interpersonal checklist. His findings indicate that subjects may respond with how they think they should feel rather than how they actually feel, therefore suggesting that individuals may not be giving an accurate evaluation of their self concept.

Since the self-reported self concept may be affected by the social desirability of the traits, an individual may report himself differently than others see him and at the same time be quite unaware that he is reporting differently. In a study of student teachers, Dixon and Morse (1961) found that student teachers who had "good" empathy scores were seen as better teachers by their pupils. Supervising teachers also saw the "good" empathy groups as significantly better teachers than the "poor" groups. According to Dixon and Morse, "the important quality of empathy, as we recognize it in teaching is a highly interpersonal phenomenon with the subject and object bound up in a mutual response" (1961, p. 323). In rating themselves, however, the student teachers exhibited no significant difference between the mean scores of the overall self-ratings of the "good" and "poor" empathy groups. Evidently, student teachers who had low empathy scores were not aware that they were seen as "weaker" teachers by their pupils and supervisors. One possibility

is that the student teachers in the low empathy group were not aware of how they were viewed by others; however, it may also be that this group was responding in terms of the social desirability of the items.

The studies by Dixon and Morse (1961) and Edwards (1957) have relevance for understanding the self concepts of adolescents. As adolescents experience the changes of their bodies and the increasing changes in social roles, it would seem likely that their self concepts would also change. However, if in fact, self-ratings are influenced by the social desirability of items, then it would also be logical that their ratings of self concepts would reflect to some degree how they think they should feel. Since the social desirability of items remains fairly constant, the stability of self concept scores of adolescents may be explainable on this basis.

Marriage Role Expectation

Dunn (1960) devised a marriage role expectation inventory which she then used with 436 high school seniors to assess the group trends with respect to expectations of marital roles. The responses from this age group reflected a definite trend toward the companionship-equalitarian type of family. However, there are some roles, such as the wife as a "homemaker" and the husband as the "breadwinner" which were held to a traditional sense by this age group.

Dunn's observation made a point of the apparent changes and

diversity in interpretation of marital roles which emphasize the importance of family life education, particularly at the high school level. Evidence indicated that youth need to become aware of the significance of role expectations in determining the quality of the relationship two people are able to build in a marriage. Dunn goes on to state that rather than defining "correct" patterns of behavior, it seems important that emphasis be placed upon development of understanding and interpersonal skills that will make it possible for each couple to build a pattern of relationships that will serve its own needs.

Moser (1961) used the Dunn Marital Role Expectation Inventory with 354 twelfth grade students. This study investigated six relevant variables to determine whether or not these factors contribute significantly to the formation of roles in marriage. The variables were sex, social status, religious affiliation, mental maturity, number of siblings, and sex of siblings. One of the most significant conclusions of this study showed that marriage role expectations were significantly related to the sex of the respondent on three of the seven subscales. This finding suggests that young men and women may disagree frequently on marriage role behavior. Thus, one infers that persons anticipating marriage would do well to discuss their attitudes and role expectations with respect to specific areas of a marriage relationship and not merely in general terms of likes and

dislikes.

The Dunn Marital Role Expectation Inventory was used by Beaseley (1967) to measure student achievement in a functional college marriage course. She found that men in a pretest and posttest situation showed a significant change at the .02 level from authoritarian to equalitarian marriage role expectations. In contrast, women in this situation showed no change under the same conditions; however, their marriage role expectations were essentially equalitarian throughout.

Again at the college level, Rogers (1964) used the Dunn Marital Role Expectation Inventory with students in a marriage course at Ohio University with matched controls. Pretests and posttests of both groups of students found significantly more change in students enrolled in a marriage course than those in the control group (significant at .001 level).

Lu (1952) investigated the relationship between dominant-equalitarian-submissive roles in marriage and marital adjustment of young couples. One thousand couples (600 of these married) were asked to respond to an instrument devised by Lu, to measure different roles in marriage. From the responses, a rating was obtained which categorized the couple as husband more dominant or equalitarian, or wife more dominant or equalitarian. Lu's results indicated that the equalitarian relationship or democratic partnership was correlated with good marital adjustment and the dominance of either the husband or the wife was associated with poor adjustment in marriage. He

concluded that this was an indication of the change in marriage roles with the authoritarian family losing popularity.

Problems in Evaluating Family Life Education

To determine the effectiveness of any course work, evaluation is necessary. In attempting to evaluate the effectiveness of family life courses, several studies have been made to determine problems encountered in evaluation, and from these studies have come several warnings and also helpful guidelines.

A cautious view towards evaluation is taken by Cuber (1949) who feels that if marriage succeeds it is difficult to know whether it was due to the effect of the happy childhood, the mental health, religion, occupation and interest, or the family life course taken at high school.

The measurement of the success of the short range goal of a family life course is a different kind of problem. Bee (1951) feels that one can measure the change that has taken place in the student's basic orientation and pattern of action during the brief duration of the course. He stresses that if appropriate instruments are used that it is possible to measure the student's emotional and ideological growth. However, he only mentions that it could be done, but he offers no proof.

Longworth (1953) and Kerckhoff (1960) have agreed that the problems in evaluation of the effectiveness of family life education are 1) determining the criterion for the possible outcomes of the

course work, 2) determining when the measurement should be made, and 3) determining the appropriate kinds of instruments with which to measure the criterion. Kerchkhoff (1960) has found that students are poor estimators of change in themselves or of change in the class, and in addition instructors' estimations are not reliable because of their vested interest. Longworth (1953) is optimistic in his view of this problem and finds it is possible and desirable to evaluate family life education within the province of existing knowledge if proper attention and concern are given to methodological considerations.

Cuber (1949) has stated four methodological factors which enter into the evaluation of family life education. These are: 1) A control group is necessary with which the family life students have been matched in as many ways as possible. 2) There must be an operational definition of terms used such as marital happiness, success, and so on. 3) Evaluation should ideally be made over a period of years. 4) Mental health of the respondents should be a consideration.

Child Development Laboratory

Insofar as traditional courses in human growth and development have used factual learning as the only method of preparing their students for life situations of today, the courses have been of little value to the students. The knowledge of facts and principles does not necessarily lead to effective applications of the information. To

improve the probability of modification of behavior or the development of new and improved modes of behavior, the school must provide richer opportunities to practice these behaviors as a part of the learning experience and as an expression of the product of learning. One possibility for providing these opportunities is to develop a setting for practice or laboratory experiences with preschool children in the schools.

The preschool laboratory can be used effectively for making observations of "textbook" learning and for deriving further knowledge. At another level, it can also be utilized for introducing students gradually to the increasing responsibilities associated with the care of individual children or groups of children.

Lee (1963) has stated that there is enough evidence to justify recommendations that high school programs in education for marriage and family living should include materials and experiences in child development. High school pupils are interested in the principles and practices of effective child rearing.

Kirkendall (1953), a family life specialist, repeated the same need before the National Council on Family Relations when he stated that there was enough evidence to justify a strong recommendation that family life programs in the high schools should include materials and experiences in child development.

The work in child development has two major purposes for high

school students: to help them understand themselves, and to help them understand children.

The early adolescent needs to understand himself and others as a means of developing better relationships with friends and family. As the adolescent matures, a deeper recognition of physical, mental, and social development is a great significance. Knowledge of child development is immediately applicable to the many associations young people have in living with brothers and sisters, in caring for children of other families, in working with children or play grounds or community groups, and in exploring occupational interest in this area, as well as in understanding the interaction among their peers.

Langford (1960) stated that through a study of small children with their free expression of their feelings, their short-time emotional responses, their trial-and-error of attaining physical, social, and mental skill one is in a better position to understand himself, his feelings, and his actions. In summary, she stated that self-insight is one of the finest rewards in the study of child development.

A noted authority in the field of child development, Spock (1959), has recommended a greater emphasis on child development in the public schools. He stated that the study of child development helped teenagers develop self-understanding since the principles of child development apply from birth through maturity.

In addition to self-insight, high school youth approaching

marriage age need insight and understanding of growth and development to help them more intelligently guide their future children. The opportunity for regular observation of children to whom one is not emotionally tied and for whom one does not have sole responsibility is unique to preschool centers. As the students watch groups of children in their daily nursery school activities, they learn to understand children's feelings and the resulting behavior. They recognize that children are not miniature adults, but are dynamic creatures who are changing rapidly (physically, mentally, socially, and emotionally). By observing the overt behavior of children and learning to understand the reasons for the behavior, students become increasingly tolerant of all children. Techniques of guidance based on principles of development become natural and this, in turn, promotes feelings of acceptance and ease in future contacts with children.

To set up a meaningful child development laboratory, the experiences in the laboratory must have clearly understood purposes-- purposes that are known by the students and the teacher. In practice, the goals for the course must be analyzed to ascertain what contributions can be made by laboratory experiences, and then specific plans should be made for the experiences which will most likely provide the desired outcomes.

First hand experiences with preschool children through observations and direct contact are accompanied by classroom work in

which the experiences are discussed and evaluated. It is in the discussions of the laboratory that the students are assisted in better understanding the "on-goingness" of human growth and development.

In establishing such a program, one could resort to findings in child growth and behavior to locate information on how a school program should be arranged. However, such findings would not tell *per se* how the practical details may best be carried out. The answer to this can only be found through experimentation. As Jersild (1946) stated:

Experimentation calls for scientific inquiry rather than simply a good-hearted attempt to play this or that hunch in the hope that some good will come of it. It is in this task that the research worker in child development and the educator join hands as scientific workers in an educational cause (1946, p.

In utilizing a Child Observation Center for observing and gaining experience with young children, in conjunction with the family life course, the possibility of changes in understanding children's behavior could be greater.

