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RELATIONSHIP OF MATERNAL EMPLOYMENT TO ADOLESCENT ADJUSTMENT

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RELATIONSHIP OF MATERNAL EMPLOYMENT TO
ADOLESCENT ADJUSTMENT

DISSERTATION

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

By

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* * * * *

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August, 1980

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ACKNOWLEDGEMENTS

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CHAPTER I
INTRODUCTION

Background of the Study

American women are entering the labor force today in larger proportions than at any previous time in history. The number of working mothers has increased more than tenfold since the period immediately preceding World War II, while the number of working women has more than tripled. Fifty-nine percent of all women 18 to 64 -- the usual working ages -- were employed and 53% of all mothers with children under 18 years were in the labor force in 1978 (U.S. Bureau of the Census, 1979). Female participation in the labor force has been facilitated by the production and availability of labor-saving equipment and products for the home; concern for population growth and smaller families; birth control; childlessness; sharing of childrearing responsibilities by parents and the state; an increase in women's rights, status; and the rise of egalitarian ideologies (Burke & Weir, 1976; Hoffman & Nye, 1974). Dual-work or dual-career families are likely to become even more prevalent in our society because of such trends (Holmstrom, 1973; Rapoport & Rapoport, 1978).
Major concerns have evolved as a result of these fundamental changes occurring in the economic activities of women. Concern over the impact of maternal employment on the family has led both researchers and laypersons to question and examine the effects of maternal employment on children in a dual-work family. There appear to be certain generic features common to all dual-work families. Rapoport and Rapoport (1978) suggest five major dimensions of stress in dual-career families which may give reason to suspect that dual-work families could have a detrimental impact on the family. Overload dilemmas, personal norm dilemmas, dilemmas of identity, social network dilemmas, and role cycling dilemmas appear to result in conflicts in many dual-career families (Rapoport & Rapoport, 1978). Lack of time and fatigue are also reported as major areas of concern common to the dual-work family (Bailyn, 1971; Garland, 1972; Nadelson & Eisenberg, 1977; Poloma, 1971). Although the impact of the working wife and mother on the family has not been conclusively determined, it is apparent that there is increased stress in the family. Adaptation and coping behaviors may be key factors in mitigating stress in the dual-work family (Angrist, Lave & Mickelson, 1976; Miller, 1975; Pleck, 1977).

Changes in the traditional female role, which formerly included primarily homemaking only, is dependent
to an extent on the female's adjustment and satisfaction with her chosen role. The corresponding impact on the adjustment and satisfaction of other family members may, in fact, depend on the wife's/mother's adaptation to her role. Satisfaction with employment status is an important predictor of marital happiness, effective parent-child relations, and role satisfaction (Ferree, 1976; Hoffman, 1974; Orden & Bradburn, 1974; Propper, 1972). These relationships hold across educational levels, stages in life cycle, and part-time/full-time employment status. There is evidence to indicate that when a wife's role means fulfillment and challenge, whether employed or not, the marital relationship as well as the parent-child relationship can be enriched and provide an environment for growth and change for all family members (Arnott, 1972; Hoffman & Nye, 1974; Nadelson & Eisenberg, 1977; Propper, 1972).

Parents and others typically are concerned with the possible harmful effects of maternal employment on the child. However, little is known in part because much concern and scholarly attention has focused on studies dealing with extreme conditions. Findings from studies of institutionalized war-time babies separated from their mothers have unfortunately been generalized to maternal employment. It has been thoroughly substantiated that when children are neglected and when the
pattern is associated with marital conflict, the child does not have an environment for optimal growth, and thus often experiences developmental difficulties, including poor social adjustment. Such maladjustment, however, does not necessarily stem from maternal employment per se, rather from neglect or deprivation.

More recent research does not clearly indicate that maternal employment itself necessarily negates healthy development among children. It is now recognized that it is a fallacy to associate maternal employment per se with difficulties in development and adjustment in children. Some children are damaged by certain types of maternal separation whereas some separations may be innocuous or even beneficial. Also, some children can be damaged by too much maternal attention and from a learned incapacity to confront and deal with separations which pervade the life cycle. When mothers work, parent-child contact may not, in fact, be eliminated or even reduced, only differentially spaced and structured (Rapoport & Rapoport, 1978; Yarrow, Scott, DeLeeuw & Heinig, 1976).

There is a lack of consensus among researchers regarding specific effects of maternal employment on children; this is possibly the result of weaknesses in research procedures. However, researchers have generally concurred that children of working mothers, male and female, have higher educational aspirations and expecta-
tions, higher career goals, and somewhat higher achievement motivation though findings are inconsistent for boys in middle-class families (Almquist & Angrist, 1971; Banducci, 1967; Birnbaum, 1971; Douvan, 1963; Etaugh, 1974). The data indicate that maternal employment is associated with less traditional sex-role concepts, more approval of maternal employment, and higher respect for female competencies (Baruch, 1972; Douvan, 1963; Etaugh, 1974; Hoffman, 1963; Kappel & Lambert, 1972; King, McIntyre & Axelsson, 1968). These findings, in turn, perhaps suggest greater self-esteem for male and female children of working as compared with nonworking mothers and overall better social adjustment. However, only indirect data, i.e. correlations, personality exam scores, and teacher opinion ratings exist to support such an assumption.

The adjustment of adolescents in our rapidly changing society and particularly their adjustment in the family is presenting perhaps as many problems to parents, teachers, social scientists, and as to adolescents themselves as any area of interpersonal relations (Nye, 1963; Sebald, 1977). (Rallings & Nye, 1979) suggests a great need to deal with the variable "social adjustment." One suggestion in this regard is to differentiate between adjustment in the family, i.e., with parents and siblings, and adjustment outside the family, i.e., with peers, teachers, and friends of the
opposite sex (Rallings & Nye, 1979). Based on Nye's conceptualization of a definition for adjustment (1952), the variable adjustment was grouped into three general areas: 1) parent-child adjustment, i.e. how the child rated his/her parents, how much they helped parents with chores at home, 2) child's personal adjustment, i.e. self-concept, school grade performance, career aspirations, and 3) adjustment to groups outside of the family, i.e. friends, school activities, and popularity. Contrary to Bossard's (1954) conception of the neglected, maladjusted child of the employed mother, Nye (1952) found no correlation with parent-child adjustment and maternal employment status based on his defined areas of adjustment. However, Nye and others (Glueck & Glueck, 1957; McCord & McCord, 1959) did find a tie between delinquency and maternal employment but only in the middle class. However, the relationship is quite tenuous as a result of the omission of intervening variables, i.e., family stability, quality of parent/child interaction, and quality of substitute care.

Despite a persistent concern over the effects of maternal employment on the child, there appear to be few conclusive positive or negative effects. The effects of maternal employment appear to depend upon a number of factors including the nature of the employment; part-time/full-time employment status; socioeconomic
status; sex and age of the child(ren); length of employment, age of child at onset of employment; attitude of the mother, father, and child(ren) concerning maternal employment; as well as numerous other factors.

Controls of such variables, e.g., length of employment, sex, and age of child(ren) are sorely needed before determining how maternal employment affects the family. Also, information has traditionally been obtained indirectly from parental responses, particularly the mother, rather than from children themselves. An investigation may be more beneficial from the adolescent's perspective of his/her relation in the dual-work family, specifically concerning social adjustment of the child.

Studies conducted specifically with adolescents suggest that maternal employment has a differential effect by sex on the social perception of adolescents. It has been shown that not only are there differences in the effect of maternal employment on female and male adolescents, but these differences are affected by social class. For example, Douvan (1963) reported that daughters in working-class families with employed mothers more often chose their mothers as confidants, and had fewer conflicts with their parents than daughters of nonworking mothers. Middle-class girls tended to define maternal employment in terms of high family interaction, which is geared to training children to be
autonomous and self-reliant. The effect of maternal employment in the boy's development was a significant factor among lower-class boys when the mother's work was a product of economic necessity (Douvan, 1963; Etaugh, 1974; King, McIntyre & Axelson, 1968). A difference between male and female adolescents was noted in the way the adolescent perceived the husband-wife relationship. Male adolescents perceived the effects of maternal employment to be a greater detriment on the marital relationship than did female adolescents (King, McIntyre & Axelson, 1968).

Walters and Stinnett (1971) in their review of parenting research conclude that children of both sexes who have working mothers appear to have none or few negative adjustment effects when compared to children of both sexes with nonworking mothers. However, under certain circumstances such as social class, the male adolescent may encounter more maladjustment than the female. In summary, maternal employment increases the likelihood that the son of a lower-class working mother will:

1) be less likely to name father as the person he most admires (Douvan, 1963; Propper, 1972).

2) be more likely to indicate disapproval of father (McCord, McCord & Thurber, 1963).
3) be more likely to evaluate father lower (Kappel and Lambert, 1972).

Maternal employment increases the likelihood that the daughter of a working mother will:

1) be employed as an adolescent (Douvan, 1963; Ray, 1963).

2) score low on an index of traditional feminity (Douvan, 1963).

3) name mother as the parent she most resembles and the one she would most want to be like (Baruch, 1972).

4) want to work when she is a mother (Banducci, 1967; Almquist & Angrist, 1971; Birnbaum, 1971).

Rallings and Nye (1979) find little evidence of appreciable effects, positive or negative, on children as a result of maternal employment.

Some studies regarding the behavior and personal characteristics of adolescent children of employed mothers indicate that they are similar to those of children of non-employed mothers, perhaps as a result of the greater acceptability of maternal employment today (Propper, 1972; Rapoport & Rapoport, 1978). Adolescent adjustment may be unrelated to maternal employment, yet the major focus of prior related studies has been maternal separation of preschool or very young children; few have concentrated on the adolescent
stage. The adolescent developmental stage has been described as a period marked by turmoil within the individual and confusion in the adolescent's relationships with others (Nye & Barardo, 1973). The increasing numbers of dual-work families and their potential negative impact related to adolescent adjustment may intensify the stresses in this developmental stage. However, maternal employment may in fact be beneficial during adolescence. If the child desires more freedom, maternal employment might facilitate that process--making it easier for the mother to turn loose. The emergence of adolescence as a life stage merits investigation concerning the changing roles and adjustments for all family members.

Significance of the Problem

The increasing numbers of women moving into paid employment (Propper, 1972; Waite, 1976) and the critical stage of adolescent development (Duvall, 1977; Nye, 1973; Sebald, 1977) merit the importance of investigating the relationship between maternal employment and adolescent adjustment. There is a lack of research involving adolescents and particularly their adjustment in the dual-work family as evidenced in the review of literature and research of various authors (e.g., Douvan, 1963; Nye & Hoffman, 1963; King, McIntyre &
Axelson, 1968; Propper, 1972). Most of the more recent studies reviewed by Nye and Rallings (1978) were only incidentally interested in the effects of maternal employment on the child, and the few investigations that focused on this variable were modest in scope.

Research on the consequences of maternal employment on the child have generally failed to show much effect. However, these results are not entirely conclusive because, as Hoffman (1974) states, the typical study considers only the employment status of the mother as related to a specific characteristic of a child. Many possible intervening variables are either not recognized or not fully controlled, e.g. ordinal position of the child, length of employment, and education of the mother, among others. Even though there have been more studies on the mother-child relationship than of any other outcome of maternal employment, few data are collected from the adolescent's perception and much of the data available are not current.

There is a need for more systematic studies which examine, in the context of carefully defined variables and control groups, the consequences of a dual-work family structure (Hoffman, 1974; Rapoport & Rapoport, 1978). Specifically, one of the dependent variables of traditional interest has been the level of independence of maturity shown by the children of working mothers.
Although findings (Douvan, 1963; Hoffman, 1963) provide support for the greater independence of daughters of working mothers, available research does not permit a conclusion about sons. Another important variable is the degree of mother's satisfaction with her work as indicated in a study by Hoffman (1963). She found that mothers who liked to work overcompensated by being permissive and sympathetic with their children, to the detriment of the child's social adjustment. In contrast, the mothers who didn't like to work developed a pattern of neglect which also had negative effects, but not the same ones. A study by Whitmarsh (1965), however, suggests that maternal employment is related to favorable adjustment of adolescent girls. Daughters of employed mothers checked fewer total problems and home-related problems than did daughters of homemakers on a checklist of problems. In regard to employment status, there is conflicting data. Douvan (1963), in a study of adolescent children in intact families, found that children with adjustment problems were more likely to be those of full-time working mothers in the lower class. On the other hand, Woods (1972) in a study of lower-class mothers found that the children of full-time workers were the best adjusted.

What is clearly needed in dealing with the dependent variable of adolescent social adjustment in relation to
maternal employment is a concerted effort to overcome conceptual ambiguity (Rallings & Nye, 1979). Adjustment must be defined and variables controlled in order to assess an accurate measure of adjustment. Also needed is carefully planned research to determine if a relationship between maternal employment and social adjustment exists. Adequate controls have not been applied such as ordinal position, age of child at onset of employment, length of employment, employment satisfaction, education of mother, and early versus late adolescence. The mother's attitude and satisfaction toward employment or non-employment is seen as an important aspect of the situation that would affect her child-rearing behavior and thus mediate the impact of her employment on the child. In addition to maternal satisfaction, studies concerning the professional mother (Birnbaum, 1971; Garland, 1972; Holmstrom, 1972; Poloma, 1972) have revealed the need to consider the mother's educational level. Another research need appears to be a measure of the child's self-concept. Hoffman (1974) dealt with the child's self-concept to a degree, but it generally has not been incorporated into studies looking into the impact of work on the adolescent.