Understanding Children's Behavior

A number of authors have found that attitudes of students toward the guidance of young children can be modified by classroom teaching (Ingle and Robinson, 1965; Lenton, 1961; Marshall *et al.*, 1960; Walters, 1959; Walters and Fisher, 1958).

Walters (1959) reported that students taking an introductory child development course made significantly greater gains than a control group in responses to the Child Guidance Survey (Wiley, 1950). He found little difference, however, in attitude changes as measured by the University of Southern California Parent Attitude Survey.

These findings seem to suggest that attitudes toward child guidance may be a dimension which is not highly correlated with other aspects of parental attitudes, at least under the conditions of this study.

An earlier study by Walters and Fisher (1958) indicated that attitudes toward child guidance continued to change over a two year period. Their study further suggested: 1) that attitudes continue to change with additional child development instruction, 2) that attitudes are not merely a function of maturation, and 3) that previous experience with the test instruments does not affect the results significantly.

Findings in a study by Karuven (1960) indicated that the maturity of students, as measured by class level, has little or no effect on behavioral understanding, as measured by the Film Test for Understanding Behavior. No significant differences were found on the Guidance subscale of the FUB between groups of college sophomores, juniors, and seniors having similar backgrounds in child development and psychology course work. In her study a

positive relationship existed between the number of courses taken in child development and psychology, and the knowledge of guidance principles. Her study also indicated that observation experiences in conjunction with course work in child development tended to increase the understanding of behavior of preschool children, but her study did not support the assumption that participation experiences enhance the ability to evaluate preschool behavior.

Also working in a higher education setting, Ingle and Robinson (1965) studied an educational psychology course. Thirty-four students in a block-time course spent one class period a week observing children while a control group of the same course had no observation. Both groups indicated a more positive attitude toward young children; even though there was no significant difference between the two groups on their posttest scores, the direction of gain was in favor of the experimental group.

Observation of young children is used in conjunction with many child development courses and currently most educators in this academic area feel that observation is an effective way to help students more clearly understand the behavior of children (Pease and Pattison, 1955; Read, 1966). Pease and Pattison (1955) state:

A study of growth and development, because of its dynamic qualities, requires objective observation and evaluation of behavior while it is going on. In this way students begin to increase their knowledge and

understanding of children as growing and developing individuals (1955, p. 755).

In a related setting, observation of behavior has been used in areas of professional study attempting to help students increase their level of behavioral understanding. In a study involving pediatricians, the investigator concluded that observation and discussion of the mother-child-doctor interaction of another doctor helped the pediatricians to be more perceptive to patients' reactions in their families and to their physicians (Korsch, 1956).

The studies by Karuven (1960), Ingle and Robinson (1965), Korsch (1956), and Walters (1959) support the thinking that opportunities to make systematic observations and to have practice in interpreting the observed behavior help students to develop greater behavioral understanding.

Implicitly involved in making observations of children are the subjective values of the observer. Gage and Cronbach (1955) suggest that an individual's social perception, including his understanding of behavior, is dominated by what the person or "judge" brings to the situation rather than by what he actually observes.

A number of studies have attempted to relate personality characteristics to behavioral understanding (Cline, 1955; Dymond, 1950; Marshall, 1958; O'Neill, 1961; O'Neill, 1963; Smith, 1960) and in general, data from these studies indicate that behavioral understanding is difficult to predict from personality variables.

Smith (1960) investigated the relationship between academic performance and personality characteristics of 65 home economics seniors and their understanding of children's behavior. A significant positive relationship existed between scores on the FUB and the Achievement Potential and Intellectual Efficiency scales of the California Personality Inventory. The Socialization, Maturity, and Responsibility scales of the California Personality Inventory indicated significant negative relationships with the FUB as did the Control and Discipline scales of the Parent Attitude Research Instrument; i. e., high scores on the FUB were related significantly to low scores on the California Personality Inventory and the Parent Attitude Research Instrument. Smith found no relationship between the FUB scores and the Taylor Manifest Anxiety Scale, Intelligence Quotients, grade point averages, grades in a child development course, or ratings of effectiveness with children in a nursery school laboratory.

O'Neill (1961) used the Minnesota Multiphasic Personality Inventory (MMPI) to measure personality variables and the FUB to measure behavioral understanding. His results indicated a significant relationship, at the .01 level of confidence, between personality scores on the MMPI and the behavioral understanding scores on the FUB. With a different sample in 1963, a similar study by O'Neill did not support the findings of his earlier study.

Although many educators agree with Gage and Cronbach (1955) that an individual's social perception is to some degree dependent upon his personality characteristics, attempts to predict behavioral understanding from personality variables have met with difficulty.

It is also generally accepted that one's self-understanding is related to the ability to understand others. Medinnus and Johnson (1969) refer to the evidence from Wylie's (1961) review of the literature on the self concept which strongly indicated that self-acceptance was related to adjustment. In general, individuals who are self-accepting are seen to be accepting of others (Wylie, 1957).

METHOD

In this study, data were collected from 11th and 12th grade students who were enrolled in either a family life course, or a modern problems course. The data included pretest and posttest measures of self concept, marital role expectation and behavioral understanding.

In addition, the subjects in the study completed a questionnaire which provided information regarding socioeconomic level, educational level of mother and father, ordinal position, birthdate, sex, and grade point average. The information from this questionnaire found in Appendix A was used as a basis for distribution matching of the experimental and control groups.

Subjects

The subjects used in this study were 106 students from the only senior high school in a district located in an Oregon city with a population of 34,000.

The experimental group consisted of students from two sections of an elective family life course. Enrollment was restricted to junior and senior level boys and girls, and both sections were taught by the same instructor. A detailed description of the course and teaching methods appears in Appendix B.

The matched control group was selected from five sections of a required modern problems course which was restricted to senior level boys and girls. The five sections of this course, available for matching with the experimental group were taught by the same instructor. This modern problems course was centered around the interpretation and better understanding of the environment as related to societal problems, and because of the course content this seemed a logical source for the controlled subjects. The major teaching methods were classroom discussion, individual reports, and audio-visual materials.

From the information gathered on the background data sheet, an experimental group of 53 students, and a matched control group of 53 students were formed based on the following criteria: age, sex, socioeconomic level, and grade point average. The subjects were automatically eliminated if they were married, or if both parents were not living together due to divorce or death.

From the family life classes, there was a possibility of 58 subjects for the experimental group. However, the following eliminations, two subjects because both parents were not living together, three subjects because of incomplete testing, were made. The remaining 53 students, 25 boys and 28 girls, made up the experimental group. The 53 matched controls were selected from a total of 85 students in the modern problems course.

Distribution matching was used to equate the experimental and control group used in the study. An IBM sorter was used to provide information as to the shape of the distribution to be used in matching the experimental and control groups on the four variables of age, sex, socioeconomic level, and grade point average. The groups were matched on the three variables of sex, age, and socioeconomic level while taking into consideration the grade point average. The grade point average in the control groups was slightly higher than that in the experimental group with the boys having a greater discrepancy than the girls. Neither difference, however, was significant. A summary of the comparison of average scores is found in Table 1.

Table 1. Average grade point values for experimental and control groups.

Group	<u>Experimental</u>		<u>Control</u>		t-value ¹
	N	Mean	N	Mean	
Boys	25	2.14	25	2.45	-1.82
Girls	28	2.35	28	2.46	-0.29
Total	53	2.39	53	2.43	-1.80

¹No t-value significant.

Instruments

Descriptive Data

Descriptive data of the subjects were necessary for general

description and for matching purposes. A background data sheet was used to obtain information on birthdate, age, year in school, father and mother's occupation, father and mother's education, size of family, ordinal position, and if parents were alive and living together.

Social position was determined (as shown in Appendix C) by using Hollingshead's Two Factor Index of Social Position (1957). Hollingshead has assumed that there is a class structure in society, positions within the class structure are determined mainly by two characteristics, and the characteristics symbolic of status may be scaled. The Two Factor Index is based upon occupation and education. Each occupation and level of education is given a scale score and multiplied by the factor seven for occupation and four for education. These two products are then added to yield an Index of Social Position Score. Scores range from a low of 11 to a high of 77. The Index of Social Position Scores are grouped into social class positions following Hollingshead's suggestion for predicting the social class position of an individual or nuclear family.

<u>Social Class</u>	<u>Range of Computed Scores</u>
I Upper	11-17
II	18-27
III	28-43
IV	44-60
V Lower	61-77

(Hollingshead, 1957, p. 10)

Interpersonal Check List

The measure of self concept used in this study was obtained by Leary's (1957) Interpersonal Check List (ICL). The ICL was developed for use as part of the Interpersonal Diagnosis of Personality, a test battery for measuring personality functioning behavior.

The use of a check list of trait names, or descriptive adjectives for purposes of measuring various personality characteristics, was known in personality research as early as 1929. Generally such check lists consist of a list of words or brief phrases which allow a rater to describe himself or another person by checking those terms that are appropriate.

The ICL is a self-rating adjective check list devised to measure personality variables. The inventory asks for a conscious description of the subject and/or others. For purposes of this study, the subjects were asked to mark only those items that described themselves as they saw themselves at the present time.

Leary (1957) has designated five levels of personality. These levels include the Level of Public Communication, the way in which an individual is perceived by people in general; the Level of Conscious Perception, the way in which he perceives himself; the Level of Private Symbolization, the way he is evaluated on the

basis of projective tests; the Level of Unexpressed Unconscious, significant omissions at the preceding levels; and the Level of Values and Goals, perception of the ideal person.

Briar and Bieri (1963) stated:

As one of the more frequently used instruments to assess interpersonal behavior, especially self-concept, the ICL has apparent advantages over other similar instruments. As developed by Leary and his colleagues, the ICL contains a set of eight personality dimensions called octants which presumably reflect important aspects of personality functioning. These octants yield scores which when combined in certain ways from rationally determined formulae are assumed to reflect two overall behavioral dispositions, dominance and love (1963, p. 193).

The ICL has 128 items representing eight interpersonal traits which are present in varying extents in everyone. These eight diagnostic variables are identified in Figure 1.

Scores on each diagnostic variable are summarized by two scores representing a dominance-submission dimension and a love-hate dimension. Scores are computed by adding the number of items checked in each octant and combining them according to formulae to obtain Dominance and Love scores. These continua are central to Leary's multilevel diagnosis of personality. The Love and Dominance scores can then be converted to standard scores and plotted on a circular grid, as shown in Figure 1, which gives both a quantitative and qualitative picture of the results.

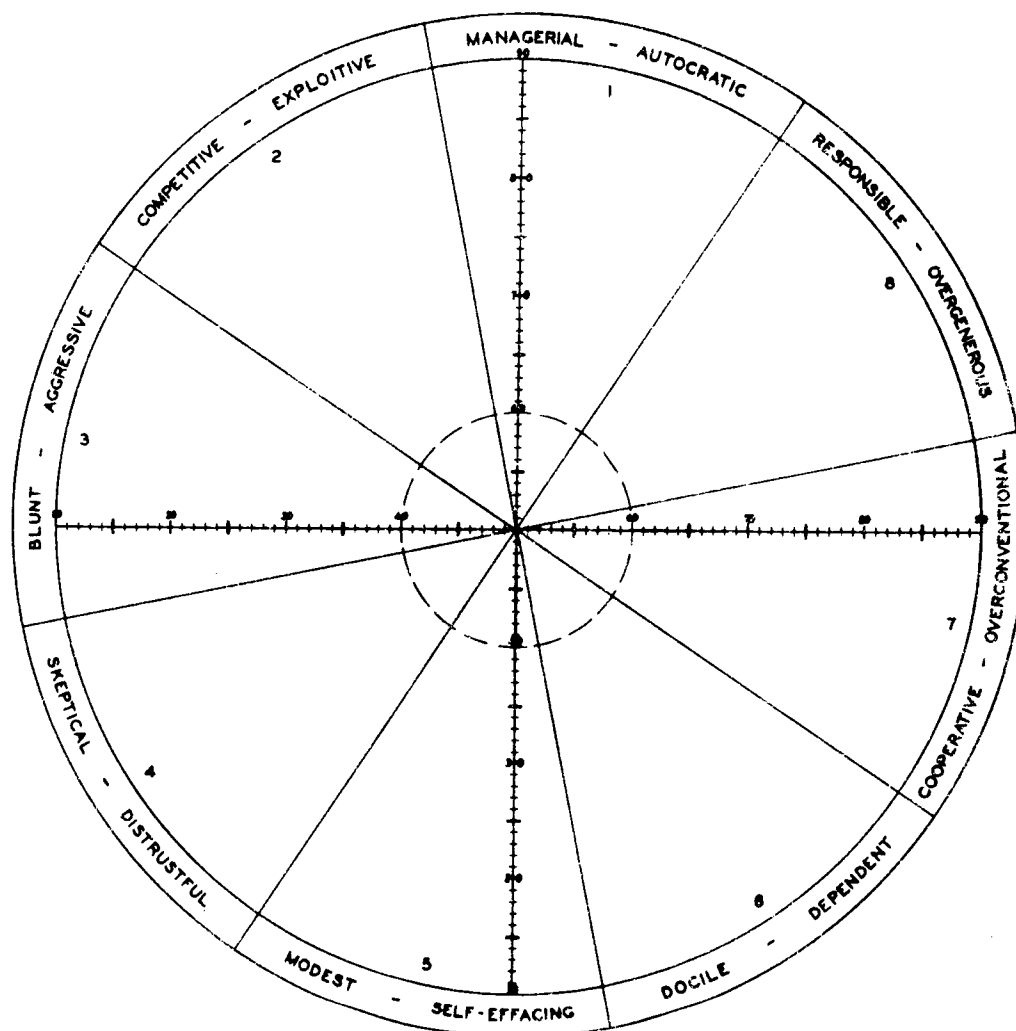


Figure 1. Leary Interpersonal Checklist Diagnostic Grid.

In developing the ICL, each item on the test was categorized to "intensity" with low intensity items referring to traits in necessary and moderate amounts. Intensity, also, referred to the endorsement frequency of items. The final four rated intensity levels corresponded approximately to 90, 67, 33, and 10 percent of the examinees agreeing with phrases as being self-descriptive.

In addition, selection of test items was based on the following:

- 1) frequencies with which intensity levels were checked
- 2) average test scores
- 3) tallies of words not understood
- 4) summaries of verbal complaints obtained by interviews
- 5) trait inter-correlations
- 6) item correlations (Buros, p. 267).

The ICL is important as a measurement of replicable dimensions of behavior. The ICL, also, can be used socio-metrically.

According to LaForge and Suczek (1955), the test retest reliability scores of 77 obese women was .73 sixteenth reliability with .78 octant reliability. The reliability suggests sufficient stability for use in personality research.

In scoring the ICL, scores were figured for both the Dominance and Love subscale. After computing the scores on

worksheets, each score was then converted to a standard score as devised by Leary.

Dunn Marital Role Expectation Inventory

The Dunn Marital Role Expectation Inventory (Dunn, 1960) was used to measure to what extent and in what areas the subjects hold authoritarian or equalitarian views concerning marriage roles. This inventory makes it possible to collect data reflecting role expectation of youth while lending itself to statistical treatment.

Challman stated;

Dunn intends this instrument to be used in marriage and family life classes so students may learn about the differing conceptions of masculine and feminine roles and realize that their own ideas are not necessarily right or wrong (Buros, p. 931).

There are two forms of the inventory with Form M for the boys, and Form F for the girls. The inventory consists of a general statement, "In my marriage I expect" followed by 71 items to which the subjects could respond: strongly agree, agree, undecided, disagree, strongly disagree. Of the 71 items, 37 items were determined by Dunn to be authoritarian, and 34 items were determined to be equalitarian.

The inventory is further divided into seven subscales, each of which includes both authoritarian and equalitarian items. The

subscales include the following areas: authority, homemaking, care of children, personal characteristics, social participation, education, and employment

The 71 items used in the test differentiate between "high" and "low" groups of adolescent testees at the 5 percent level of significance. Intrinsic validity is claimed on this basis and by the fact that the items were selected by a consensus of judges (Buros, p. 931).

According to Dunn (1960), the reliability of the instrument was determined by split-half correlation coefficient computed on scores of fifty respondents. The resulting coefficient, .953, corrected to .975 was of sufficient magnitude to permit the interpretation of a substantial degree of reliability in the final form of the instrument.

In scoring, a positive value was given to the subject's responses when the subject indicated he strongly agreed or agreed with the equalitarian items, and when he indicated he disagreed or strongly disagreed with the authoritarian items. Scores were, also, computed for the responses to the undecided items.

Film Test for Understanding Behavior

The Film Test for Understanding Behavior (FUB), Form II, was used to measure the behavioral understanding of the subjects. The authors of the test were Schalock and O'Neill (1960).

The authors described the test as:

. . . a technique for measuring behavioral understanding which attempts to incorporate some of the emotional involvement that is encountered in an interpersonal situation, yet maintains sufficient simplicity to make its administration feasible (Schalock and O'Neill, 1960, p. 1).

This test consists of responses to ten filmed episodes of behavior of three- and four-year-old children in a nursery school setting. Each episode runs approximately one minute in length. The behavioral episodes emphasize types of behavior which are commonly observable in preschool children. Responses to items are given in terms of a five point agreement-disagreement continuum: agree, agree with hesitation, uncertain, disagree with hesitation, and disagree. Scores for each of the items range from a +2 for the most correct response, to a -2 for the least correct response. All the items in the test have been developed with reference to three dimensions of behavioral understanding: sensitivity to the behavior portrayed, guidance principles, and the general knowledge of facts and principles of development.

Selected for the test were episodes of behavior which illustrate the types of behavior that commonly occur in the nursery school as well as those which offer particular value as learning situations. The episodes include a child simply sitting and watching that which

is occurring around him, a child playing in paint, a child eating, a situation in which two children confiscate the property of another child with its attending consequences, a motor development sequence, a sequence involving aggression, a child taking part in rhythms, a child dressing, a child painting leaves outside, and an episode enabling comparative judgments of mental ability.

After the episodes were selected, items were developed to tap the major kinds of understanding which could be related to the behavior observed in each episode. The items included questions concerning how the child was feeling in the situation, the kinds of guidance that could be offered the child in the situation, and questions relating to general information about the development and behavior of children of this age. Pretesting of the items was carried out in two phases. The items were first presented to a group of professional persons and students outside the field of child development for an evaluation of their clarity. On the basis of this evaluation, the items were revised and submitted to a group of nursery school teachers who served as experts, with the aim of arriving at a set of good items and "most correct" answers to these items. This constituted the second step of pretesting. Each expert was required to respond to each item in terms of a five point agreement.

On the basis of the experts' evaluations, six items which were rated as being strong by four out of five judges, and which had at

least eighty-five per cent interjudge agreement as to the "most correct" response, were selected for each episode. Also, on the strength of these evaluations, a ranking was made of the five possible responses to each item, from most correct to least correct. Thus, a scoring weight, ranging from +2 to -2 was attached for each item response.

From the analysis, there were two keys established for the test with each key containing 36 items. The high-medium key was developed for people having considerable academic work in child development and psychology, while the low-medium key was developed for persons having little or no academic work in these areas. The latter form of the test was used in this study.