Furthermore, the typical study deals only with two variables -- the mother's employment status and a child characteristic. The child's perceptions of the dual-work
family, mother's feelings about her employment, age of the adolescent -- are rarely measured. The focus of this study was specifically to determine the impact of the relationship of maternal employment on adolescent adjustment, to assess the effect of sex on 16 measures of adolescent social adjustment, and to investigate interactions which may occur between these variables. The independent variables in the study were maternal employment status and sex of adolescent. The intervening variables were maternal employment, age of child at onset of employment, birth order, and age (i.e. early versus late adolescence) were also examined. Information obtained from the adolescents themselves and their mothers were analyzed and reported in the study. The persistent concern over the effects of maternal employment on the child and the research needs identified in the literature substantiate the significance of a more complete and controlled study of the relationship of maternal employment to adolescent adjustment.

Research Hypotheses

The purpose of this research was to investigate the effect that maternal employment has on adolescent adjustment. The following hypotheses were developed to pursue the objectives of this study. The null hypotheses to be tested were:
$H_0$ 1: There is no difference in the adolescent's perceived career aspirations as a function of maternal employment.

$H_0$ 2: There is no difference in the adolescent's attitude toward parents as a function of maternal employment.

$H_0$ 3: There is no difference in the adolescent's self-esteem as a function of maternal employment.

$H_0$ 4: There is no difference in the number of household responsibilities performed by the adolescent as a function of maternal employment.

$H_0$ 5: There is no difference in the adolescent's school grade performance as a function of maternal employment.

$H_0$ 6: There is no difference in the adolescent's popularity among school peers as a function of maternal employment.

$H_0$ 7: There is no difference in the adolescent's ability to make friends with members of the opposite sex as a function of maternal employment.

$H_0$ 8: There is no difference in the adolescent's frequency of involvement in extracurricular activities as a function of maternal employment.
$H_0^9$: There is no difference in the adolescent's ability to get along with brothers and sisters as a function of maternal employment.

$H_0^{10}$: There is no difference in the aforementioned measures of social adjustment of adolescents as a function of sex.

There are certain variables which may be related to adolescent adjustment. An overall research question was developed to guide this investigation because of the influence of these factors on adolescent adjustment.

Is the relationship between maternal employment and adolescent social adjustment accounted for by any of the following:

1) length of maternal employment
2) age of child at onset of maternal employment
3) early versus late adolescence (age)
4) ordinal position of child(ren)
5) education of mother
6) maternal satisfaction with employment status

**Definition of Terms**

For the purpose in this study:

1. **Dual-work family** is the family in which both husband and wife are involved in employment outside the home.

2. **Maternal employment status** is the participation of the mother in the labor force. Part-time employment is
employment requiring less than 40 hours outside the home per week, and full-time employment is employment requiring 40 or more working hours per week.

3. **Adolescent** is a child between the ages of twelve and eighteen.

   *Early Adolescence* is defined as twelve to fifteen years.

   *Late Adolescence* is defined as sixteen to eighteen years of age.

4. **Length of maternal employment** is the number of years the mother has participated in the labor force.

5. **Age of child at onset of maternal employment** is the age of the child when the mother entered the labor force.

6. **Ordinal position of child(ren)** is birth order -- oldest, middle, or youngest.

7. **Education of mother** is the number of years of formal education attained.

8. **Maternal satisfaction with employment status** is the degree of job satisfaction as measured by a five-point Likert scale.

9. **Adolescent social adjustment** is the process of the establishment of harmonious relationships between the adolescent and his/her social environment (Rallings & Nye, 1979).

   Measures of social adjustment included:
1) Extent of getting along with brothers and sisters as measured by a four-point Likert-type scale.

2) Extent of popularity among school peers as measured by a four-point Likert-type scale.

3) Extent of difficulty in making friends with members of the opposite sex as measured by a five-point Likert-type scale.

4) Average grade in school performance as measured by a Guttman-type scale.

5) Participation in household responsibilities determined from a composite number of chores.

6) Participation and frequency of involvement in extracurricular activities, including after-school jobs as measured by a cumulative scale.

7) Self-esteem score based on an evaluation which an individual maintains with regard to himself as measured by Coopersmith's Self-Esteem Inventory. There is a direct relationship between the score on the instrument and self-esteem.

8) Career aspirations of adolescents are determined by the level of employment sought after graduation from high school based on Hollingshead's occupational criteria.

9) Adolescent ratings of parents as measured by a five-point Likert-type scale.
CHAPTER II

REVIEW OF RELATED LITERATURE

The 1950's and early 1960's witnessed a growing research concern with the effects of maternal employment on children, culminating in several comprehensive literature reviews (e.g., Etaugh, 1972; Hoffman, 1974; Howell, 1973; Nye & Hoffman, 1963; Siegal & Haas, 1963; Walters & Stinnett, 1971; Stolz, 1960). During the last ten years, the body of literature dealing with the effects of maternal employment has continued to expand. The increased participation of women in the labor force is a trend that is not a transitory phenomenon, and there is every reason to assume it will continue (Hoffman, 1977). Technological advances, delay in age at marriage, limited family size, and increased health and longevity are factors which encourage women at every stage in the life cycle to seek employment. The focus in this chapter will be on literature that relates to the effects of maternal employment on the child, specifically the adolescent. The findings will be grouped topically into the following categories: general overall adjustment; school achievement and intelligence; activities; and relationship with parents.
General Background of Employed Mothers

Studies have shown that, on the whole, mothers who work in comparison with mothers who do not work have higher education, are in lower socioeconomic categories as compared to husband's occupation and income, include a higher proportion of widowed, divorced, or separated women, have smaller families, and more of them have urban residence (Blood, 1962; Nye, 1959; Powell, 1963; Sweet, 1973). Most of the early studies of the effect of maternal employment on children made no attempt to control these variables and in some cases had no control group of nonworking mothers. Studies during the past decade have nearly all attempted to control, either by selection or matching, some, if not all of these pertinent variables.

General Overall Adjustment

The adjustment of adolescents in our changing society and particularly their adjustment in the family has traditionally presented many problems. Nye (1952) developed a study from the general hypothesis that the differences in the adjustment of adolescents to parents are largely the product of differences in the significant social encouragement of the adolescent. A measurement of adolescent-parent adjustment was constructed and items were grouped into five general areas: 1) feeling
of being loved and accepted by parents, 2) parents' trust and confidence in the child, 3) child's feelings about the personalities of the parents, 4) socialization of the child, 5) adjustment to groups outside of family. Nye's results showed adolescent-parent adjustment was better in homes where the mother works part-time than where the mother works full-time outside the home or does not work at all. Broken homes, on the average, showed poorer adolescent-parent adjustment, and adolescents in small families showed much better adjustment to parents than did those in larger families. No significant differences were found between boys and girls in early adolescence (13-15 years), but by middle adolescence (16-19 years) boys showed a poorer adjustment than girls of the same age.

The literature reveals that adjustment is often measured by participation in delinquent or non-delinquent acts. Glueck & Glueck (1957) found emotional conflict significantly more prevalent in delinquent boys whose mothers worked sporadically than in delinquent boys whose mothers worked regularly; and hostility among nondelinquents was significantly higher in boys whose mothers were sporadic workers than in sons of housewives. The Glueck's also found more boys with defensive attitudes among nondelinquent sons of regularly employed mothers than those of housewives.
For adolescent boys, the evidence revealed no difference in the adjustment of sons of employed and nonemployed mothers, except a tendency for nondelinquent boys of employed mothers to be more defensive. The sons of irregularly employed mothers showed greater emotional conflict if delinquent and greater hostility if nondelinquent.

One study of adolescent girls (Essig & Morgan, 1946) revealed the overall mean adjustment scores of daughters of working mothers to be less well-adjusted than the girls of nonworking mothers. Responses indicated that a greater percentage of daughters of working mothers than daughters of nonworking mothers felt that a) their parents did not approve of their behavior, b) there was a lack of communication between parents and daughter, c) home life was not happy, and d) their fathers rejected them and they disapproved of their fathers. These findings might be more convincing if there had been more precise matching of groups and therefore more control of relevant variables.

More recently, no relationship seems to exist; Riege (1972) compared juvenile delinquent girls and nondelinquent controls and found no difference in the number of working mothers in the two groups. Along similar lines, Roy (1963) found that adolescent daughters of working and nonworking mothers did not differ in incidence of delinquent behavior.
Nelson (1971) administered the Minnesota Counseling Inventory (MCI) to 312 ninth-grade pupils. In all instances, the personality adjustment of boys was better when the mother worked full-time, rather than part-time or not at all whereas the girls' adjustment did not follow a consistent pattern regarding the employment history of their mother. However, on the majority of MCI scales, girls with nonworking mothers had better adjustment scores than girls with mothers who had worked either part-time or full-time. Similar findings (Baruch, 1972; Burchinal, 1963; Fish, 1970) revealed no personality differences or differences in self-esteem inventory scores between adolescent daughters of working and nonworking mothers.

A study by Whitmarsh (1965) suggests that maternal employment was related to favorable adjustment of adolescent girls. Daughters of employed mothers checked fewer total problems and home-related problems than did daughters of homemakers on a checklist of problems. Among daughters of working mothers, middle-class girls checked fewer home-related problems than did lower-class girls. This finding is consistent with Douvan's (1963) conclusion that middle-class adolescent girls adjust better to full-time maternal employment than do lower-class girls.
Two studies (Douvan, 1963; McCord, McCord & Thurber, 1963) suggest that a mother's working may pose some problems for lower-class boys. Douvan (1963) observed that lower-class boys whose mothers worked full-time were somewhat more rebellious, less active, and had poorer ego-integration than lower-class sons of women employed part-time, and middle-class sons of women working full-time or part-time. These characteristics appeared when the mother worked of necessity. In these cases there appeared to be negative features concerning the relationship between boys and their fathers as well as with their mothers. The girls whose mothers worked as a result of choice or because of self-realization, were influenced by the modeling process and incorporated many of their mothers' ego characteristics. The girls whose mothers worked only part-time seemed most well-adjusted whereas the daughters of full-time working women showed a mixed pattern of developed autonomy and unresolved dependency.

Even when the lower-class father is an adequate provider, the fact of the mother's working may diminish the son's perception of his father's status. McCord, et al., (1963) suggest maternal employment was negatively related for boys as they reported less favorable perceptions of their fathers. Maternal employment was related to son's increased sexual anxiety in stable homes, and
to increased criminality and dependency in unstable homes. Another study (Brown, 1970) found a relationship between maternal employment and poorer adjustment of boys. Though maternal employment was unrelated both to delinquency and to social maladjustment, sons of nonworking mothers made better adjustment scores on the California Test of Personality than did sons of working mothers.

Etaugh (1974) summarizes her review of literature by stating that the mother's working has little effect on the adjustment of adolescents, although lower-class boys and girls may have some problems adjusting to full-time maternal employment. Maternal employment appears to be unrelated or negatively related for boys dependent upon their social class.

Other areas of adjustment may include leadership involvement and/or self-actualization. Howell (1973) observed that adolescent sons of employed mothers saw themselves as agents for social change more often than did the sons of nonemployed mothers. Dawson (1970) found maternal employment to be unrelated to an inventory measure of self-actualization achievement among a group of 420 high school seniors.

Adjustment as a general term includes a broader perspective than adolescent behavior and personality adjustment scores. The intricacies of the scope of adjustment also involve attitudes, activities, and the
general well-being of the adolescent in all aspects of daily life which will be discussed in related areas of this paper. Although many of the earlier studies seem to indicate poorer adjustment of adolescents with working mothers, one must keep in mind the changes in societal attitudes toward working women as well as a different type of woman now working than in past decades. More recent data, Gold and Andres (1978), indicate that both sons and daughters were better adjusted when the mothers were employed. The better adjustment of the adolescent children of employed mothers could be due to the less restrictive childrearing attitudes and greater paternal activity reported in the family when the mothers were employed (Gold & Andres, 1978). It is possible that the adjustment of the daughters was also facilitated by the stronger feminist attitudes and the greater satisfaction with the mothers' roles reported by both parents when the mothers were employed. The lack of differences in the academic achievement data between sons of employed and nonemployed mothers indicates that maternal employment was a much less salient factor in the development of male adolescent children (15 years and older) than in younger children. According to recent research, it would appear that maternal employment may have no effect in adjustment of adolescents with working and nonworking mothers. However, differences
may surface when certain variables, i.e., sex, social class, length of employment, birth order, age of child at onset of employment, and attitudes of employed mothers toward their work are controlled, but overall there appears to be no significant relationship. The best adjusted children are those whose mothers are satisfied and happy with their roles, whether employed or not (Hoffman, 1974; Etaugh, 1974).

**School Achievement, Intelligence, and Career Aspirations**

Probably the child characteristics that have most often been examined in relation to maternal employment are those pertaining to academic achievement. A large sample (N = 3,014) of high school seniors showed little, if any, detrimental effects in their educational aspirations, expectations, and achievement as a result of having full-time employed mothers (Banducci, 1967). There was even a trend for them to have higher educational aspirations and expectations than children of nonworking mothers, with the exception of boys from the professional socioeconomic level. Aspirations and expectations were less divergent at higher socio-economic levels than at lower levels. Daughters with working mothers planned to combine homemaking and a career more often than daughters of nonworking mothers (Smith, 1969). Banducci seems to indicate that socioeconomic levels definitely
affect the responses in the sample. Among children of professional fathers, mother's working was related to lower aspirations in boys, and lower expectations in girls. Hoffman (1974) also suggests that children of working mothers generally have higher career goals and somewhat higher achievement motivation, although there are mixed results depending in part on social class, mother's degree of satisfaction with working status, age and sex of children, and issues of research design.