Being a comparatively recent test, the FUB had little or no standardization data pertaining to it. A test-retest reliability has been computed on the basis of the scores of seven students, with a time lapse between testing on an average of two months. These subjects had taken no course work in either psychology or child development in the intervening period; hence, any differences in retest scores could probably be attributed to being a function of the effects of practice or to testing conditions. The reliability coefficient for the test-retest measure was 0.78.

Karuvén (1960) found that the FUB discriminated between students having different amounts of background work in child

development, and that among the students having similar academic backgrounds it discriminated between those who had had laboratory experiences and those who had not.

Other measures of validity have not yet been demonstrated for the FUB.

The FUB has a total of sixty items. Scores on the test range between +72 and -72 with a larger plus score indicating more "correct" than "less correct" items were checked on the test.

However, in order to facilitate the scoring, 40 was added to all the scores. The subscales with their possible range are Knowledge, +14 to -14; Guidance, +36 to -36; and Sensitivity +22 to -22. The fourth score, known as the "Total," was made up of some of the items that fell on the three other subscales of the test.

After a brief description of the test, the writer explained the answering system to the subjects to make clear the continuum with five possible choices. The sequence followed during the test was

- 1) The writer read the information needed before each episode as the subjects followed along.
- 2) An episode of the film was observed.
- 3) The subjects responded to items pertaining to the observed episode, and then the sequence repeated itself until all ten episodes were completed.

The subjects were, also, reminded not to read items prior to seeing an episode of behavior.

Procedure

Obtaining Cooperation of Subjects

The experimental subjects came from two sections of a family life course, and the control subjects came from five sections of a modern problems class. The instructors of these classes arranged for class time to be used by the writer to explain the plan of the study, and to request the cooperation of the students in carrying out the plan of the study. Students were informed that the investigator was interested only in group response and that individual scores would have no bearing on course grades. To enhance cooperation, the students were told that findings from such research could be useful to educators.

Administration of the Instruments

All subjects of the experimental group and the control group were informed that the investigator was interested only in how the groups responded, and that no attempts would be made to identify individual responses. Each subject was given a code number so that individuals would remain anonymous, and to facilitate the matching of the pretest and posttests and the completed background data sheet.

The subjects were first given the background data sheet. As

the writer explained each section of the sheet, the students completed their individual responses.

Two class periods on successive days were then used to administer the three tests: the Interpersonal Check List, the Dunn Marital Role Expectation Inventory, and the Film Test for Understanding Behavior.

At the end of one school semester, both groups were given retests on the instruments previously administered. All instruments and background data sheets were administered by the investigator, and in the same manner and sequence on both the pretest and posttest sessions. All tests were scored by hand keys, and scores were verified independently by a second scorer.

RESULTS

The data collected for this study were analyzed by the application of the Analysis of Covariance to the difference scores on pretest and posttest measures of self concept, marital role expectations, and behavioral understanding. Comparisons of total experimental and control group differences provided the initial test of the hypotheses. Each hypothesis was then tested for sex differences across the experimental and control groups.

Summary tables of means, standard deviations, and t-tests on pretest data are provided. The results of the test of hypotheses are then presented in the usual Analysis of Covariance format, and supplementary data are summarized from the tests of influence of the pretest covariate.

Experimental-Control Comparison

Table 2 presents a summary of means and standard deviations of pretest scores for the experimental group and the control group.

Hypotheses 1. There are no differences in changes in self concept for family life education students and their controls.

The test of this hypothesis is reported in Table 3. The F-values of 1.24 for Dominance and 0.06 for Love are not significant

Table 2. Summary of means, standard deviations, and test of significance for pretest scores for the Interpersonal Check List, Dunn Marital Role Expectation Inventory, and Film Test for Understanding Behavior for experimental-control group comparison.

Source of Variation	Experimental Group		Control Group		\bar{x} Diff	t-test
	\bar{x}	SD	\bar{x}	SD		
ICL - Dom	52.47	8.24	54.38	5.92	-1.91	1.37
ICL - Lov	49.27	8.86	52.80	8.32	-3.52	* 2.14
DMREI - Cor	47.81	8.65	45.89	7.60	1.92	1.22
DMREI - Inc	13.59	6.01	12.45	4.98	1.14	1.06
DMREI - Und	9.57	6.99	16.38	19.94	-6.81	* 2.35
FUB _{SSK}	40.96	5.02	40.83	3.50	0.08	0.09
FUB _{SS2G}	36.87	9.64	41.02	8.29	-4.15	* 2.38
FUB _{SS3S}	42.94	4.83	42.89	3.96	0.05	0.07
FUB Tot	41.04	15.30	44.13	12.44	-3.09	1.14

* Significant at the .05 level.

Table 3. Analysis of Covariance for Dominance and Love dimensions of self concept for experimental-control group comparison.

Source of Variation	df	ss	ms	F
<u>Subscale: Dominance</u>				
Group ¹	1	51.86	51.86	1.24
Error	103	4302.26	41.77	
Total	104	4354.12		
<u>Subscale: Love</u>				
Group ¹	1	2.53	2.53	0.06
Error	103	4784.84	46.56	
Total	104	4787.37		

¹ Adjusted for average error.
 $P < .05$, $F_{1, 103}$ d.f. = 3.94

and indicate that there were no differences in the amount of change in self concept recorded by the experimental and control groups.

Therefore, this null hypothesis could not be rejected.

Intermediate calculations from the Analysis of Covariance were then used to present the summary of covariate means, adjusted means of differences, and tests for the influence of the initial scores on the distribution of difference scores. These statistics appear in Table 4 where \bar{x} represents the mean of the pretest scores, \bar{y} represents the mean of the difference between pretest and posttest scores and \bar{y} adjusted represents the final adjusted mean and posttest differences.

Table 4. Summary table of values of mean, adjusted mean, test of significance and test of regression for Interpersonal Check List for experimental-control group comparison.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test for b
<u>Subscale: Dominance</u>						
Exp.	52.47	1.32	0.90	1.11	0.44	***4.94
Contr.	54.37	-0.92	-0.51			
<u>Subscale: Love</u>						
Exp.	49.23	0.26	0.49	0.25	0.42	***5.40
Contr.	52.79	-0.93	0.17			

*** Significant at .001 level.

The t-values associated with the comparison of adjusted means of differences holds the mathematical relationship of $t^2 = F$ with the F-value in the Analysis of Covariance; therefore, indications of significance are exactly the same. However, the t-test associated with the b-values is directed toward a test of the deviation of the slope of the regression line from zero. Significant t-values in this test indicate that the distributions of difference scores is significantly dependent upon the initial scores on that variable. The tests for both the Dominance and Love dimensions of self concept are significant indicating that the distributions of difference scores for the experimental and control groups were, to a high degree, a function of the initial scores on those dimensions.

Hypothesis II. There are no differences in changes in marital role expectation for family life education students and their controls.

The reader is reminded that the scoring on the Dunn Marital Role Expectation Inventory does take into account Dunn's philosophy that equalitarian items are more desirable than authoritarian items. In this context, the Correct subscale refers to equalitarian items, while the Incorrect subscale refers to authoritarian items. An Undecided score reflects a choice midway between the equalitarian-authoritarian viewpoint.

Table 5 presents the summary of the Analysis of Covariance for the subscales of the DMREI. In this comparison of the experimental and control groups, the only significant finding is with respect to the Incorrect subscale. The significant F-value of 15.83 indicates a high degree of difference of change for the two groups. The null hypothesis then is rejected only for this subscale.

The direction of change, as reported in Table 6, is such that the experimental group scored significantly lower on this measure of authoritarian views after exposure to the family life course. In addition, the findings in Table 6 show that the difference scores on this subscale are influenced by the distribution of initial scores and that the adjustments in this instance tended to decrease the difference between the groups. Even with this adjustment, however,

Table 5. Analysis of Covariance for Correct, Incorrect, and Undecided subscales of marital role expectations for experimental-control group comparison.

Source of Variation	df	ss	ms	F
<u>Subscale: Corrects</u>				
Group ¹	1	67.45	67.45	1.63
Error	103	4265.06	41.41	
Total	104	4332.51		
<u>Subscale: Incorrects</u>				
Group ¹	1	222.41	222.41	***15.83
Error	103	1447.13	14.05	
Total	104	1669.54		
<u>Subscale: Undecided</u>				
Group ¹	1	19.14	19.14	0.59
Error	103	3327.50	32.31	
Total	104	3346.62		

¹ Adjusted for average error.

*** Significant at .001 level.

Table 6. Summary table of values of mean, adjusted mean, test of significance and test of regression for Dunn Marital Role Expectation Inventory for experimental control group comparison.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Corrects</u>						
Exp.	47.81	3.00	3.13	1.28	0.14	1.81
Contr.	45.89	1.66	1.53			
<u>Subscale: Incorrects</u>						
Exp.	13.59	-3.23	-3.01	*3.97	0.38	***5.71
Contr.	12.45	0.11	-0.10			
<u>Subscale: Undecided</u>						
Exp.	9.57	-0.17	-0.52	0.76	0.23	2.55
Contr.	12.60	-1.74	-1.39			

* Significant at .05 level.

*** Significant at .001 level.

the experimental group showed a significantly less authoritarian viewpoint concerning marriage role expectation.

Hypothesis III. There are no differences in changes in behavioral understanding for family life education students and their controls.

A summary of the Analysis of Covariance associated with behavioral understanding is presented in Table 7. The F-values for the tests of the four subscales are all non-significant; therefore, the null hypothesis cannot be rejected. The t-values in Table 8, associated with the tests of the b-values indicate that for each of the

Table 7. Analysis of Covariance for subscales of Knowledge, Guidance, and Sensitivity, and Total score of behavioral understanding for experimental-control group comparison.

Source of Variation	df	ss	ms	F
<u>Subscale: Knowledge</u>				
Group ¹	1	1.82	1.82	0.12
Error	103	1593.79	15.47	
Total	104	1595.62		
<u>Subscale: Guidance</u>				
Group ¹	1	274.75	274.75	3.57
Error	103	7928.83	76.98	
Total	104	8203.58		
<u>Subscale: Sensitivity</u>				
Group ¹	1	6.36	6.36	0.39
Error	103	1668.80	16.20	
Total	104	1675.16		
<u>Subscale: Total</u>				
Group ¹	1	86.66	86.66	0.54
Error	103	16515.99	160.35	
Total	104	16602.64		

¹ Adjusted for average error.

P < .05, F_{1, 103} d.f. = 3.94.

three subscales and the total score, the distribution of difference scores is dependent upon the initial scores on the variables.

Table 8. Summary table of values of mean, adjusted mean, test of significance, and test of slope of regression line for Film Test for Understanding Behavior for experimental-control group comparison.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Knowledge</u>						
Exp.	40.91	-0.06	-0.03	0.34	0.77	***8.59
Contr.	40.83	0.26	0.24			
<u>Subscale: Guidance</u>						
Exp.	36.87	4.60	3.60	1.89	0.49	***5.07
Contr.	41.02	-0.72	0.29			
<u>Subscale: Sensitivity</u>						
Exp.	42.94	1.62	1.64	0.62	0.66	***7.39
Contr.	42.89	1.17	1.15			
<u>Subscale: Total</u>						
Exp.	41.04	6.38	5.46	0.73	0.60	***6.67
Contr.	44.13	2.72	3.64			

*** Significant at .001 level.

Male Experimental-Control Comparison

Table 9 presents a summary of means, and standard deviations, and tests of significance on the pretest scores for the male experimental control comparison.

Table 9. Summary of means, standard deviations, and test of significance of pretest scores for the Interpersonal Check List, Dunn Marital Role Expectation Inventory, and Film Test for Understanding Behavior for male experimental and male control groups.

Source of Variation	Experimental Group		Control Group		\bar{x} Diff	t-test
	\bar{x}	SD	\bar{x}	SD		
ICL - Dom	53.72	8.27	55.80	5.20	- 2.08	1.06
ICL - Lov	48.08	10.21	51.84	7.70	-3.76	1.47
DMREI - Cor	46.20	9.71	45.56	8.81	0.64	0.24
DMREI - Inc	12.80	5.34	12.32	4.90	0.48	0.33
DMREI - Und	12.04	7.40	13.08	6.66	- 5.04	1.13
FUB _{ss1} K	39.60	5.06	39.96	3.68	- 0.36	0.29
FUB _{ss2} G	36.64	9.58	38.48	8.28	- 1.84	0.73
FUB _{ss3} S	42.40	4.67	41.84	3.93	0.56	0.46
Fub Tot	38.92	16.24	39.44	11.61	- 0.52	0.13

$P < .05$, $F_{1, 103}$ d. f. = 1.98.

Hypothesis 1. There are no differences in changes in self concept for male family life education students and their controls.

The test of this hypothesis is reported in Table 10. The F-values of .002 for Dominance and 1.744 for Love dimensions of self

Table 10. Analysis of Covariance for Dominance and Love dimensions of self concept for male experimental and male control groups.

Source of Variance	df	ss	ms	F
<u>Subscale: Dominance</u>				
Group ¹	1	0.10	0.10	0.002
Error	47	2150.21	45.75	
Total	48	2150.31		
<u>Subscale: Love</u>				
Group ¹	1	92.95	92.95	1.744
Error	47	2505.36	53.28	
Total	48	2597.30		

¹ Adjusted for average error.

$P < .05$, $F_{1, 47}$ d.f. = 4.02.

concept are not significant and indicate that there were no differences in the amount of change recorded by the males in the experimental and males in the control group. The null hypothesis, therefore, can not be rejected.

The t-values associated with the tests of b-weights are

presented in Table 11. The significant t-values for the test indicate that the distributions of difference scores is significantly dependent

Table 11. Summary table of values of mean, adjusted mean, test of significance, and test of slope of regression line for Interpersonal Check List for male experimental and male control groups.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Dominance</u>						
Exp.	53.72	0.04	0.43	0.00	0.37	*2.60
Contr.	55.80	0.72	0.34			
<u>Subscale: Love</u>						
Exp.	48.08	-0.60	-1.64	1.32	0.55	***4.74
Contr.	51.84	0.12	1.15			

* Significant at .05 level.

*** Significant at .001 level.

upon the initial scores on the Dominance and Love dimensions of self concept. The tests for both dimensions are significant indicating that the distribution of difference scores for the males in the experimental and males in the control groups were, to a significant degree, a function of the initial scores on both dimensions of self concept.

Hypothesis II. There are no differences in changes in marital role expectation for male family life education students and their controls.

Table 12 presents a summary of the Analysis of Covariance associated with the Dunn Marital Role Expectation Inventory.

Table 12. Analysis of Covariance for Correct, Incorrect, and Undecided subscales of marital role expectation for male experimental and male control groups.

Source of Variation	df	ss	ms	F
<u>Subscale: Corrects</u>				
Group ¹	1	6.05	6.05	0.18
Error	47	1592.17	33.88	
Total	48	1598.22		
<u>Subscale: Incorrects</u>				
Group ¹	1	51.23	51.23	*4.47
Error	47	538.83	11.46	
Total	48	590.07		
<u>Subscale: Undecided</u>				
Group ¹	1	21.04	21.04	0.68
Error	47	1454.59	30.95	
Total	48	1479.63		

¹ Adjusted for average error.

*Significant at .05 level.

In this comparison of the males in the experimental and males in the control groups, the only significant finding is with respect to the Incorrect subscale. The significant F-value of 4.47 indicates a significant degree of difference of change for the two groups. The null hypothesis then is rejected only for this subscale.

The tests of significance associated with the relation of difference scores to the pretest scores are found in Table 13. Significant

Table 13. Summary table of values of mean, adjusted mean, test of significance, and test of slope of regression line for Marital Role Expectation Inventory for male experimental and male control group.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Corrects</u>						
Exp.	46.20	2.16	2.21	0.42	0.36	***3.84
Contr.	45.56	1.56	1.51			
<u>Subscale: Incorrects</u>						
Exp.	12.80	-2.76	-2.67	*2.11	0.15	1.69
Contr.	12.32	-0.56	-0.65			
<u>Subscale: Undecided</u>						
Exp.	12.04	0.52	0.42	.61	0.04	***6.73
Contr.	17.08	-0.64	-0.55			

* Significant at the .05 level.

*** Significant at the .001 level.

t-values for the Correct and Undecided subscales indicate that the distribution of difference scores on these subscales were significantly dependent upon the initial scores on each of the variables.

It is interesting to note at this point that while the test of the influence of pretest scores on difference scores is highly significant for the Correct subscale the actual adjustment from \bar{y} to \bar{y} adjusted is very slight. This is, perhaps, an example of the degree of sensitivity to score patterns which is available with the Analysis of Covariance.

Inspection of the average change for the two groups shows that the males in the experimental group were decreasing their authoritarian views of marriage roles to a significantly greater degree than were the males in the control group.

Hypothesis III. There are no differences in changes in behavioral understanding for male family life education students and their controls.

A summary of Analysis of Covariance is presented in Table 14 to test this hypothesis. The F-value of 4.54 for the Guidance subscale is significant and indicates that there were significant differences in the amount of change in the knowledge of guidance principles as recorded by the males in the experimental and males in the control groups. The null, hypothesis, then is rejected only for the Guidance subscale.

Table 14. Analysis of Covariance for subscales of Knowledge, Guidance, and Sensitivity, and Total score for behavioral understanding for male experimental and male control groups.

Source of Variation	df	ss	ms	F
<u>Subscale: Knowledge</u>				
Group ¹	1	1.57	1.57	0.11
Error	47	689.15	14.66	
Total	48	690.72		
<u>Subscale: Guidance</u>				
Group ¹	1	422.50	422.50	*4.54
Error	47	4581.29	97.47	
Total	48	5023.80		
<u>Subscale: Sensitivity</u>				
Group ¹	1	27.08	27.08	1.65
Error	47	770.76	16.40	
Total	48	797.84		
<u>Subscale: Total</u>				
Group ¹	1	633.23	633.23	3.24
Error	47	9194.03	195.62	
Total	48	9827.27		

¹ Adjusted for average error.

*Significant at the .05 level.

The t-values associated with the tests of b-weights are presented in Table 15. The significant t-values indicate that the distribution of difference score is significantly dependent upon the initial scores of the three subscales and the Total score.

Table 15. Summary table of values of mean, adjusted mean, test of significance and test of slope of regression line for Film Test for Understanding Behavior for male experimental and male control groups.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Knowledge</u>						
Exp.	39.60	0.16	0.003	0.33	0.87	***6.88
Contr.	39.96	0.20	0.360			
<u>Subscale: Guidance</u>						
Exp.	36.64	4.72	4.19	*2.13	0.58	***3.59
Contr.	38.48	-2.32	-1.79			
<u>Subscale: Sensitivity</u>						
Exp.	42.40	1.76	2.00	1.29	0.85	***6.34
Contr.	41.84	0.76	0.52			
<u>Subscale: Total</u>						
Exp.	38.92	8.32	8.14	1.80	0.70	***4.86
Contr.	39.44	0.84	1.02			

*Significant at .05 level.

*** Significant at .001 level.

Table 16. Summary of means, standard deviations, and test of significance of pretest scores for the Interpersonal Check List, Dunn Marital Role Expectation Inventory, and Film Test for Understanding Behavior for female experimental and female control groups.