Roy (1963) found that among rural high school students, the children of working mothers were more likely to plan to go to college than were the children of nonworking mothers. This finding held for both sexes, although a general impression was that the relationship was stronger in girls. Considerable evidence has revealed that daughters of working mothers have higher academic and career aspirations as well as a higher level of achievement than the daughter of a nonworking mother. Almquist and Angrist (1971) found that career-oriented college women were more likely to be the daughters of working women, and Tangri (1969) found that college women who aspired to careers in the less conventionally feminine areas were more likely to be the daughters of working women. In studies of highly-educated professional women, both Ginzberg (1971) and Birnbaum (1971) found maternal employment a significant background factor.
Higher intelligence has been associated with maternal employment as intelligence scores were positively related to maternal employment in Woods' (1972) study of lower socioeconomic fifth graders. Hoffman (1963) however found that middle-class children of working mothers who liked their work had lower intelligence scores than did matched children of nonworking mothers, and found no differences among children whose working mothers disliked work, and the matched nonworking group. Rees & Palmer (1970) found that generally maternal employment was related to high intelligence in girls and low intelligence in boys. The impact of intelligence and academic performance seem to differ if the working mothers are professionally employed or just working. Jones, Lundsteen & Michael (1967) found the children of professional mothers were more proficient, had more plans for their education, and had higher reading achievement. Frankel (1964) found high achievers were more likely to have professional mothers. Other variables to be considered are presence of older or younger siblings in the home and age at which the children are tested.

Older youth (15-18) seem to reveal fewer differences in school achievement. Thus neither Nye (1963) or Nelson (1969) reported significant differences in a comparison that matched on academic ability. Burchinal
(1963) and Roy (1963) found adolescent sons had lower school grades, as did Banducci (1967) in his "professional" socioeconomic class where sons of working mothers had lower grades than sons of nonworking mothers. However, in the "skilled-worker" class the opposite relationship prevailed. Stolz (1960) in his earlier review of the literature found achievement in school (grades 3 through 6) of children of employed mothers to be rated lower in intellectual performance by their teachers than children of nonemployed mothers. In grades 9 through 12, there was no relation between maternal employment and school marks, and in college, women students who were academically successful had mothers with intellectual interests and aspirations.

Etaugh's (1974) summary of literature showed educational aspirations generally higher among both sons and daughters of working mothers and daughters of working mothers have higher career aspirations and more often choose male-dominated careers than do daughters of nonworking women. Howell (1973) in her review of literature reported that adolescent children of employed mothers were similar to children of nonemployed mothers in tested intelligence, academic achievement, and career aspirations. College women were found to look forward to their own careers when mothers were employed, and maternal employment was found to be significantly
related to the daughter's intellectual accomplishment (Almquist & Angrist, 1971; Sanford, 1957). Adolescent sons of employed mothers have been found to achieve higher grades in college, participate more often in social-activist events, and see themselves as agents for social change more often than do the sons of non-employed mothers (Glueck & Glueck, 1957).

Two studies (Armstrong, 1967; George & Thomas, 1967) found no relationship between maternal employment and either the I.Q. or achievement of high school students. Woods (1972) reported higher I.Q.'s among lower-class black children whose mothers worked full-time than among those whose mothers worked part-time. One study (Kriesberg, 1970) was of interest because of its focus on single-parent families. For children of married mothers, maternal employment was not related to school grades, but among single-parent mothers, employment was associated with higher grades. Keidel (1970) and Nelson (1969) report mother's working status was unrelated to grade point average among ninth-grade boys and girls.

Boys' aspirations are affected by maternal employment, although the assumption that daughters' aspirations are more influenced by maternal employment often prevails though both could be true. Brown (1971) found that maternal employment was positively related to the
occupational mobility of adult sons, particularly in white-collar families. These results were consistent with Douvan's (1963) finding that among urban middle-class boys, upward mobility striving was more often associated with part-time maternal employment than was non-mobility or downward mobility strivings.

Three studies of adult women in professional occupations (Astin, 1969; Birnbaum, 1971; White, 1967) further indicate the positive influence of maternal employment on career commitment. Astin (1969) found that women whose mothers had worked while they were growing up were more likely to be employed full-time and to have worked continuously since receiving the doctoral degree (subjects were 1,547 women doctorates). Birnbaum (1971) compared intellectually gifted women who were either traditional homemakers or university faculty members. Married faculty women were more likely to have had a working mother than homemakers. Females whose mothers were currently employed (110 senior women were subjects) showed higher career salience, and more often chose atypical occupations than did females whose mothers had never worked (Almquist & Angrist, 1970). These findings may result in part because the working mother provides a more independent role model. It may also reflect the fact that working mothers are more apt than nonworking mothers to stress independence training (Hoffman, 1977).
Although findings are inconsistent on relating maternal employment and children's school achievement, there are some indications that maternal employment is positively associated with college plans of high school children. There is evidence that college-educated daughters of working mothers have higher career aspirations and achievements than do college-educated daughters of nonworking mothers. However, there is evidence that sons of working mothers may not fare so well (Hoffman, 1963). This view receives a modest amount of support, and data suggest that the sons of working mothers in the middle class have lower academic performance. In the lower class, however, better academic performance is associated with maternal employment for both sexes.

Activities

Maternal employment may bring about not only a redefinition of household responsibility for family members, but also affect relationships within the family structure. The amount of work performed by adolescent sons and daughters may increase as a result of maternal employment and leave less time for social and leisure activities or for taking part-time or summer jobs. Another consequence of increased housework might be more parent-child disagreement over a wide range of issues. A youngster who has responsibility for household chores
may feel more entitled to independence than one who does not have this responsibility. Negative effects on parent-child relationships could result if parents have household chores to perform in addition to employment outside the house. Propper (1972) offers evidence that when mothers were employed, the adolescents had only slightly more responsibility for household chores and that their degree of participation in social activities does not differ consistently from respondents whose mothers are not employed.

Johnson (1969) found that adolescent children of working mothers were found to have more household responsibilities than children of nonworking mothers. Yarrow (1976) controlled for the education of the mother and found children under firmer control and given more responsibilities by working mothers with high school training than children of nonworking mothers, however among college-trained working and nonworking mothers, this difference did not exist. Yarrow also found that college-trained families tend to compensate for mother's employment away from home by more planned activities with the children. Hoffman (1963) even suggests that because of the mother's occasional sense of guilt for being away from the home and children, children of employed mothers are given less responsibility in the home than children of non-employed mothers.
Mothers tend to overcompensate, but these data were collected at a time when popular sentiment was more opposed to maternal employment.

Similarly, Douvan (1963) found that adolescent girls were more likely to carry major responsibilities at home when the mother worked (either full-time or part-time) than when she did not. Roy (1963) also reported that adolescent sons and daughters of employed mothers had more household responsibilities than children of nonemployed mothers, and Hedges & Barnett (1972) found the same relationship in their study. Of interest was Hoffman's study (1961) in which she found the children of mothers who enjoyed their work reported that they participated less in household tasks than was reported by the children of nonworking mothers; however, the children of mothers who did not enjoy their work reported that they participated more in household tasks than was reported by the children of nonworking mothers.

Degree of participation in social activities did not differ consistently for children of employed and nonemployed mothers (Douvan, 1963; Propper, 1972). Daughters of working mothers belonged to fewer clubs and organizations than daughters of nonworking mothers whereas more sons of working mothers were taking lessons in dancing, dramatics, speech, art, or music than were sons of nonworking women. However, children of employed
and nonemployed mothers did not differ with respect to number of hobbies and sports, activities with parents, activities with friends, and number of dates. Douvan (1963) also found few leisure activity differences between sons of working and nonworking mothers. Contrary to Propper (1972), however, Douvan reported that daughters of full-time employed mothers engaged in fewer sports, games, and hobbies, read less, and were more likely to hold part-time jobs than daughters of nonworking women. Roy (1963) similarly found that both sons and daughters of employed mothers more often had part-time jobs. George & Thomas (1967) in a comparative study of children of employed and unemployed mothers found no differences in their extracurricular activities.

Conclusions from Etaugh's (1974) review of literature were that working mothers' children tend to have more household responsibilities, but there are few differences in the leisure activities of children with working and nonworking mothers.

In summary, the data suggest that in working mothers' homes, more responsibility for household tasks is assumed by adolescents than in households of non-working mothers, although the extent of participation does not appear to affect participation in extracurricular activities, except in some circumstances where boys were more involved than girls. Propper (1972)
found little support for the proposition that household chores were so time-and-energy-consuming that adolescents of employed mothers have less time for leisure activity and part-time employment than adolescents with nonworking mothers. Evidence from limited empirical research investigating degree of participation in extracurricular activities indicates that the adolescents whose mothers work do not differ consistently from respondents whose mothers are not employed. The extent of responsibility assumed by adolescents may also be affected by the mother's attitude toward her work, although data indicate that the child of the working mother has more household responsibilities (Douvan, 1963; Johnson, 1969; Propper, 1972; Roy, 1963). One study (Douvan, 1963) however suggests that boys help less around the house when the mother is working. The methodological implications of the findings are that it may be incorrect to assume that maternal employment affects both sexes the same way, or that girls and the mother-child relationship are most crucially affected by the mother's employment (Propper, 1972).

**Relationship with Parents**

Few studies have been conducted which yield much information concerning the adolescents' perception of the parental relationship. This results largely from
the fact that most information is not collected from the adolescent's perspective and it is only recently that the impact of parental behavior on adolescents has been considered.

The earliest study (Nye, 1959) to indicate adolescents' perceptions of parental warmth and acceptance failed to reveal any significant association between employment status of mothers and affectional attitude of adolescents toward them. The data indicated that children of employed mothers showed a slight tendency to feel more fully accepted or more completely rejected than those of mothers who were not employed. Children of mothers employed part-time were less likely to feel rejected. Finkelman (1967) administered questionnaires to 96 fifth- and sixth-grade children and found no differences in perceived nurturance or authority of parents as a function of mother's working status. Franke (1972) gave 658 eighth-grade children the "Parent-Child Relations Questionnaire for Mothers" which measured ten categories of perceived maternal behaviors. Again, there were no differences in the child's perception of the mother's behavior as a function of the mother's working status. Only one significant interaction was found between maternal employment and sex of child: punishment by working mothers was perceived as more severe by girls than by boys whereas
punishment by nonworking mothers was perceived as more severe by boys than by girls. Franke (1972) concluded that working and nonworking mothers relate to their children in the same ways.

The Parent Behavior Inventory was administered to black 10-year-old children of lower-class working mothers, and only one variable was perceived differently for mothers working full-time and part-time; mothers employed full-time were more consistent in their discipline (Woods, 1972). In a study of "professional" career families, Johnson (1977) found techniques for rearing children did not differ from child-rearing of middle-class families; this finding may be a result in part of the mother's work status. The focus was on fostering the development of an internal locus of control, and they used more indirect and verbal discipline techniques. These parents felt this approach made child-rearing more time consuming and usually generated some anxiety and guilt for the mother because demands on her time and her absence from home precluded extensive attention to these different needs.

In Propper's (1972) study of lower-class high school students, reports of parent-child disagreement over a wide range of issues were common among both boys and girls when the mother was employed. However, perceptions of parental interest, help with school and
personal problems, and degree of closeness to parents were similar to those of children whose mothers were not employed outside the home. The one exception to this finding was the fact that sons of working women less frequently reported their fathers as the males they most admire. Douvan (1963) and Propper (1972) were consistent in their findings which reported that sons of working women in the lower social class less frequently chose their father as an adult ideal or the male they most admire. McCord, et al. (1963) and Blood (1965) found that sons of working mothers showed more disapproval of their fathers. This was more likely a result of the high value placed on economic success in the larger community. A mother's employment (particularly in working-class families where employment is an economic necessity) probably makes the husband appear ineffectual as a provider and as an effective ideal to his son (Propper, 1972). Douvan (1963) found that maternal employment was associated with more problems for lower-class than middle-class adolescents. In contrast, McCord, et al. (1963) found that in middle-class homes, delinquency was greater for sons of employed mothers than for sons of nonemployed mothers, even when the factor of broken homes was eliminated. Among working class families, however, delinquency was greater among sons of employed than nonemployed mothers only in
unstable homes. There have been many changes in social attitudes towards sex roles, with the changes more likely to be greater in middle- than in working-class families (Hacker, 1975). In both middle- and working-class families, the prevailing stereotype still portrays the father as the breadwinner, while the mother stays home with the children. When mothers are employed, the care of the children and home may require realigning domestic roles, necessitating role adjustments by the husband and other members of the family (Ferriss, 1971). Such role adjustments by the husband are more likely to occur in the more flexible middle-class family than in the more traditionally sex-typed working-class family where the wife might be expected to continue to fulfill her entire domestic role as well as her job role with minimal changes in the husband's role (Guttentag, 1977).

Studies of adolescents whose mothers are employed present evidence that they receive as much "emotional supportiveness" and affection from their mothers as do adolescent children of nonemployed mothers. When fathers take a substantial role in household tasks, adolescents of both sexes see mother's employment as "not threatening" to their parents' marital relationship. Even when fathers do not participate in serving the mutual day-to-day needs of the family, the children of
employed mothers are less likely to see this employment as "threatening" than are the children of nonemployed mothers (Howell, 1973). Hoffman's review of literature (1973) reveals that children of employed mothers tend to receive more independent training, although there seems to be no general lack of supervision of children. According to Yarrow's (1976) interviews of mothers from intact, white, economically stable families, child-rearing practices are not related to work status. The data, however, support the hypothesis that mothers' frustrations in nonmother roles were related to child-rearing. When mothers' motivations regarding working were taken into account, mothers who want to work but out of a sense of responsibility do not work report the most problems in child-rearing -- in the areas of control in interpersonal areas, i.e. less emotional satisfaction in relationships with their children, and less confidence in their functioning as mothers.