Source of Variation	Experimental Group		Control Group		\bar{x} Diff	t-test
	\bar{x}	SD	\bar{x}	SD		
ICL-Dom	51.36	8.20	53.17	6.31	-1.75	0.90
ICL-Lov	50.25	7.49	53.64	8.90	-3.39	1.54
DMREI-Cor	49.25	7.47	46.18	6.49	3.08	1.64
DMREI-Inc	14.29	6.58	12.57	5.15	1.72	1.09
DMREI-Und	7.36	5.88	12.18	4.68	-8.39	* 2.21
FUB _{ss1} K	42.07	4.78	41.61	3.19	0.46	0.43
FUB _{ss2} G	37.07	9.87	43.29	7.74	-6.22	* 2.62
FUB _{ss3} S	43.43	4.99	43.82	3.81	-0.40	0.33
FUB Tot	42.93	14.44	48.32	11.81	-5.39	1.53

* Significant at .05 level.

Female Experimental-Control Comparison

Table 16 presents a summary of means, standard deviations, and test of significance on the pretest scores for the female experimental and female control group comparisons.

Hypothesis I. There are no differences in changes in self concept for female family life education students and their controls.

The summary of the Analysis of Covariance for the test of this hypothesis is reported in Table 17. The F-values of 2.73 for

Table 17. Analysis of Covariance for Dominance and Love dimensions of self concept for female experimental and female control groups.

Source of Variation	df	ss	ms	F
<u>Subscale: Dominance</u>				
Group ¹	1	106.55	106.55	2.73
Error	53	2068.77	39.03	
Total	54	2175.31		
<u>Subscale: Love</u>				
Group ¹	1	47.73	47.73	1.23
Error	53	2053.31	38.74	
Total	54	2101.04		

¹ Adjusted for average error.
 $P < .05$, $F_{1, 53}$ d.f. = 4.02.

Dominance and 1.23 for Love are not significant and indicate that there were no significant differences in the amount of change in self concept recorded by both groups. Therefore, the null hypothesis can not be rejected for either dimensions of self concept.

The t-values associated with b-weights are found in Table 18.

Table 18. Summary table of values of mean, adjusted mean, test of significance and test of slope of regression line for Interpersonal Check List for female experimental and female control groups.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Dominance</u>						
Exp.	51.36	2.54	2.10	1.65	0.49	***4.26
Contr.	53.11	-1.11	-0.68			
<u>Subscale: Love</u>						
Exp.	50.25	1.04	0.53	1.11	0.30	**2.84
Contr.	53.64	-1.86	-1.35			

** Significant at .001 level.

*** Significant at .01 level.

The significant t-values for the Dominance and Love dimensions indicate that the distribution of difference scores were significantly dependent upon the initial scores of the female experimental and female control groups.

Hypothesis II. There are no differences in changes in marital role expectation for female family life education students and their controls.

Table 19 reports the test of this hypothesis. The significant

Table 19. Analysis of Covariance for Correct, Incorrect, and Undecided subscales on Dumm Marital Role Expectation for female experimental and female control groups.

Source of Variation	df	ss	ms	F
<u>Subscale: Corrects</u>				
Group ¹	1	187.52	187.52	***4.41
Error	53	2254.63	42.54	
Total	54	2442.14		
<u>Subscale: Incorrects</u>				
Group ¹	1	201.32	201.32	***13.05
Error	53	817.69	15.43	
Total	54	1019.01		
<u>Subscale: Undecided</u>				
Group ¹	1	29.24	29.24	0.007
Error	53	1736.21	32.76	
Total	54	1736.45		

¹ Adjusted for average error.

*** Significant at .001 level.

F-values of 4.41 for Corrects and 13.05 for Incorrects indicate a high degree of difference in change for the two groups in marital role expectations. The null hypothesis is rejected for two of the three subscales.

The direction of change is observable from Table 20. The

Table 20. Summary table of values of mean, adjusted mean, test of significance and test of slope of regression line for Dunn Marital Role Expectation Inventory for female experimental and female control groups.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Corrects</u>						
Exp.	49.25	4.61	5.05	*2.10	0.29	*2.29
Contr.	46.18	1.75	1.30			
<u>Subscale: Incorrects</u>						
Exp.	14.29	-3.79	3.45	**3.67	0.39	***4.37
Contr.	12.57	0.71	-0.38			
<u>Subscale: Undecided</u>						
Exp.	7.36	-0.71	-0.80	0.08	0.36	2.57
Contr.	12.18	-2.39	-1.52			

*Significant at .05 level.

*** Significant at .001 level.

females in the experimental group scored significantly higher on Corrects and significantly lower on Incorrects, and both of these changes indicate an increase in an equalitarian viewpoint of marital roles after exposure to a family life course.

The test of significance associated with the relation of difference scores to the pretest scores are found in Table 20. Significant t-values for the Correct and Incorrect subscales indicate that the distribution of difference scores on both subscales were highly dependent upon the initial scores on both dimensions.

Hypothesis III. There are no differences in changes in behavioral understanding for female family life education students and their controls.

A summary of the Analysis of Covariance associated with the Film Test for Understanding Behavior is found in Table 21. The F-values associated with the subscales and Total score are all non-significant; therefore, the null hypothesis cannot be rejected.

The t-values, as found in Table 22 associated with b-weights, indicate that for each three subscales and Total score, the distribution of difference scores are dependent to a significant degree on the initial scores on each variable.

In summary, the results of this study are as follows:

In testing Hypothesis 1, no significant findings can be reported on any of the tests for either the experimental-control group comparison or sex comparisons. Although the summary tables, reporting the average amount of change, do indicate changes in scores between pretests and posttests, the groups are not changing in a statistically significant manner on this measure of self concept. Of the three comparisons, the females record the highest amount of absolute change between the pretests and posttests.

Hypothesis II can be reported with the following results: significant difference on Incorrect subscale for the experimental-control group comparison, significant difference on Incorrect

Table 21. Analysis of Covariance for subscales of Knowledge, Guidance, and Sensitivity, and Total score of behavioral understanding for female experimental and female control groups.

Source of Variation	df	ss	ms	F
<u>Subscale: Knowledge</u>				
Group ¹	1	0.68	0.68	0.04
Error	53	839.30	15.84	
Total	54	839.97		
<u>Subscale: Guidance</u>				
Group ¹	1	7.46	7.46	0.14
Error	53	2936.37	55.40	
Total	54	2943.83		
<u>Subscale: Sensitivity</u>				
Group ¹	1	0.90	0.90	0.06
Error	53	794.74	15.00	
Total	54	794.64		
<u>Subscale: Total</u>				
Group ¹	1	118.01	118.01	1.01
Error	53	6173.30	116.48	
Total	54	6291.31		

¹ Adjusted for average error.
 $P < .05$, $F_{1, 53}$ d. f. = 4.02 .

Table 22. Summary table of values of mean, adjusted mean, test test of significance and test of slope of regression line for Film Test for Understanding Behavior for female experimental and female control groups.

Source of Variation	\bar{x}	\bar{y}	Adj. \bar{y}	t-value	b-value	t-test of b
<u>Subscale: Knowledge</u>						
Exp.	42.01	-0.25	-0.07	0.02	0.76	***5.65
Contr.	41.61	0.32	0.15			
<u>Subscale: Guidance</u>						
Exp.	37.07	4.50	3.00	0.37	0.48	***4.20
Contr.	43.29	0.71	2.22			
<u>Subscale: Sensitivity</u>						
Exp.	43.43	1.50	1.39	0.24	0.60	***5.37
Contr.	43.82	1.54	1.65			
<u>Subscale: Total</u>						
Exp.	42.93	4.64	3.04	1.00	0.55	***4.70
Contr.	48.32	4.39	6.00			

*** Significant at .001 level.

subscale for the male experimental and male control group, and significant difference on Correct and Incorrect subscales for the female experimental and female control group. The significant amount of change in scores between pretests and posttests on the Incorrect subscale for all three comparisons indicates a significant shift away from authoritarian marital role expectations. In addition, the females in the experimental group indicate a significant shift toward more equalitarian marital role expectations.

In testing Hypothesis III, the only significant finding that can be reported is on the Guidance subscale for the male experimental and male control group comparison. Although evidences of change are indicated for the experimental-control comparison and sex comparisons from the summary tables reporting on average amount of change, generally the groups are not changing in a statistically significant manner on the measures of behavioral understanding.

SUMMARY AND DISCUSSION

Summary

The purpose of this study was to assess change in self concept, marital role expectations, and behavioral understanding in high school students enrolled in a family life course.

The subjects were two groups of high school students from only senior high school in a school district. The experimental group was made up of 25 boys and 28 girls enrolled in a one semester family life course and a control group made up of 25 boys and 28 girls enrolled in a modern problems course. The groups were matched on sex, age, socioeconomic level, and grade point average.

Data from these subjects were collected in a one semester pretest and posttest situation using the following instruments: the Interpersonal Check List as a measure of self concept, the Dunn Marital Role Expectation Inventory as a measure of marital role expectancy, and the Film Test for Understanding Behavior as a measure of behavioral understanding.

The Analysis of Covariance was selected as a statistical method using the pretest scores as a covariant to test the null hypotheses regarding no differences in the changes of self concept, marital role expectations, and behavioral understanding for the

experimental and control groups. The Analysis of Covariance provided information for testing the null hypotheses as well as establishing whether or not differences in the initial scoring patterns influenced the distributions of difference scores of the experimental and control groups.

The Analysis of Covariance was used to test the following hypotheses:

Hypothesis I: There are no significant differences in changes in self concept for family life education students and their controls.