Maternal employment is largely unrelated to children's perceptions of maternal behavior. However, working-class daughters of employed mothers were found to be more likely to have fewer conflicts with their parents, to choose their role models from family members, and to consider their mothers as trusted confidantes, than daughters of nonemployed mothers, whereas among lower-class boys, the father is perceived less favorably when the mother works.
Summary

The findings reviewed in this paper may be summarized as follows. There is little evidence of appreciable effects, positive or negative, concerning the effects of maternal employment on the child. Mothers who are satisfied with their roles -- whether working or not -- have the best adjusted children. The mother's working has little effect on the adjustment of adolescents, although lower-class boys and girls may have some problems adjusting to full-time maternal employment. Working mothers' children tend to have more household responsibilities, but there are few differences in the leisure activities of children with working and nonworking mothers. Maternal employment appears to be unrelated to academic achievement for girls, and either unrelated or negatively related for boys. However, educational aspirations generally are higher among both sons and daughters of working mothers. Mothers in professional occupations tend to have highly achieving children and daughters of working women particularly have higher career aspirations and more often choose male-dominated careers than do daughters of nonworking women. Maternal employment is largely unrelated to children's perceptions of maternal behavior, but it is associated with less favorable perceptions of the father among lower-class
boys. Despite some sex differences, when the topic under consideration is sex roles, three propositions however can be stated which apply to both sexes. They are:

1) The level of maternal employment positively affects the child's approval of egalitarianism in the family.

2) The level of maternal employment positively affects the child's approval of maternal employment.

3) The level of maternal employment positively affects the child's evaluation of female competence.

Children of working mothers perceive smaller differences between masculine and feminine roles, and under certain conditions these children appear more androgynous (Rallings & Nye, 1979).

The literature on dual-work families thus depicts the integral and complex process of determining the impact of maternal employment on family life patterns, particularly the adjustment of the adolescent. As illustrated in the literature review, there are few conclusive generalizations concerning the effects of maternal employment. It appears that only through a process of controlling a large number of variables and many studies indicate such a need, in addition to longitudinal investigations can
conclusions be formulated. One certainty that can be accepted is that an increasing number of women are involved in the labor force and in many cases preparing themselves for a life-long pursuit of a career. The prevalence of female employment underscores the point that the adult role for females has shifted and that women will be spending more time as wage earners than as mothers (Hoffman, 1977). Thus the persistent concern over the effects of maternal employment on the child will be a valid issue for students of the family and the general public for many years to come.
CHAPTER III

METHODOLOGY

Design and Sample Selection

This study was designed to investigate the relationship between maternal employment and adolescent adjustment. Specifically, this investigation was designed to determine differences in multiple measures of adolescent social adjustment as a function of maternal employment and sex. There are certain intervening variables which may affect the relationship between maternal employment and sex and adolescent social adjustment. Length of maternal employment, age of child at onset of maternal employment, maternal job satisfaction, education of the mother, ordinal position of the child(ren), and age of the adolescent (early versus late adolescence) were incorporated as intervening variables.

The independent variables were employment status and sex of the adolescent and the dependent variables were determined as the following measures of social adjustment: adolescent's self-esteem, perceived career aspirations, attitudes toward parents, participation in household responsibilities, school grade performance, frequency of involvement in extracurricular activities,
ability to make friends of the opposite sex, popularity among peers, and the adolescent's ability to get along with siblings. The aforementioned dependent variables pertaining to adolescent social adjustment were measured by the adolescent's and his/her mother's responses to several questionnaire items.

This investigation was part of a larger study entitled "The Impact of Maternal Employment on the Family's Definition of the Male Role" directed by Dr. Patrick C. McKenry and administered by the Ohio Agricultural Research and Development Center (Hatch-644) in cooperation with Dr. Sharon Price-Bonham, University of Georgia.

Sample

The sample for this study consisted of 90 white, intact families with at least one adolescent living in the home. The couples had been married for an average of approximately 19 years, and had from one to six children, with a mean number of 3.07 (S.D. = .99). The oldest child in the families ranged in age from 12-30, with a mean of 17.9 (S.D. = 3.64) and youngest children ranged in age from 1-18 with a mean of 11.4 (S.D. = 4.1). Although several of the children were from the same family, this did not confound responses as results were sustained when only one child per family was used in the analysis, thus all adolescents (N = 137) were
used in reporting results. The mean age of these respondents was 15.1 (Range = 12-18; S.D. = 1.77) and included 64 (46.7%) females and 73 (53.3%) males; total number of adolescents involved in the study were 137.

At the time of the study the women's mean age was 41.7 (Range = 29-58; S.D. = 5.46); the men's mean age was 44.8 (Range = 29-73; S.D. = 6.83). The mean educational level of the mothers was 14.5 years (between two and three years of college), the range being 7th grade through a Ph.D. degree. The father's educational level ranged from 8th grade through a Ph.D. degree, with a mean of 16.9 years (college completed, some post-baccalaureate education).

Eighty-six (95.6%) of the fathers were employed; of these 95.3% (n = 82) were employed full-time and 4.6% (n = 4) were employed part-time. Four of the subjects (4.4%) were unemployed at the time of the survey. Fifty-five (61.1%) of the mothers were employed; 30 (55.2%) full-time and 25 (44.9%) part-time. Thirty-five mothers (38.6%) were not employed. Total family income ranged from $5,000 to over $50,000 with a mean of approximately $28,000.

The data for this study were collected using a purposive sampling procedure in pre-selected middle-income neighborhoods in Franklin County, Ohio; Fulton and Clark Counties, Georgia; and surrounding areas.
Each family member in these households was asked to participate in a study of the opinions, attitudes, and characteristics of parents and adolescent children.

Sample Selection. The sample for this study was determined by a "neighborhood sampling technique" which included four neighborhoods purposively selected from information received from the U. S. Bureau of the Census on all middle-class Franklin County, Ohio neighborhoods. This sampling technique was chosen to conform to guidelines established by Dr. Sharon Price-Bonham (University of Georgia) who administered the same survey in pre-selected housing areas in Fulton and Clark Counties, Georgia. This enabled the combination of these data from Georgia with those from Ohio. Households in each of these areas were canvassed and only two-parent families with at least one adolescent (aged 12-18) living at home were included in this study.

Information was collected from 35 families in Franklin County, Ohio neighborhoods and combined with 55 middle-class families in Fulton and Clark Counties, Georgia. The response rate was approximately 60% in Franklin County, Ohio and 75% in Fulton and Clark Counties, Georgia. The completion rate approximated 90% in both samples.
Sample Criteria. The following criteria were used to select subjects for this investigation:

1) The families were a two-parent, intact family structure.

2) At least one adolescent (aged 12-18) child must currently reside in the home.

3) The mother, father, and adolescent child(ren) must have completed the questionnaire within one week after having received the material. Incomplete surveys from fewer than three members of the family were eliminated from the study.

Procedures. The data collection for this study was completed over a period of one year. Data collection for the Franklin County, Ohio sample was completed over a period of six months, January, 1979 through June, 1979, whereas data collection for the Georgia sample was completed the six months previous, June, 1978 through December, 1978. Three questionnaires were administered to the selected sample of families which included one questionnaire specifically designed for the mother, father, and one for the adolescent. Trained data collectors explained the nature of the study, collected consent forms, and then, leaving the questionnaires and accompanying envelopes with the family, collected the completed questionnaires one week later.
The family was asked to seal their questionnaires and not to discuss their responses with other family members in order to ensure confidentiality. All information remained anonymous and the name of the participating family was not associated with any of the information provided. Those desiring results of the study returned an index card with their name and address along with, but unattached to, their questionnaires.

Instrumentation

The questionnaire approach was chosen because it was the most economical and practical means of obtaining the desired information. Standard interview questions were compiled from those of King, Safilios-Rothschild, Price-Bonham, Yarrow, and Banducci. Pilot testing was conducted on selected parent attitude questions and the reliability was internally consistent at \( r = .85 \). Content validity was assessed by a panel of judges in the field.

Open-ended questions developed by Banducci provided information on the perceived career aspirations of male and female adolescents. Perceived career aspirations were defined as the projected number of years the adolescent planned to go to school and by the level of employment sought after graduation. The former was measured numerically by the adolescent's response to an
open-ended question, How far do you plan to go in school? The latter was determined by the adolescent's response to the question, What type of job would you like to have when you finish school? and was coded according to Hollingshead's categorical levels of occupations.

To determine or measure the adolescent's attitude toward his/her parents, objective forced-choice questions were developed. The questions were: How do you rate your mother as a mother? and How do you rate your father as a father? The evaluation of responses was coded on a five-point Guttman scale: Excellent, Good, Fair, Poor, Bad. The rating represented the adolescent's attitude toward his/her parents.

The adolescent's self-esteem was measured by Coopersmith's Self-Esteem Inventory (1967). This scale measures the evaluation which an individual "makes and customarily maintains with regard to himself: (self-esteem) expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy." The Self-Esteem Inventory contains 59 items, most selected from an earlier scale developed by Rogers and Dymond (1954). Examples of the items included: I often wish I were someone else; I have a low opinion of myself; Most people are better liked than I am; I am
good in my school work; I am a happy person; and so forth. Positive responses were totalled to obtain a cumulative score. The scale has shown considerable construct validity in a series of studies by Coopersmith, establishing theoretically consistent relationships with creativity, anxiety, parental treatment, level of aspiration, and other variables.

The self-esteem scale was self-administered and subjects were required to mark either "true or false" in response to each of the 59 descriptive statements. Coopersmith's research with this instrument establishes several specific antecedents and behavioral consequents of high, medium, and low self-esteem in children. The Self-Esteem Inventory correlates with laboratory behavior and projective evidence. Interestingly, the results suggest that defense biasing is generally of little importance in these studies. Coopersmith (1967) concludes that the appropriate family environment for producing high self-esteem can be characterized by "conditions of acceptance, clear definition of rules, and respect."

Performance of household tasks and responsibilities within the home were considered as the number of chores performed in the home and the amount of help (as perceived by the adolescent) given to Mom/Dad. Household tasks and responsibilities were measured numerically by the response made to the open-ended question, What chores
do you do around the house that help your parents? Responses were measured by a five-point Likert scale on the following questions: Overall, how helpful do you think you are to your mother/father? with replies being: extremely helpful, somewhat helpful, not very helpful, or don't help at all.

Participation and frequency of involvement in extra-curricular activities was an assessment of the total number of activities in which the adolescent participated. The subjects were evaluated according to their extent of participation and number of organizations they listed such as clubs, sports, church groups, etc. and measured by a cumulative score. To gather information concerning the adolescent's participation in work outside the home, a forced-choice question, Do you work in addition to going to school and working around the house? indicated the adolescents who participated in afterschool jobs.

To collect information on the adolescent's relationships with peers and their ability to make friends and get along with members of the opposite sex, forced-choice questions, i.e. How close are you to boys your own age? and How close are you to girls your own age? solicited responses on a five-point Likert-type scale: very close, above average, average, below average, or distant. The question, How much difficulty have you had in
making friends with members of the opposite sex? was also measured by a five-point Likert-type scale: very great, great, average, only a little, or very little. Also to determine the adolescent's ability to get along with siblings, the question, How well do you get along with your brothers and sisters? was measured by a four-point Likert-type scale: very well, fairly well, not very well, not well at all.

The popularity of the adolescent among school peers was measured by his/her responses to the question, How popular are you among your fellow students at school? on a four-point Likert-type scale: very popular, somewhat popular, not very popular, or disliked. Subjects were also asked to respond to the question, What grade do you make most often on tests in school? as measured by a Guttman-type scale: A, B, C, D, or F. Responses to this question gave some indication of the adolescent's school grade performance. The aforementioned forced-choice and open-ended questions represented an attempt to collect more accurate information on the adolescent's adjustment with his/her friends; at school, and within his/her family.

Maternal employment status was measured by the mother's response to the question, Are you employed outside your home? Replies to the question, How many hours per week do you work at your job? as indicated on
an ordinal scale: 1-10 hours, 11-20 hours, 21-30 hours, 31-40 hours, or over 40 hours resulted in the number of mothers with part-time employment (those marking a response of less than 40 hours per week) and mothers who were employed full-time (indicated by marking 40 hours or more per week). Maternal employment status was defined as the mother's participation in the labor force (part-time or full-time). Maternal satisfaction with employment status was assessed by the mother's response to the following statement, I am satisfied with my job for the time being. Choice of responses were based on a five-point Likert-type scale: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree. Degree of response measured high, medium, or low job satisfaction. The education of the mother was the total number of years of formal education attained. Assessment of the highest level of education completed by the mother was her response to the question, What is the highest level of schooling completed, including graduate school?

The ordinal position of the children was computed from information given by the mother concerning the number, age, and sex of her children coded from their raw scores. Ordinal position was defined as birth order -- oldest, middle, or youngest child. Length of maternal employment was determined from the mother's
response concerning her work history. The mother's
information on the work history form included the title
of her jobs, date started and date ended. Therefore,
the length of maternal employment was computed from the
raw scores. Using this information in combination with
the information regarding the age of her children, the
age of the child at onset of maternal employment was
computed only for currently employed mothers as a
percentage of the child's life the mother was employed.
This was an effort to assess any possible relationship
between adolescent adjustment and the age of child when
the mother entered the labor force.

Early adolescence (aged 12-15) and late adolescence
(aged 16-18) were also computed from the raw scores of
the ages of the children so that age could be controlled
when looking at the relationship between adjustment and
maternal employment.

Data Analysis

The primary focus of this study was on differences
in adolescents in dual-work families and families where
only the father was employed; differences on 16 measures
of adolescent social adjustment were considered.
Maternal employment and sex of the adolescent were the
independent variables whereas the dependent variables
included the adolescent's career aspirations, attitudes
toward parents, self-esteem, participation in extracurricular activities, participation with household chores and responsibilities, ability to get along with peers, members of the opposite sex, and siblings, school grade performance, and the adolescent's popularity at school. Intervening variables included length of maternal employment, age of child at onset of employment, maternal job satisfaction, birth order, age of child (early/late adolescence), and education of mother since previous work indicated that these factors may have certain effects on the relationship between maternal employment and adolescent social adjustment.

Multivariate analysis was chosen as the primary means of data analysis. Multivariate analysis of variance, (MANOVA) focuses upon differences between groups or between experimental conditions. In analysis of variance, the issue is that of systematic differences in performance between groups of subjects with groups defined by the levels of classification of one or more independent variables, i.e. sex of child, maternal employment status (full-time, part-time, non-employed mothers). Because there were two or more distinct groups of subjects with several measures on each subject, the purpose of this study was to determine whether the groups could be significantly discriminated on the basis of a derived variable composed of a linearly
weighted combination of the several dependent variables. The question that is answered by MANOVA is whether or not the information contained in the dependent variables, considered as a group rather than individually, will discriminate between the groups or be related to an effect. (Huck, Cormier, & Bounds, 1974; McCall, 1969; Mussen, 1970).

A two-way analysis of variance (ANOVA) was used to compare the groups of adolescents along the two dimensions of maternal employment status and sex. The two-way ANOVA answered three basic research questions; the first two questions concerned the main effects of the two factors and the third research question concerned the possible existence of an interaction between the two independent variables.

In order to assess the modifying effects of the intervening variables, education of mother, birth order, and age of respondent (early/late adolescence) multivariate analysis of covariance (MANCOVA) was used to determine the effects of such variables. The intervening variables, treated as covariates resulted in adjusted scores on each of the dependent variables which were then analyzed to assess their relationship to the independent variables of sex and maternal employment.
While it would be more desirable to use the intervening variables as factors in a multivariate analysis of variance, so that their interactions with each other and with sex and maternal employment could be observed, filling all the cells in such a factorial design would require the collection of far more subjects than resources allowed. The use of residual scores makes some sense, however since the 16 adjusted scores could thereby be transformed into dependent variables with the effects of education of mother, birth order, and age (early/late adolescence) removed. Thus, the dependent variables analyzed were not the raw adjusted score for each person but rather a score which indicated how much better or worse he/she was relative to those other subjects in approximately the same situation with respect to those three intervening variables. Thus, the effects of the intervening variables were assessed in two ways: first by their multiple relationship to each of the 16 measures of adjustment, and second by the observation of differences between the ANOVAS and MANOVA of the raw scores versus the ANCOVAS and MANCOVAS of the residual scores.

While the MANCOVA was essentially a multiple analysis of variance of the 16 residual adjustment scores (i.e. with the effects of education of mother, birth order, and age removed) further analyses of the
residual scores using sex, length of maternal employment, age of child at onset of employment, and job satisfaction as predictors were performed for the subsample of adolescents with working mothers. These latter analyses were performed by multiple regressions. This was an attempt to see if specific aspects of the mother's employment would have more impact on her child's adjustment than her employment status per se; these analyses were performed only for those subjects whose mothers were employed.

In an effort to obtain a more accurate assessment of the influence of the intervening variables, correlations between the dependent and intervening variables were performed. Although the implications of the study were that the intervening variables in general do not modify the relationship between mother's employment and adjustment and/or sex, the directional relationship of these variables, exclusive of their effect as modifiers, was determined by correlation analysis.

Limitations of the Study

The possible limitations of this study include the following:

1. Certain factors may decrease the representative character of the sample. The method of securing subjects was based on a purposively
selected sample and is therefore not generalizable to other populations.

2. Cross-sectional rather than longitudinal study. A major limitation of this study, as of so many social science investigations, is its cross-sectional rather than longitudinal approach. Whereas a longitudinal study over the span of adolescent years 12-18 would have given a much more accurate report of the effects of the dual-work family, it would have involved serious difficulties such as the expense and attrition of cases through mobility and loss of interest by the subjects; consequently, the cross-sectional approach was more practical for this investigation.

3. Perception as opposed to direct observation. Because the adolescents' perceptions as opposed to direct observation were used to answer the research questions, certain factors relating to the situation at the moment may decrease the validity and reliability of the data gathered or at least pose certain limitations.

4. Reports made by adolescents. Caution should be exercised in drawing conclusions pertaining to parental attitudes from reports made by
children. Parental behavior when studied through children's reports should be recognized for what it is -- a report of parental behavior as it is observed by their children, and it cannot be assumed that these reports are perfectly valid indicators of underlying parental attitudes. Certainly, there are individual variations among children in their ability to observe and evaluate the behavior of parents. Inaccuracies in children's reports as a result of emotional and attitudinal factors may introduce a source of error.

5. Sample size. Although the sample size was relatively large, (137 adolescents from 90 families), in order to deal most effectively with the number of dependent variables (16), additional subjects would have increased the power of the statistical procedures. Future studies of this nature should utilize a greater pool of subjects.

6. Lack of employment history. Because of the lack of information concerning the employment history of these mothers, it is not known to what extent presently unemployed mothers worked in the past, as information was obtained only from currently employed mothers.
CHAPTER IV
RESULTS OF INVESTIGATION

Introduction

Analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), multivariate analysis of covariance (MANCOVA), regression, and Pearson correlations were used to analyze the collected data. The analysis produced five primary techniques for investigation:

1) Analysis of variance (ANOVA) solved for a difference on each of the sixteen dependent variables, the measures of adjustment, as a function of maternal employment and sex.

2) Multivariate analysis of variance (MANOVA) was used to analyze the multiple dependent variables (16 measures of adjustment) to determine if some combination of the dependent variables was associated with either main effects of sex or maternal employment or the interaction between the two main effects.

3) Multivariate analysis of covariance (MANCOVA) was performed to see if results different from the MANOVA were obtained when the intervening variables were treated as covariates, as a way of assessing the effects of the intervening variables.
4) The 16 residual adjusted scores that were analyzed by the MANCOVA to assess the effects of sex and maternal employment were further analyzed by regression using predictors of sex, length of maternal employment, job satisfaction, and age at onset of employment. This obviously was done only for those adolescents with employed mothers.

5) To further assess the relationship of the intervening variables on the 16 dependent measures of adjustment, Pearson correlations were run to specifically determine the relationship, if any, between the intervening and dependent variables. The probability level of .05 was used as a criterion to reject null hypotheses. The Statistical Analysis System (SAS) computer program was used to run all analyses.

The purpose of the investigation was to determine the relationship of maternal employment to adolescent adjustment, to assess the effect of sex on the 16 measures of adolescent social adjustment, and to investigate interactions which may occur between these variables. The independent variables in the study were maternal employment status and sex of adolescent. The intervening variables were the length of maternal employment,
age of child at onset of employment, maternal job satisfaction, early versus late adolescence, birth order, and education of mother. The first three intervening variables were applicable only to the subsample of adolescents with employed mothers.

To present the results of the study, this chapter was divided into four sections: 1) descriptive data, 2) data analysis; 3) hypotheses tested; and 4) discussion and summary of findings.

Descriptive Data

Descriptive data concerning the mean ages of adolescents, mean ages of children at onset of maternal employment, and percentages of adolescents with employed/non-employed mothers are provided in this section. Also included are the mean ages, age at time of marriage, employment status, education level, and income of each parent. The occupational categories of each parent is also illustrated by Hollingshead's description of occupational levels. The mean number of children per family is described as are the mean ages of older and younger children.

The subjects consisted of 90 families with a total of 137 adolescents. All subjects' ages were calculated as age at last birthday. The mean age for the adolescents participating in the study was 15.1 years. The
mean age of females with full-time employed mothers was 15.8 years, 14.8 years for females with part-time employed mothers, and 15.4 years for females with non-employed mothers. The mean age for males with full-time employed mothers was 14.7 years, 15.7 years for males with part-time employed mothers, and 14.4 years for males with non-employed mothers. The mean age at onset of employment for females was 7.8 years for girls with full-time employed mothers, and 5.5 years for girls with part-time employed mothers. The mean age for boys at onset of employment was 6 years and 8.6 years respectively (TABLE 1).

Of the female adolescents, 37 (57.8%) of their mothers were employed, whereas 27 (42.2%) adolescents' mothers were not employed, whereas 50 (68.5%) of the male adolescents' mothers were employed and 23 (31.5%) were not employed. Of the total sample, 87 (63.5%) adolescents' mothers were employed and 50 (36.5%) adolescents' mothers were not employed. (TABLE 2). This was interesting in light of the statistic that 53 percent of all mothers with children under 18 years were in the labor force in 1978 (U. S. Bureau of Census, 1979).

The mean age for mothers participating in the study was 41.7 years, and their average age at the time of marriage was 22.9 years. Only 12 persons in the
### TABLE 1

#### AGE OF SUBJECTS

<table>
<thead>
<tr>
<th>Sample Description</th>
<th>N</th>
<th>Mean Age</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males, Mothers emp. full-time</td>
<td>26</td>
<td>14.7</td>
<td>1.7</td>
<td>12-18</td>
</tr>
<tr>
<td>Males, Mothers emp. part-time</td>
<td>24</td>
<td>15.7</td>
<td>1.8</td>
<td>12-18</td>
</tr>
<tr>
<td>Males, Mothers unemployed</td>
<td>23</td>
<td>14.4</td>
<td>2.0</td>
<td>12-18</td>
</tr>
<tr>
<td>Females, Mothers emp. full-time</td>
<td>20</td>
<td>15.8</td>
<td>1.3</td>
<td>12-18</td>
</tr>
<tr>
<td>Females, Mothers emp. part-time</td>
<td>17</td>
<td>14.8</td>
<td>1.9</td>
<td>12-18</td>
</tr>
<tr>
<td>Females, Mothers unemployed</td>
<td>27</td>
<td>15.4</td>
<td>1.9</td>
<td>12-18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>137</td>
<td>15.1</td>
<td>1.77</td>
<td>12-18</td>
</tr>
</tbody>
</table>

#### AGE AT ONSET OF EMPLOYMENT

<table>
<thead>
<tr>
<th>Sample Description</th>
<th>N</th>
<th>X</th>
<th>S.D.</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males, Mothers emp. full-time</td>
<td>26</td>
<td>6</td>
<td>4.9</td>
<td>0-14</td>
</tr>
<tr>
<td>Males, Mothers emp. part-time</td>
<td>24</td>
<td>8.6</td>
<td>5.6</td>
<td>0-17</td>
</tr>
<tr>
<td>Females, Mothers emp. full-time</td>
<td>20</td>
<td>7.8</td>
<td>4.2</td>
<td>0-14</td>
</tr>
<tr>
<td>Females, Mothers emp. part-time</td>
<td>17</td>
<td>5.5</td>
<td>5.2</td>
<td>0-17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>87</td>
<td>6.98</td>
<td>5.02</td>
<td>0-17</td>
</tr>
</tbody>
</table>
### TABLE 2

**TABLE OF SEX BY EMPLOYMENT**

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>Percent</th>
<th>Col Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males, Mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emp. full-time</td>
<td>26</td>
<td>18.96</td>
<td>35.62</td>
</tr>
<tr>
<td>Males, Mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emp. part-time</td>
<td>24</td>
<td>17.52</td>
<td>32.88</td>
</tr>
<tr>
<td>Males, Mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unemployed</td>
<td>23</td>
<td>26.79</td>
<td>31.51</td>
</tr>
<tr>
<td>TOTAL MALES</td>
<td>73</td>
<td>53.28</td>
<td>100.00</td>
</tr>
<tr>
<td>Females, Mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emp. full-time</td>
<td>20</td>
<td>14.60</td>
<td>31.25</td>
</tr>
<tr>
<td>Females, Mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>emp. part-time</td>
<td>17</td>
<td>12.41</td>
<td>26.56</td>
</tr>
<tr>
<td>Females, Mothers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unemployed</td>
<td>27</td>
<td>19.71</td>
<td>42.19</td>
</tr>
<tr>
<td>TOTAL FEMALES</td>
<td>64</td>
<td>46.72</td>
<td>100.00</td>
</tr>
</tbody>
</table>
sample had been married more than once, and one person had been married more than twice, making the mean times married 1.23. Of the 55 (61.3%) mothers employed, 30 (55.2%) of these were employed full-time and 23 (44.9%) were employed part-time. The mean educational level of the mothers was approximately 14.5 years (between two and three years of college; S.D. = 2.7) the range being 7th grade through a Ph.D. or equivalent degree.