Hypothesis II: There are no significant differences in marital role expectation for family life education students and their controls.

Hypothesis III: There are no significant differences in behavioral understanding for family life education students and their controls.

Each hypothesis was considered for an experimental-control comparison, a male experimental-control comparison, and a female experimental-control comparison.

Results of Hypothesis I indicated that the tests of significance of difference for both the Dominance and Love dimensions of self concept were not significant for either the experimental-control comparison or the sex comparisons. The non-significant results indicated that changes in self concept recorded for any comparison of the experimental and the control groups were not significantly

different. The null hypothesis was not rejected for any of the comparisons.

Results of Hypothesis I indicated that the tests of significance of difference for both the Dominance and Love dimensions of self concept were not significant for either the experimental-control comparison or the sex comparisons. The non-significant results indicated that the changes in self concept recorded for any comparison of the experimental and the control groups were not significantly different. The null hypothesis was not rejected for any of the comparisons.

The test of Hypothesis II yielded significant results in each of the three comparisons: total group, male, and female. One consistent difference throughout these groups was with respect to the subscale Incorrects on the DMREI. In each instance the scores of the experimental subjects recorded a significant decrease on the Incorrect subscale which indicated a decrease in authoritarian views of marital roles after exposure to the family life course.

In addition, the results of the female experimental-control comparison testing of Hypothesis II, also, showed a significant difference in change on the Correct subscale. These findings indicated that after exposure to the family life course the females in the experimental group scored significantly higher on the Correct subscale reflecting an increase in equalitarian views. The null

hypothesis was rejected for the total group comparison and for the male comparison on the subscale Incorrects. For females, it was rejected for both the Incorrect and the Correct subscales.

For Hypothesis III, the data indicated that the males in the experimental group experienced a significant increase on the subscale Guidance on the Film Test for Understanding Behavior. No other comparison yielded significant differences. The null hypothesis was rejected only for the males on the subscale Guidance.

Discussion

Self Concept

The findings with regard to self concept indicate that the amount of change recorded by experimental subjects and control subjects did not differ for any of the comparisons made. The absolute amounts of change, as summarized in Table 2, reflect very little change in either group and in general this is consistent with other findings in this area. The general conclusion of researchers dealing with adolescent self concept is that this dimension remains relatively stable throughout this period.

This notion of stability, however, is perplexing and there is another line of thought which makes it difficult to accept this as a definitive conclusion. The limitations of cross-sectional approaches in some studies and the handicap of the social desirability factor associated with the items on tests of self concept would weaken this

conclusion. With these limitations, supported by data on the rapid physical and social changes experienced during this period and influenced by logical speculations such as Erickson's (1950) notion of identity crisis, one is reluctant to allow that there are definitely no changes in self concept experienced by the adolescent. It may be as Brownfain (1952) suggested that the fate of the self concept in adolescence is still a matter for speculation. Certainly it is a matter which deserves more research attention.

Marital Role Expectation

No other studies dealing with changes in marital role expectation at the high school level could be found in the literature; therefore, direct comparison of results with those of previous studies is not possible.

The most striking finding in the analyses of the DMREI are those associated with the Incorrect subscale. In every comparison, members of the experimental group recorded a significantly greater decrease than did the controls. Stated positively, in every comparison the experimental group reflected significant shifts toward more equalitarian views of marriage roles. These findings are even more interesting when one recalls that this shift is recorded on items which, prior to exposure to the family life course, had been answered with authoritarian responses. The subjects are not merely ascribing to a position, but they are actually changing their previous

commitment. Even though the design of this study does not allow causal inferences, the matched control group and additional control provided by the covariance analysis suggests strongly that exposure to some material in this course is influencing these decisions. It may well be true that the personalities of the individuals in the experimental group were quite different from those of the controls; therefore these differences made them more susceptible to the material presented. However, even if this is a valid consideration, the consistency of the findings across sex groupings would suggest appeal to a broad spectrum of personality components and, perhaps, compositions.

There is a slight indication of sex differences, however, reflected in the additional significant increase on the Correct subscale for females in the experimental group. This shift indicates an additional commitment to equalitarian marital role expectations for these young women.

One must note, however, that on the Correct subscale the males in the experimental group also showed a strong tendency to increase their scores.

The controls, males and females, showed practically no change on the Incorrect subscale; however, there was a slight tendency for them to increase their scores.

For the experimental group, this increase in scores on the subscale Corrects was coupled with a significant decrease in the

subscale Incorrects, and the resultant picture at the close of the semester was one of considerably stronger equalitarian views on marriage roles in the experimental group than in the control group.

Behavioral Understanding

The only significant finding in this area was that males in the experimental group recorded a significant increase over the controls on the subscale Guidance. Since it is unlikely that information on guidance principles applicable to young children would be heavily stressed in the family life course, one is tempted to associate this change, possibly, to the exposure to young children in the Child Observation Center. Certainly they would have been exposed to the guidance techniques and would have seen many of them demonstrated. While it is true that this exposure alone could have accounted for their increase in scores, another possibility does exist. When we recall that these males also shifted significantly toward more equalitarian views of marriage roles, it may be that this shift reflects concomittant change in their actual perceptions of their duties, responsibilities and general role in marriage, and the rearing of children. This added awareness and sensitivity to the importance of their roles, when coupled with the exposure to guidance techniques in a real life setting, would theoretically increase the probability of their retaining the information. In brief, their awareness that

they will be sharing in the responsibility of caring for their children could have acted as a strong motivating force in their related area of learning.

Why then would the females in the experimental group not show the same pattern? They experienced a significantly greater shift toward equalitarian views than did the males, but it may be that awareness of this responsibility for children is not a new aspect of thinking for females. Our culture conditions them to expect this role, to look forward to it, and in some instances to prepare for it, over a long period of time. Perhaps at this time in the life of the adolescent female the concern for how to operate effectively with her husband (real or imagined) is of much more concern than her interaction with children. At least it would be easy to understand if she perceived adult female-male relationships as more complex and as requiring much more skill than female-child relationships.

Limitations

Several limitations were encountered during the course of this study. They were as follows:

1. The sample was representative of one community.
2. The subjects in the experimental group elected to take the family living course, while the control group essentially elected not to take the course. This may have had some implications as to the

differences in the initial scoring patterns for the two groups and general receptivity to material dealing with the family.

3. Anytime a control group is used there always may be some questions as to the control subject's sincere participation..

4. The sample was not matched on family background factors of the subjects other than socioeconomic level.

5. The personality traits of the experimental and control group were not taken into consideration between the groups in the study.

Suggestions for Further Study

As a result of the present study of assessing change of family life education students, several suggestions for further study have emerged. They are as follows:

1. Enlarge the sample to include more subjects as well as analyze the data according to different descriptive characteristics of the subjects.

2. Obtain a more geographically representative sample so as not to limit the sample to one small area.

3. Select a broader array of instruments that will allow the researcher to measure other changes that may be experienced by the subjects as a result of taking the family life course. In this study, the selection of instruments was done on the basis of what the

researcher anticipated the subjects might gain from such course work.

4. Analyze the data in more depth to distinguish the areas in which the experimental and control group showed differences. One method would be to analyze the responses to test items to identify more specifically areas of discrepancy between the groups.

5. Assess in more detail the changes that have been noted in the students who have taken the family life course as evaluated by the instruments of this study. With such findings one needs to be assured that such changes are desirable and that educators are not doing an injustice to students. This suggests some evaluation of course work needs to be done which ideally includes participation from the students, teachers, and the representative cross-section of the community. In addition, it would seem that the school district in which the study was done would investigate the findings further to better evaluate the impact that such a family life course has on adolescents.

6. To achieve a more accurate picture of the effects of family life course work, one may replicate this study and include a matched group which would not be given the pretest, but would be given the treatment (family life course) and given the posttest to find out the effects of the pretesting. This would allow one to better estimate the influence of the family life course without the possibility of the influence of pretesting situation.

7. To give the students of the experimental and control group a personality test to help establish if the group of students who elected to take the family life course are different kinds of people than the students who elected not to take the course. This may help to better explain some of the results of this study as well as suggest some difficulties in teaching such a course if it were to be a required course for all students.

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APPENDICES

APPENDIX A

STUDENT QUESTIONNAIRE

Code Number _____

For most of your life did you live (check one)

- _____ in a city of more than 50,000 population
 _____ in a town of more than 10,000 but less than 50,000 population
 _____ in a town of more than 500 but less than 10,000 population
 _____ on a farm

Are your parents living together: (check one)

- _____ Yes _____ No

For those who checked "No":

Were your parents separated by (check one)

- _____ Death _____ Divorce _____ Other

Your father's occupation _____

Your family's main source of income:

- | | |
|--|---|
| wages, hourly wages, piece work,
weekly checks _____ | salary, monthly checks _____ |
| private relief, odd jobs, share
cropping, seasonal work _____ | profits and fees from a business
or profession _____ |
| savings and investments earned
by my father and mother _____ | public relief and charity _____ |
| inherited savings and investments _____ | |

Your father completed

- _____ years of high school
 _____ years of college

Your mother completed

- _____ years of high school
 _____ years of college

Your mother's occupation _____

The approximate ages of your brothers: _____

The approximate ages of your sisters: _____

Your age _____ Your birthdate _____

Sex _____ Married _____ Single _____

Approximate grade point average _____

APPENDIX B

Family Life Course

Many professionals referred to the United States as having the most systematic and extensively organized programs in family life education (American Association of School Administration, 1941; Brown, 1953; Kirkendall, 1953; and Strain and Eggert, 1955). There is little consistency, however, when one attempts to compare the various programs. Some of the more common variations found in course work are the definitions of coursework, methods of teaching, outlines of study, departments offering the family life course, length of courses, needs of community, needs of students, ages of students taking course, composition of enrollment, qualifications of teachers, and methods of evaluation. In most instances, local school authorities determine their own programs; therefore, little consistency exists in the comparisons of family life courses.