The fathers who were involved in the survey had a mean age of 44.8 years and averaged 25.3 years as the mean age when married. The mean number of times married was 1.15 with twelve persons in the sample being married more than once, and one person being married more than twice. Eighty-two (95.6%) fathers in the sample were employed with 4 (4.4%) of these fathers being employed part-time; 4 (4.4%) of the sample was unemployed during the period the survey was conducted. The educational level of the fathers ranged from 8th grade through Ph.D. or equivalent degree, with a mean of 16.9 (college completed, some post-bachelor education; S.D. = 2.81). Total family income ranged from $5,000 to over $50,000 with a mean of approximately $28,000 (S.D. = $4,000). The average number of children per family was 3.07 children with the oldest child 17.9 years of age and the youngest 11.4 years of age at the time the survey was conducted. (TABLE 3).
<table>
<thead>
<tr>
<th>TABLE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESCRIPTIVE DATA OF PARENTS IN</td>
</tr>
<tr>
<td>THE ADOLESCENT STUDY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>MOTHERS N = 90</th>
<th>FATHERS N = 90</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>41.7</td>
<td>44.8</td>
</tr>
<tr>
<td>S.D.</td>
<td>5.46</td>
<td>6.83</td>
</tr>
<tr>
<td>RANGE</td>
<td>29-58</td>
<td>29-73</td>
</tr>
<tr>
<td><strong>AGE when married</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>22.9</td>
<td>25.3</td>
</tr>
<tr>
<td>S.D.</td>
<td>4.35</td>
<td>5.33</td>
</tr>
<tr>
<td>RANGE</td>
<td>17-39</td>
<td>17-51</td>
</tr>
<tr>
<td><strong>EMPLOYMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FULL-TIME</td>
<td>33.8% (30)</td>
<td>91.1% (82)</td>
</tr>
<tr>
<td>PART-TIME</td>
<td>27.5% (25)</td>
<td>4.4% (4)</td>
</tr>
<tr>
<td>NONE</td>
<td>38.6% (35)</td>
<td>4.4% (4)</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>14.5</td>
<td>16.85</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.78</td>
<td>2.81</td>
</tr>
<tr>
<td>RANGE</td>
<td>7-20</td>
<td>8-20</td>
</tr>
<tr>
<td><strong>INCOME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEAN</td>
<td>5.3</td>
<td>5.47</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.75</td>
<td>1.77</td>
</tr>
<tr>
<td>RANGE</td>
<td>1-10</td>
<td>1-10</td>
</tr>
</tbody>
</table>
The occupational levels of both mothers and fathers were described according to Hollingshead's occupational categories. The majority of mothers (44%) were classified in Category IV which includes clerical and sales workers, technicians, and owners of small businesses. Category II (business managers, proprietors of medium-sized businesses, and lesser professionals) and Category III (administrative personnel, small independent businesses, and minor professionals) each comprised 17% of the mothers. The smallest percentage (5%) of mothers were classified as higher executives, proprietors of large concerns, and major professionals, Category I, while the largest percentage of fathers (51%) were classified in Category I. Twenty percent of the fathers were classified in Category II, previously described; 16% in Category III, as described, and the smallest percentage (3%) of fathers being machine operators and semi-skilled employees, category VI. The classification of levels of employment of mothers and fathers was interesting for comparative purposes alone, but also when the job aspirations of adolescents were analyzed according to Hollingshead as described in the summary of this chapter.
Data Analysis

This section includes the analysis of the relationships between maternal employment status and sex to the dependent variables of adolescent social adjustment. The part-time/full-time difference on the MANOVAS yielded no significant differences on the 16 measures of adjustment, thus these two categories of work status were collapsed and therefore the independent variable, employment status was dichotomous—employed, unemployed. Only the analysis of variance on each dependent variable was interpreted as there were no differences other than trivial magnitude between the multivariate analysis of variance (MANOVA) and the multivariate analysis of covariance (MANCOVA). The question of the intervening variables and their general lack of relationship to the measures of adjustment will be discussed later.

Of the sixteen univariate two-way ANOVAS performed on the sixteen measures of adjustment, six of the forty-eight F tests were significant. Four of the significant tests referred to sex effects, whereas only one referred to employment effect and one produced an interaction effect. One might conservatively assert that six significant effects out of forty-eight would not be too unlikely by chance alone. However, if one considers that there were three sets of 16 tests, i.e. 16 sex main effect tests, 16 employment main effects
tests, and 16 interaction tests then one might conclude that each of the four main sex effects tests could be interpreted with less caution than the other two significant effects, since sex appears to have a consistent effect when considered alone.

If 16 tests are performed at the .05 level of significance and all 16 null hypotheses are true, the probability that at least one of those tests will be significant by chance can be as high as 56%, depending upon the degree of relatedness between the 16 variables. Therefore, it appears that the one significant employment test and the one significant interaction might as well have arisen by chance as by a difference between population means. Further supporting the notion that any relationship between mother's employment and adjustment was quite small was the result of the MANOVA test for employment which was not significant (Wilks' Lambda F = 1.52; df = 16, 90; P > .11). Further supporting the notion of a spurious interaction effect for a particular dependent variable (number of extracurricular activities in which the adolescent participates) was the nonsignificance of the MANOVA F test (Wilks' Lambda F = 0.73; df = 16, 90; P > .76) applied to all 16 dependent variables. However, in relative terms one can probably have more confidence that a mother's employment effect exists for the dependent variable job (type of job adolescent
would like to have at completion of education; classified according to Hollingshead's Occupational Categories) than one can have confidence in the existence of an interaction effect for the dependent variable, extracurricular activity, since the significance level for the former test was .002 but only .045 in the latter test. Sampling error seems to provide a more likely explanation for the interaction effect than it does for the employment effect (TABLE 4). However, the interaction found between mother's employment and sex of adolescent with respect to the dependent variable number of extracurricular activities participated in must be noted (F = 4.12; df 1, 105; P < .05; r^2 = .028). While this interaction was not strong, it provides interesting insight for investigation. Figure 1 displays the means for boys and girls under the two conditions of mother's employment. Note that boys whose mothers were employed were more likely to engage in more extracurricular activities than boys whose mothers were unemployed, whereas the reverse was true for girls. Note in Table 6 that the \( \bar{X} \) difference in the number of extracurricular activities was 19.28 for girls and 17.30 for boys, with 2.8% of the variance accounted for by the interaction of sex and employment. Inferences could be made that the additional income of the mothers permits participation of boys in more extracurricular
TABLE 4

RESULTS OF UNIVARIATE AND MULTIVARIATE TWO-WAY
ANALYSES OF VARIANCE FOR 16 DEPENDENT
MEASURES OF ADJUSTMENT

N = 109

*significant at .05 level
**significant at .01 level

df for univariate tests are 1, 105;
for multivariate tests 16, 90

<table>
<thead>
<tr>
<th>Variable</th>
<th>$r^2$</th>
<th>Mother's Employment</th>
<th>Sex</th>
<th>Employment x Sex Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>.006</td>
<td>.58</td>
<td>.10</td>
<td>.00</td>
</tr>
<tr>
<td>Father</td>
<td>.007</td>
<td>.20</td>
<td>.57</td>
<td>.14</td>
</tr>
<tr>
<td>Chores</td>
<td>.096</td>
<td>.20</td>
<td>10.42**</td>
<td>0.84</td>
</tr>
<tr>
<td>With Sib</td>
<td>.011</td>
<td>1.02</td>
<td>.07</td>
<td>.00</td>
</tr>
<tr>
<td>Help Mom</td>
<td>.015</td>
<td>.53</td>
<td>.83</td>
<td>.10</td>
</tr>
<tr>
<td>Help Dad</td>
<td>.071</td>
<td>.14</td>
<td>7.05**</td>
<td>2.65</td>
</tr>
<tr>
<td>Job</td>
<td>.156</td>
<td>10.04**</td>
<td>5.32*</td>
<td>3.59</td>
</tr>
<tr>
<td>School</td>
<td>.043</td>
<td>1.96</td>
<td>1.12</td>
<td>.59</td>
</tr>
<tr>
<td>Grades</td>
<td>.020</td>
<td>0.00</td>
<td>1.96</td>
<td>.52</td>
</tr>
<tr>
<td>Girls</td>
<td>.062</td>
<td>.04</td>
<td>6.61*</td>
<td>0.65</td>
</tr>
<tr>
<td>Boys</td>
<td>.010</td>
<td>.81</td>
<td>0.28</td>
<td>.05</td>
</tr>
<tr>
<td>Pop</td>
<td>.030</td>
<td>.51</td>
<td>2.10</td>
<td>.28</td>
</tr>
<tr>
<td>Opp. Sex</td>
<td>.017</td>
<td>1.54</td>
<td>0.07</td>
<td>.19</td>
</tr>
<tr>
<td>Extracurricular Activity</td>
<td>.048</td>
<td>.42</td>
<td>1.48</td>
<td>4.12*</td>
</tr>
<tr>
<td>Work</td>
<td>.028</td>
<td>.11</td>
<td>2.29</td>
<td>0.21</td>
</tr>
<tr>
<td>Self-concept</td>
<td>.003</td>
<td>.07</td>
<td>0.02</td>
<td>0.13</td>
</tr>
<tr>
<td>Multivariate Test (Wilke Lambda)</td>
<td>---</td>
<td>1.52</td>
<td>2.19**</td>
<td>0.73</td>
</tr>
</tbody>
</table>
FIGURE 1
MEANS FOR EXTRACURRICULAR ACTIVITY BY SEX AND EMPLOYMENT STATUS
activities since financial provision can be made for their son's involvement, whereas girls' participation in extracurricular activities may be more dependent on the mother's amount of time allocation to assist their daughters in their selection and involvement in extracurricular activities. The inference being that mother's time is needed for girl's participation whereas financial assistance is needed for boy's participation in extracurricular activities.

The strength of the association measures (called $r^2$) for the six statistically significant tests and the means and standard deviations of each of these variables is presented in TABLE 5. As indicated in the table, one would expect females to participate more in household responsibilities and chores ($\bar{x}$ for girls = 4.04; $\bar{x}$ for boys = 3.10) whereas boys would be expected to help their fathers more than girls ($\bar{x}$ for boys = 3.10; $\bar{x}$ for girls = 2.79); however, the proportion of variance as a result of sex was 8% and 5.2% respectively. Of interest was the small difference in means of boys and girls related to the type of job one expects to have after completion of their education ($\bar{x}$ = 5.67 for girls; 6.07 for boys) while employment indicates a difference in the means of expected job for adolescents with employed mothers ($\bar{x}$ = 6.19) and adolescents with unemployed mothers ($\bar{x}$ = 5.39). The proportion of variance directly
TABLE 5

STRENGTHS OF ASSOCIATION AND APPROPRIATE DESCRIPTIVE STATISTICS FOR SIX SIGNIFICANT EFFECTS

<table>
<thead>
<tr>
<th>Ind. Var.</th>
<th>Males</th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX Effects</td>
<td>$R^2$</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Chores</td>
<td>.080</td>
<td>3.06</td>
<td>1.45</td>
<td>4.04</td>
<td>1.46</td>
</tr>
<tr>
<td>Help Dad</td>
<td>.052</td>
<td>3.10</td>
<td>0.55</td>
<td>2.79</td>
<td>0.70</td>
</tr>
<tr>
<td>Job</td>
<td>.034</td>
<td>6.07</td>
<td>1.17</td>
<td>5.67</td>
<td>1.09</td>
</tr>
<tr>
<td>Girls</td>
<td>.049</td>
<td>3.63</td>
<td>0.93</td>
<td>4.08</td>
<td>0.94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maternal Emp.</th>
<th>$R^2$</th>
<th>Employed Mothers</th>
<th>Unemployed Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job</td>
<td>.072</td>
<td>$\bar{X}$ 6.19 S.D. 1.02</td>
<td>$\bar{X}$ 5.39 S.D. 1.28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex By Mother's Emp. Interaction</th>
<th>$R^2$</th>
<th>Employed Mothers</th>
<th>Unemployed Mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>.028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td>18.4</td>
<td>15.90</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td>16.3</td>
<td>13.86</td>
</tr>
</tbody>
</table>
related to employment was 7.2%, whereas the variance related to sex alone was only 3.4%. As expected, the mean for girls in getting along with other girls was 4.08 whereas for boys, (\(\bar{x} = 3.63\)); the variance accounted for by sex was 4.9%.

**Intervening Variables**

When an attempt was made to account for the effects of intervening variables (age, education of mother, and birth order) by introducing them as covariates in the MANOVA and ANOVAS previously described, nothing other than trivial differences between the results of the analysis with the covariates and without the covariates were observed. The trivial differences obtained were that a weak employment by sex interaction was observed for the dependent variable perceived career aspirations whereas when the unadjusted dependent variable was used, none was observed. The interaction for the dependent variable activity previously significant at .045 became insignificant at .08 with the adjusted activity score. Further indicating that the intervening variables of age (early vs. late adolescence), education of mother, and birth order would not provide explanations for the lack of certain effects or the presence of the significant ones, were the low relationships between the intervening variables as presented in
Table 5. The fact that these multiple $R^2$'s are low indicated that no strong differences should have been expected between the ANOVA and ANCOVA results. Therefore, only the results of the unadjusted dependent variables have been discussed.

It is not possible, of course, to assess the effect of the intervening variables of length of maternal employment, age of child at onset of employment, or job satisfaction for those adolescents whose mothers have never been employed or were not employed at the time of the survey. For those adolescents whose mothers have been employed, regressions were performed using sex, length of maternal employment, age of child at onset of employment, and job satisfaction as predictors of the 16 residual scores that were analyzed for the entire sample via ANOVAS/MANCOVAS.

Of the 64 weights computed (4 independent variables, 16 regressions), only six were significantly different from zero. The interpretation problem present in the ANOVAS previously discussed was therefore present here as well. Sampling error is potentially as reasonable an explanation for significance as is population effects. The significant effects displayed in TABLE 6 were all rather weak. It was felt that these could be explained most parsimoniously by sampling error. For example, examination of the scattergrams which plot school
TABLE 6
WEIGHT ESTIMATES AND HYPOTHESIS TESTS FOR SIX SIGNIFICANT REGRESSION WEIGHTS ATTACHED TO INTERVENING VARIABLES FOR SAMPLE OF ADOLESCENTS WITH EMPLOYED MOTHERS

<table>
<thead>
<tr>
<th>Dep. Var.</th>
<th>Indep. Var.</th>
<th>Weight</th>
<th>t value</th>
<th>Prob. of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual &quot;Girls&quot;</td>
<td>Job. Sat.</td>
<td>0.24</td>
<td>2.16</td>
<td>0.034</td>
</tr>
<tr>
<td>Residual &quot;Chores&quot;</td>
<td>Sex</td>
<td>-0.82</td>
<td>-2.44</td>
<td>0.017</td>
</tr>
<tr>
<td>Residual &quot;School&quot;</td>
<td>Work age</td>
<td>-1.00</td>
<td>-2.07</td>
<td>0.042</td>
</tr>
<tr>
<td>Residual &quot;School&quot;</td>
<td>Time Emp.</td>
<td>-16.16</td>
<td>-2.13</td>
<td>0.037</td>
</tr>
<tr>
<td>Residual &quot;School&quot;</td>
<td>Job Sat.</td>
<td>-1.91</td>
<td>-3.22</td>
<td>0.002</td>
</tr>
<tr>
<td>Residual &quot;Work&quot;</td>
<td>Sex</td>
<td>-0.27</td>
<td>-2.28</td>
<td>0.026</td>
</tr>
</tbody>
</table>

NOTE: In each regression, the independent variables were sex, job satisfaction, work age, and time employed; the dependent variables were the 16 adjustment scores.
against the three intervening variables declared "signi-
ficant" showed that a single outlying subject may
account for the observed relationships. While one
would not wish to rule out the possibility that those
three variables, length of maternal employment, age of
child at onset of employment, and job satisfaction,
related to adolescent adjustment, a study designed
specifically to investigate those relationships would
be more appropriate in obtaining accurate information
concerning these relationships.

The relationship of the six intervening variables
on the dependent measures of adolescent adjustment
however showed some significant directional relation-
ships when correlations were performed, exclusive of
their effect as modifiers on the relationship between
sex and adjustment. Of the 96 possible correlation
effects, TABLE 7 illustrates the significant relation-
ships between the intervening variables and the 16
dependent measures of adjustment.

As expected, the intervening variable birth order
revealed several correlations consistent with other
birth order studies. There are many studies that
indicate first-born children are higher achievers, both
academically and interpersonally. The first born or
middle children get along better with their siblings
than later borns \( r = .21; N = 137; P < .01 \), this
<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>N = 137</th>
<th>N = 85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth order</td>
<td>Age</td>
<td>Educ. Mom</td>
</tr>
<tr>
<td>Mother</td>
<td>-.26*</td>
<td>.27**</td>
</tr>
<tr>
<td>With Sib</td>
<td>.21**</td>
<td>.21**</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades</td>
<td>-.17*</td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opp. Sex</td>
<td>-.18*</td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
correlational finding could be a result, in part, that first born often carry more responsibility in the care of younger siblings. Being the oldest child carries responsibilities and higher behavioral expectations from parents (Driekurs, 1958). A similar correlation existed between birth order and members of the opposite sex. A negative relationship occurred between later borns and how well they got along with members of the opposite sex \( (r = -0.18; N = 137; P < 0.05) \). Typically, younger adolescents (13-15 yrs.) do not get along with members of the opposite sex as well as older adolescents (16-18 yrs.). Therefore, the correlation may have resulted primarily because the later borns in the study were younger in age not only because they were later born.

It was interesting to note that birth order and grades revealed a significant relationship. Later borns had poorer grades than first and/or middle borns \( (r = -0.17; N = 137; P < 0.05) \). Again, this finding is consistent with other studies which have found that first borns tend to achieve higher academically than later borns. First borns tend to be more aggressive, get better grades, and achieve higher positions in society than do later-born children (Belmont & Marolla, 1973). It was not surprising to find a negative relationship between the age of the adolescent (early/late
adolescence) and work (after-school job) outside the home \((r = -.26; N = 137; P < .01)\). It is only logical that older adolescents are more likely to have after-school jobs than younger adolescents. A correlation also existed between age and how well the adolescent got along with his/her siblings. The older adolescents (16-18 yrs.) got along better with his siblings than younger adolescents (13-15 yrs.) \((r = .21; N = 137; P < .01)\). This relationship may be a result of the maturation process and increased level of responsibility assumed by older adolescents.

A significant effect also existed between age and the self-esteem of the adolescent. Certainly, as one matures and grows older, one would expect to develop a higher level of self-esteem. Self-esteem is also related to physical development, and there appears to be a reciprocal relationship between self-esteem and the school experience (Hanson & Reynolds, 1980). In agreement with previous research, the older the adolescent, the higher the self-esteem he/she holds for self as revealed in the correlational finding in this study \((r = .18; N = 137; P < .05)\). According to Hanson and Reynolds (1980), the younger the adolescent, the greater fragility and susceptibility to outside influences affecting one's self-esteem.
The more highly educated the mother or the more years of education she had completed appeared to have a positive relationship to how well both male and female adolescents got along with boys, although no relationship between these variables affected how well adolescents, both male and female, got along with girls. The relationship \( r = .20; \ N = 137; \ P < .01 \) could infer that the better educated mother presents a more positive attitude toward men than the less educated mother. This could also mean that the mother may work with men in their careers thus providing positive role models for their daughters and perhaps sons as well. The correlational effect may also be a result of the mother's self-esteem, confidence, and independence which perhaps places her on an equitable basis with her male counterparts. At any rate, there was a rather strong relationship between the mother's education and how well the adolescent, male or female, got along with boys. Similarly, the mother's education also affected how well male and female adolescents got along with the opposite sex \( r = .17; \ N = 137; \ P < .05 \). In addition to the aforementioned possible reasons pertaining to this effect, a more egalitarian relationship between parents as well in careers may result because of the mother's high educational level, thus causing a positive effect in both male and female adolescents' ability to
get along with the opposite sex. Another possible reason for these correlations resulting from the mother's higher educational level is the possibility that men are attracted to better educated and more exciting women.

A positive correlation existed between the adolescents' (male and female) ability to get along with girls and the mother's job satisfaction ($r = .27$; $N = 85$; $P = <.01$). Again, the role modeling effect may permit both male and female adolescents to get along better with girls or the fathers of these adolescents support and encourage their wives in such a way that sons and daughters perceive working women satisfied with their jobs as a very positive experience for the entire family. Somewhat surprising, was the negative correlation between higher job satisfaction and lower school/ career aspirations ($r = -.32$; $N = 85$; $P = <.01$). Perhaps when the mother is highly satisfied with her job, it may very well mean that she does not push or pressure her children into the desire for many years of education as might the dissatisfied working mother who continually tells her children they must go on to school to get better jobs. In previous studies, Burchinal (1963) and Roy (1963), results indicated that in a "professional" socioeconomic class, sons of working mothers had lower grades than sons of nonworking mothers.
As in the present study, a rather negative vicarious effect may exist which is not conducive to high achievement in adolescents when the mother is highly satisfied with her job or whose job is categorized as "professional."

Although there was not a positive correlation between job satisfaction and how far the adolescents want to go in school, the MANOVA test on employment did show adolescents of working mothers tend to choose jobs in a higher occupational category than adolescents whose mothers are unemployed.

Another significant correlation was between the dependent variable, how the adolescent rated his/her mother and the length of maternal employment; this showed a negative relationship ($r = -0.26; N = 85; P < .05$); indicating the longer the mother was employed, the lower the ratings recorded by the adolescents. In interpreting this finding as well as the other correlations, one must keep in mind the fact that responses were from adolescents and any number of conditions could have influenced their responses on any given day. This is not to say that one should ignore the above findings, but rather to interpret with caution. The older the child at the time the mother went to work seemed to have a rather positive effect on how he/she rated their mother ($r = 0.27; N = 85; P < .01$). Perhaps this finding does reveal additional insight into the
adolescent's perception of his/her mother as they rate their mothers higher when they (the adolescents) were older when mother first entered the labor force.

**Hypotheses Tested**

This section includes the research hypotheses tested in this investigation and the significant statistical findings related to each hypotheses.

**Hypothesis 1:** There is no difference in the adolescent's perceived career aspirations as a function of maternal employment.

With respect to the above hypothesis, analysis of variance scores did not provide statistical support for Hypothesis 1 (Table 5). The F value was significant \( (F = 10.04; \text{ df } = 1,105; P < .01; r^2 = .072) \). Therefore, Hypothesis 1 was rejected. Adolescents with employed mothers indicated significantly higher career aspirations (according to Hollingshead's Occupational Categories) than did adolescents with unemployed mothers on the dependent variable job (choice of job upon completion of education). No interaction was found between employment and sex with respect to Hypothesis 1. The mean differences for females with employed mothers was 6.17 with 1.00 standard deviation whereas the mean for the females with unemployed mothers was 5.08 with 1.19
standard deviation. The mean differences for males with employed mothers was 6.2 with 1.04 standard deviation compared with a mean of 5.79 for the males with unemployed mothers with 1.4 standard deviations. The mean perceived career aspirations for adolescents with employed mothers was 6.19 with a standard deviation of 1.02 while the overall mean for adolescents with unemployed mothers was 5.44 with 1.30 standard deviations. The variance accounted for as a function of employment was 7.2%, and 3.4% of the total variance was a function of sex. One can infer from these mean differences that adolescents with employed mothers tend to have higher career aspirations than adolescents whose mothers are unemployed. This could be related to the role models of the parents, the degree of independence to which adolescents are allowed, or very simply that adolescents from dual-work families tend to be more career-oriented; this has been documented in a number of research studies.

Hypothesis 2: There is no difference in the adolescent's attitude toward parents as a function of maternal employment.

The ratings of parents as given by adolescents whose mothers were employed and adolescents whose mothers were not employed failed to be rejected at a P < .05 (Father; F = 0.2; df 1,105; P > 0.65)(Mother;
Thus, the attitude adolescents have toward their parents, at least rating them on a scale from bad to excellent showed no differences among the adolescents with employed mothers and the adolescents whose mothers were unemployed. No interaction was found between employment and sex with respect to Hypothesis 2.

**Hypothesis 3:** There is no difference in the adolescent's self-esteem as a function of maternal employment.

The ANOVA score on the dependent variable, self-esteem, cannot be rejected at a $P < .05$ ($F = 0.11; \text{df} \ 1,105; \ P > 0.74$). The self-concept scores of adolescents whose mothers were employed and adolescents whose mothers were not employed revealed no differences in the adolescent's self-esteem as a function of maternal employment. No interaction was found between employment and sex with respect to Hypothesis 3.

**Hypothesis 4:** There is no difference in the number of household responsibilities performed by the adolescent as a function of maternal employment.

Data analysis was performed by analysis of variance on the dependent variable (household responsibilities).
Results were all non-significant and provided no support for Hypothesis 4 (F = 0.20; df 1,105; P > 0.66). Therefore, Hypothesis 4 failed to be rejected for the number of household responsibilities performed by adolescents whose mothers worked was no different from the number of household responsibilities performed by adolescents whose mothers did not work. No interaction was found between employment and sex with respect to Hypothesis 4.

**Hypothesis 5:** There is no difference in the adolescent's school grade performance as a function of maternal employment.

The ANOVA scores on the dependent variable, school grade performance, resulted in a non-significant score providing no support for Hypothesis 5 (F = 0.00; df 1,105; P > 0.98). Thus, Hypothesis 5 failed to be rejected at a P < .05 level of significance for adolescents whose mothers worked did not differ in school grade performance from adolescents whose mothers did not work. No interaction was found between employment and sex with respect to Hypothesis 5.

**Hypothesis 6:** There is no difference in the adolescent's popularity among school peers as a function of maternal employment.
With respect to Hypothesis 6 analysis of variance provided no statistical support for the dependent variable, popularity among school peers (F = 0.51; df 1,105; P > 0.48). Therefore, Hypothesis 6 failed to be rejected at a P < .05 level of significance. The adolescent's popularity among school peers did not differ when mothers were employed. No interaction was found between employment and sex with respect to Hypothesis 6.

Hypothesis 7: There is no difference in the adolescent's ability to make friends with members of the opposite sex as a function of maternal employment.

The ANOVA scores on the dependent variable, opposite sex, revealed no significant results (F = 1.54; df 1,105; P > 0.22) providing no statistical support for Hypothesis 7, therefore the hypothesis failed to be rejected at a P < .05 level of significance. There were no differences in the abilities of adolescents to make friends with the opposite sex when mothers were or were not employed. No interaction was found between employment and sex with respect to Hypothesis 7.
Hypothesis 8: There is no difference in the adolescent's frequency of involvement in extracurricular activities as a function of maternal employment.

Data analysis was performed by analysis of variance on the dependent variable (number of extracurricular activities). Results for the employment effect were not significant and provided no support for rejecting Hypothesis 8 (F = 0.42; df 1,105; P > 0.52). Therefore, Hypothesis 8 failed to be rejected. However, some interactive effects occurred (F = 4.12; df 1,105; P < 0.045) between employment and sex main effects. Further analysis were performed to locate the source of variation (TABLE 6, Figure 1). Even though one cannot infer that differences between males and females exist, one cannot infer that no effect exists, rather that if it does, it is difficult to know if it was due to sex or age, primarily because of the unbalanced design; this is often referred to as confounding.

Hypothesis 9: There is no difference in the adolescent's ability to get along with brothers and sisters as a function of maternal employment.

The ANOVA scores on the dependent variables (sibs) revealed no significant results (F = 1.02; df 1,105;
P > 0.31) providing no statistical support for Hypothesis 9, therefore, the Hypothesis failed to be rejected at a $P < .05$ level of significance. There were no differences among adolescents with employed or unemployed mothers in their ability to get along with brothers and sisters. No interaction was found between employment and sex with respect to Hypothesis 9.

**Hypothesis 10:** There is no difference in the aforementioned measures of social adjustment of adolescents as a function of sex.

Significant differences between males and females as a function of sex were found for the dependent variables chores, help dad, job and girls; the differences between the sexes accounted for 8, 5.2, 3.4, and 4.9 percent of the variance in the dependent variables respectively ($F = 10.42$; $F = 7.05$; $F = 5.32$; $F = 6.61$ respectively; df in each case 1,105; all the above dependent variables were significant at the .02 level of significance).

Certain variables which may be related to adolescent social adjustment resulted in the following research questions: Is the relationship between maternal employment and adolescent social adjustment influenced by any of the following:
1) length of maternal employment;
2) age of child at onset of maternal employment;
3) early versus late adolescence (age);
4) ordinal position of child(ren);
5) education of mother;
6) maternal satisfaction with employment status.

In terms of assessing the effects of the intervening variables within the group of adolescents whose mothers were employed, it was possible to assess the effects of all six intervening variables. Since main effects existed for the dependent variables chores, help dad, job, and girls, in the entire sample whereas no interactions between sex and mother's employment existed, it may be inferred that a difference between the sexes existed for those subjects whose mothers were employed. However, upon adjustment of the dependent variable scores by the six intervening variables, no differences were found between the sexes for any of the 16 dependent variables.