Due to the number of variations found in family living courses, the writer felt it necessary to explain in more depth the family life course that was used in this research. With this information the reader, hopefully, will have a more accurate conception of the context and scope of the course.

Two classes of a family life course taught by the same instructor were available for study. One of the course goals was

that the students would gain a better understanding of themselves. It was intended that the course would help students see themselves as they are, and to help the students so they might better relate with others, whether with a family member or a peer. It was intended that the students would grow in their understanding of themselves when recognizing that knowing one's self is an ongoing, continuous process in which one's goals and values may vary at different periods of the life cycle.

The major teaching methods used included lecture-discussions on aspects of family life, audio-visual materials, guest speakers, and small group work on topics related to family life. Although discussions focused on self-understanding and the recognitions of one's attitudes toward marriage and family life, topics of discussion included the family, maturity, values and emotions, personality, relationships, sex education, love, and marriage.

In addition to self understanding, it was felt that future family members need a better understanding of democratic marriages since research indicates that the roles of men and women are becoming more analogous. Along with the changing roles of men and women, current trends suggest that more wives will be employed outside the home and that husbands will assume greater responsibilities for the raising of children.

Although the emphasis of the course was on the family,

included in the course was a study of principles of growth and development of young children. This aspect of the course was carried out in a Child Observation Center in which the students of the family life course observed and interacted with three- and four-year-old children. Class discussions focused on the needs of children as related to the laboratory setting; one's values when working with others; social, physical, emotional, and intellectual aspects of development; individual differences; and principles and techniques of guidance.

During the study of child development, the course was team taught by the instructor of the family life course and the instructor of the Child Observation Center.

The Child Observation Center was part of a pilot program supported by funds from the Vocational Education Act of 1963. Ten preschool children, five boys and five girls, participated in a nursery school program for three half-days a week. The children were all three and four years old, and were selected from the community. Included within the group were children with varying family situations: a range of socioeconomic levels, ethnic groups, ordinal positions within their families, and size of family.

Integration of some of the basic principles of child development were expressed by the students in some of their questions and concerns. Students' questions included the following topics: Can a child

raise a child? What kind of an environment in childhood helps foster the adult who will be adequate most of the time and still find some real fulfillment in life? Where does one obtain certain personality traits? How do children learn to be independent and still show concern for others? What is the purpose of discipline? In our event-crammed society, how do we meet the emotional needs of children as well as physical?

APPENDIX C

Table 23. Distribution of socioeconomic levels of subjects in experimental and control groups.

Socioeconomic level	Exp.	Cont.	Total
	<u>Total Groups</u>		
I	9	7	16
II	3	5	8
III	17	14	31
IV	13	19	32
V	11	8	19
	<u>Males</u>		
I	3	3	6
II	1	1	2
III	8	8	16
IV	7	10	17
V	6	3	9
	<u>Females</u>		
I	6	4	10
II	2	4	6
III	9	6	15
IV	6	9	15
V	5	5	10

APPENDIX D

Table 23. Summary of means and standard deviations of pretest and posttest scores for Interpersonal Check List, Dunn Marital Role Expectations Inventory, and Film Test for Understanding Behavior for all experimental-control comparisons.

	Experimental Group				Control Group			
	Pretest		Posttest		Pretest		Posttest	
	\bar{X}	S. D.	\bar{X}	S. D.	\bar{X}	S. D.	\bar{X}	S. D.
ICL Dom	52.47	8.24	53.79	8.42	54.38	5.92	53.49	6.72
ICL Lov	49.27	8.86	49.34	9.47	52.80	8.32	51.83	7.07
DMREI Cor	47.81	8.65	51.26	8.93	45.29	7.60	47.55	9.21
DMREI Inc	13.59	6.01	10.28	4.75	12.45	4.98	12.57	5.25
DMREI Unc	9.57	6.99	9.40	7.24	12.60	5.66	10.87	7.73
FUBss ₁ K	40.96	5.02	40.89	4.45	40.83	3.50	40.98	3.56
FUBss ₂ G	36.87	9.64	40.77	9.70	41.02	8.29	42.09	8.98
FUBss ₃ S	42.94	4.83	44.57	4.54	42.89	3.96	44.06	4.01
FUB Tot	41.04	15.30	46.68	14.31	44.13	12.44	46.66	12.30
Male Experimental Group				Male Control Group				
ICL Dom	53.72	8.27	53.68	9.63	55.80	5.20	55.08	5.89
ICL Lov	48.08	10.21	47.48	9.69	51.84	7.70	51.96	6.60
DMREI Cor	46.20	9.71	48.36	11.02	45.56	8.81	47.12	8.31
DMREI Inc	12.80	5.34	10.04	4.54	12.32	4.90	11.76	4.82
DMREI Und	12.04	7.40	12.56	8.78	13.08	6.66	12.08	6.73
FUBss ₁ K	39.60	5.06	39.76	4.65	39.96	3.68	39.92	2.81
FUBss ₂ G	36.64	9.58	40.24	9.89	38.48	8.28	39.96	10.28
FUBss ₃ S	42.40	4.67	44.16	4.32	41.84	3.93	42.60	3.79
FUB Tot	38.92	16.24	45.68	15.15	39.44	11.61	40.92	13.06
Female Experimental Group				Female Control Group				
ICL Dom	51.36	8.20	53.89	7.35	53.11	6.31	52.07	7.20
ICL Lov	50.25	7.49	51.00	9.13	53.64	8.90	51.71	7.59
DMREI Cor	49.25	7.47	53.86	5.58	46.18	6.49	47.93	10.08
DMREI Inc	14.29	6.58	10.50	5.01	12.57	5.15	13.29	5.59
DMREI Und	7.36	5.88	6.57	3.86	12.18	4.68	9.79	8.50
FUBss ₁ K	42.07	4.78	41.89	4.08	41.61	3.19	41.93	3.93
FUBss ₂ G	37.07	9.87	41.25	9.69	43.29	7.74	44.00	7.30
FUBss ₃ S	43.43	4.99	44.93	4.78	43.82	3.81	45.36	3.80
FUB Tot	42.93	14.44	47.57	13.73	48.32	11.81	51.79	9.05

APPENDIX E

Table 25. Summary of means, standard deviations, and test of significance of posttest scores for the Interpersonal Check List, Dunn Marital Role Expectation Inventory, and Film Test for Understanding Behavior for the experimental-control group comparison.

Variables	Posttest Scores					
	Experimental Group		Control Group		\bar{X} diff.	t-test
	\bar{X}	S. D.	\bar{X}	S. D.		
ICL Dom	53.79	8.42	53.49	6.72	0.30	0.20
ICL Lov	49.34	9.47	51.83	7.07	-2.49	1.53
DMREI Cor	51.26	8.93	47.55	9.21	3.71	*2.11
DMREI Inc	10.28	4.75	12.57	5.25	-2.29	*2.35
DMREI Und	9.40	7.24	10.87	7.73	-1.47	1.01
FUBss ₁ K	40.89	4.45	40.98	3.56	-0.09	0.12
FUBss ₂ G	40.77	9.70	42.09	8.98	-1.32	0.73
FUBss ₃ S	44.57	4.54	44.06	4.01	0.51	0.61
FUB Tot	46.68	14.31	46.66	12.30	0.02	0.01

*Significant at .05 level.

Table 26. Summary of means, standard deviations, and test of significance for posttest scores for the Interpersonal Check List, Dunn Marital Role Expectation Inventory, and Film Test for Understanding Behavior for the male group comparison.

Variables	Male Posttest Scores					
	Experimental Group		Control Group		\bar{X} diff.	t-test
	\bar{X}	S. D.	\bar{X}	S. D.		
ICL Dom	53.68	9.63	55.08	5.89	-1.40	0.62
ICL Lov	47.48	9.69	51.96	6.60	-4.48	-1.91
DMREI Cor	48.36	11.02	47.12	8.31	1.24	0.45
DMREI Inc	10.04	4.54	11.76	4.82	-0.72	1.30
DMREI Und	12.56	8.78	12.08	6.73	0.48	0.22
FUBss ₁ K	39.76	4.65	39.92	2.81	-0.16	0.15
FUBss ₂ G	40.24	9.89	39.96	10.28	0.28	0.10
FUBss ₃ S	44.16	4.32	42.60	3.79	1.56	1.36
FUB Tot	45.68	15.15	40.92	13.06	4.76	1.19

None significant at the .05 level.

Table 27. Summary of means, standard deviations, and test of significance for posttest scores for the Interpersonal Check List, Dunn Marital Role Expectation Inventory and Film Test for Understanding Behavior for the female group comparison.

Variables	Female Posttest Scores					
	Experimental Group		Control Group		\bar{X} diff.	t-test
	\bar{X}	S. D.	\bar{X}	S. D.		
ICL Dom	53.89	7.35	52.07	7.20	1.82	0.94
ICL Lov	51.00	9.13	51.71	7.59	-0.71	0.32
DMREI Cor	53.86	5.58	47.93	10.08	5.93	*2.72
DMREI Inc	10.50	5.01	13.29	5.59	-2.79	1.96
DMREI Und	6.57	3.86	9.79	8.50	-3.22	1.82
FUBss ₁ K	41.89	4.08	41.93	3.93	-0.04	0.03
FUBss ₂ G	41.25	9.69	44.00	7.30	-3.75	1.20
FUBss ₃ S	44.93	4.78	45.36	3.80	-0.43	0.37
FUB Tot	47.57	13.73	51.79	9.05	-4.22	1.56

*Significant at .01 level.