Further regression analyses and hypothesis tests on the intervening variables for the subsample, adolescents with employed mothers, revealed six significantly different regression weights, though each was rather weak. Most likely, these differences occurred as a result of a single outlying subject as evidenced in the scattergrams, however, one cannot ignore the possibility of the aforementioned effects.
Correlation relationships existed in 12 of the correlations between the intervening and dependent variables. Although no modifying effects of the intervening variables on the independent variables, employment and sex, were found, of interest were the directional relationships which occurred as a result of the correlation analysis as depicted in Table 7.

Discussion and Summary

For years women's attempts to seek the opportunities offered by employment or even to seek employment because of economic necessity, have been met with the adage that "a woman's place is in the home." Nonetheless, economic conditions and the trends toward equalitarianism and individuality have influenced increasing numbers of women to enter the labor force (King, Abernathy & Chapman, 1978). The number of working mothers has increased more than tenfold since the period immediately preceding World War II, whereas the number of working women more than tripled. Fifty-three percent of all mothers with children under 18 years (16.1 million) were in the labor force in 1978 (U. S. Bureau of Census, 1979).

Most parents face the question of the impact of maternal employment during the children's "formative" years as based here on Rallings' and Nye's (1979)
conceptualization of adolescent social adjustment. The purpose of this investigation was to determine if adolescents with working mothers differ from adolescents with nonworking mothers in their overall social adjustment. Exploring the possibility of existing relationships between the mother's employment and adolescent social adjustment was difficult in light of the ambiguity of a definition for "social adjustment." For the purpose of this study, sixteen dependent variables were regarded as the index for adjustment.

The concept of the neglected, maladjusted child of the employed mother (Bossard, 1954) appears to have little validity. One of the first studies to investigate adjustment (Nye, 1959) reported school performance, psychosomatic symptoms, and affectional relationship to the mother were unrelated to employment status of the mother. Douvan (1963), in a study of adolescent children in intact families, found that the children with adjustment problems were those of full-time working mothers in the lower class. On the other hand, Woods (1972), in a study of lower-class mothers most of whom were employed, found that the children of full-time workers were the best adjusted. A study by Nelson (1971) sought to determine if there was a difference in personality adjustment as measured by the Minnesota Counseling Inventory. The findings revealed that in all instances
the personality adjustment of boys was better when the mother worked full-time than if she had worked part-time or not at all whereas the girls with nonworking mothers had better adjustment scores than girls with mothers who had worked either full-time or part-time.

Generally, when considering adolescents from middle-class families, no differences were found in adolescent social adjustment between adolescents with working mothers and those whose mothers did not work (Baruch, 1972; Gold & Andres, 1977; Hoffman, 1974) as was also the case in the present study. However, the large number of factors, i.e. social class, maternal satisfaction, age of child, as well as other intervening variables appear to affect findings resulting in somewhat inconclusive or inconsistent results. Therefore, an attempt to control for such intervening variables as length of maternal employment, age of child at onset of employment, early/late adolescence, birth order, education of mother, and maternal satisfaction was a part of the design for this study. No differences were found in the results of the study on the dependent variables of adjustment when the aforementioned variables were treated as covariates and analyzed in a multivariate analysis of covariance. However, it should be noted that in order to precisely measure the effects of such intervening variables, a much larger sample would be
required to gain more statistically sound predictions of the effects of the intervening variables.

However, some correlation relationships were noted between the dependent and intervening variables in the subsample. Birth order was positively correlated with how well the adolescent got along with other siblings. The age (early/late adolescence) also produced an identical correlation which may simply mean that first borns or older adolescents get along better with their siblings simply as a function of maturity and growth. A negative relationship occurred between grades and birth order which again may be a function of growth and maturity rather than merely interpreting the result as later borns make poorer grades. A similar correlation was found between birth order and how well adolescents got along with members of the opposite sex. Again, one must exercise caution in reporting that later borns don't get along well with members of the opposite sex, when actually the growth and maturity of the child most likely affected the responses to such questions.

As expected, the younger the adolescent the fewer jobs or work experiences the child had outside the home and of particular interest was the positive relationship between age and self-esteem. The older the adolescent, the more positive self-esteem score. Again, growth and maturity permit the adolescent, when healthy adjustment
is occurring, to develop a more positive self-esteem than when younger.

The mother's education level affected only two dependent variables -- how well the adolescent got along with boys and how well they got along with members of the opposite sex. The positive relationship may have occurred as a result of the mother's more egalitarian position in the home or in her career. The more educated mother may present a role model in her relationship with her spouse as well as other men and women which adolescents perceive as healthy and positive, thus preparing them for more effective relationships with members of the opposite sex. The more educated mother may also receive more respect and consideration from her spouse and/or other men which could influence adolescents, especially girls, in getting along better with boys.

Correlations appeared between the length of maternal employment; the age of the child at onset of employment and how the adolescent rated his/her mother. The longer the mother had been employed, the lower her rating by her child. Similarly, the older the child when mother went to work, the higher the rating she received. Although the relationships were significant at the .05 level and .01 level respectively, further investigation would be required to accurately assess the meaning of these relationships.
Job satisfaction has received considerable attention pertaining to its effects on the adolescent and these correlations revealed a negative relationship between job satisfaction and school aspirations, whereas a positive relationship occurred between job satisfaction and how well adolescents got along with girls. The former may be a result, in part, to the mother's satisfaction which may precipitate less pressure or encouragement for her children to go on to school, while the mother dissatisfied with her job may push or strongly urge her children to go further in school in order to obtain better jobs. The latter correlation, job satisfaction related to how well adolescents get along with girls, may be the result of the mother's higher esteem for self as well as her peers. The father's interaction with and involvement in the family when mother is satisfied with her job may also contribute to the adolescent's perception (most likely positive) of girls, thus affecting how well they got along with girls. Although these intervening variables cannot be assessed as modifiers on the relationship between sex and adjustment, they can serve some purpose as the indicators of their relationship on specific areas of adjustment.

In this study, the two independent variables, maternal employment and sex, indicated few significant
differences on the sixteen dependent measures of adjustment. However, one must bear in mind that when dealing with this number of dependent variables, the possibility of differences occurring by chance is somewhat increased, especially when the sample size does not permit a representative cell size for each dependent variable. The research involving these variables resulted in only four significant differences related to the sex of the child, whereas only one appeared to be related to maternal employment, and one interaction effect resulted on the dependent variable, extracurricular activities. The existing literature on maternal employment offers considerable research support and insight into the analysis and interpretation germane to the impact of these variables, although some of the dependent measures of adjustment were absent from consideration in the literature.

Maternal employment is largely unrelated to adolescent adjustment as was summarized in Etaugh's (1974) review of literature in which she reported few differences in the leisure activities of children with working and nonworking mothers, as well as little effect on the overall adjustment of adolescents, although social class status may alter these conclusions.

A few studies have investigated the relationship between maternal job satisfaction and the mother-child
relationship. Hoffman (1961) studied Caucasian mothers who liked and disliked their work with regard to their behavior toward their children as well as the consequences of their behavior on their children. She found that children of mothers who did not like work showed more aggressiveness toward peers and a higher level of rebelliousness than children of mothers who were not employed. This study revealed no differences between adolescents with employed mothers and adolescents with unemployed mothers on how well they got along with their peers. One exception, as expected, was that girls got along better with girls than boys got along with boys, but this was merely a function of sex, not employment. Yarrow, Scott, DeLeeuw, and Heinig (1962) attempted to relate attitudes toward employment with maternal attitudes toward children (using an adequacy of mothering scale). Nonworking mothers who did not wish to work were rated slightly higher on adequacy of mothering than the others. Working mothers who did not wish to work scored significantly higher than nonworking mothers who wished to work. The literature focusing on maternal employment as related to the parent-child relationship is complex and inconclusive. However, it does suggest that a mother's positive or negative attitudes toward work influence her relationship with her child. Results of this study revealed no differences
in the adolescent's rating of his/her parents or in the adolescent's ability to get along with siblings or peers when maternal job satisfaction was treated as a covariate. In fact, none of the 16 dependent adjustment variables were modified by this intervening variable. However, as expected, girls got along with girls better than boys which produced a significant effect on the dependent variable, girls. Correlations also indicated a positive relationship between adolescents', both male and female, abilities to get along with girls and the higher degree of satisfaction the mothers felt concerning their jobs. This may be a result, in part to a more egalitarian relationship within the family, as well as higher self-esteem by the satisfied mother and higher regard for and by her peers. All such factors may contribute to this relationship.

There were no differences in the number of chores and household responsibilities between adolescents with working mothers and adolescents with nonworking mothers. However, earlier studies by Douvan (1963) and Roy (1961) found that working mothers' adolescent children help more around the house, although the differences were slight. As expected, there was a main effect for sex on number of chores performed in the household with girls participating in more chores than boys; Douvan (1963) even found that boys of working mothers partici-
pated even less in household chores than boys with nonworking mothers. The present study also revealed that boys "help dad" somewhat more than girls, thus indicating a possible sex role division of tasks.

The dependent variable on which both maternal employment and sex were significant was the selection of job or the career aspiration level of adolescents after completion of their education. Banducci (1967) reported a trend for children with employed mothers to have higher educational aspirations, expectations, and achievement, with the exception of boys from the professional socioeconomic level. Girls with working mothers also planned to combine a homemaking and working career in their own lives more often than did girls with nonworking mothers. Nolan (1963) found higher achievement among children of employed mothers using teacher's ratings as a criterion whereas no achievement differences were found by Armstrong (1966). Farley (1968) reported that college males whose mothers worked had higher grade point averages than those with housewife mothers, whereas there were no differences in grade point averages for females. Frankel (1964) found that more low than high achievers' mothers were employed, but he suggested that many of these mothers of low achievers "seemed to reject their role as homemaker and in general were dissatisfied with their position in the family."
Although the results of studies of differential achievement for adolescents of working and nonworking mothers are inconsistent, the results of this study found that adolescents with employed mothers select jobs at a higher occupational level than adolescents with unemployed mothers; and boys tend to select jobs at a somewhat higher level than girls. The role modeling effect may contribute to produce this effect, whereas the differences occurring as a result of sex may have occurred because there was a slightly larger number of boys with employed mothers than girls with employed mothers in the sample.

Douvan (1963) suggests that daughters of full-time and part-time working mothers are more active in their degree of participation in leisure activities as they model after their active, autonomous mothers. In contrast, Propper (1972) reported that girls whose mothers were employed indicated membership in fewer clubs, organizations, and teams than girls whose mothers were not employed. Mother's employment status was not related to the amount of male participation in clubs, teams and organizations. In agreement with Propper, the findings of this study revealed a similar conclusion; girls with employed mothers engaged in fewer extracurricular activities than girls with nonemployed mother whereas the reverse was true for boys. This could be
the result of a greater need for mother's time and involvement for their girls to participate in extracurricular activities, whereas financial supplements available from the mother's income may provide more opportunities for their boys to participate in extracurricular activities. Another influence on this finding was that girls are more involved in household chores than are boys, thus possibly permitting less time for girls' involvement in extracurricular activities.

This study with its apparent limitations indicates that maternal employment has few, if any, effects on adolescent adjustment. While studies of maternal employment as a general concept might yield little information, examination of the effects under specified conditions, such as in this study, prove to be more accurate concerning the effects of maternal employment on adolescent adjustment. The need for control in more than one variable simultaneously is apparent, thus several levels should be examined in any single study to obtain adequate insight into the process involved.

There have been many studies concerning the relationship of maternal employment to the child. Although the lack of theoretical emphasis in this research has been that the intent was centered on a social problem -- possible damage to children -- rather than on theory testing or theory extension per se. Given that objective,
the studies were reasonably successful in establishing that maternal employment into the decade of the 1970s was not generally damaging to children, although it undoubtedly was in some cases, just as it was beneficial in others. In summary, there is little evidence of appreciable effects, positive or negative (Rallings and Nye, 1979).
CHAPTER V

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purpose in this investigation was to investigate the effect of maternal employment and sex on 16 measures of adolescent social adjustment with consideration given to six intervening variables. Maternal employment status (employed- unemployed) and sex were the independent variables and 16 measures of adjustment were the dependent variables. The dependent variables tested by the univariate, multivariate, and multivariate analysis of covariance (six intervening variables treated as covariates) were 16 scores of social adjustment. The intervening variables in the study were length of maternal employment, age of child at onset of employment, maternal job satisfaction, birth order, age (early/late adolescence) and education of mother.

Ninety families participated in this study with a total of 137 adolescents -- 64 girls and 73 boys. Of the sample, 55 (63%) of the mothers were employed, and 35 (37%) were unemployed. The criteria for selection of subjects were that the family be a two-parent intact family structure with at least one adolescent between the ages of 12 and 18 currently residing in the home.
The data were collected over a six-month period, January - June, 1979 from middle-income neighborhoods in Franklin County, Ohio and in Fulton and Clark Counties, Georgia six months previous (June, 1978 -December, 1978) to the data collection in Ohio. The neighborhoods were systematically canvassed so that all residents had an equal chance of being selected for the study.

In this study, the measures of adjustment were derived from responses to a paper and pencil questionnaire consisting of standard questionnaire items -- open-ended questions, and Likert and Guttman scales.

The data relevant to adolescent social adjustment were analyzed by a two-way analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), multivariate analysis of covariance (MANCOVA), and regression to determine main effects for employment status, sex, or any interaction between the two. MANCOVA was used when intervening variables treated as covariates were analyzed on the dependent variables for corrected adjustment scores. No differences were noted between ANOVA/MANCOWA. Correlations between the intervening and dependent variables were performed to further assess their influence on the dependent variables of adjustment. All analyses were run using the Statistical Analysis System (SAS) computer programs. The .05 level of statistical significance was the criterion used for hypothesis testing.
Results of the hypotheses testing and data analyses are presented below:

**Hypothesis 1:** There is no difference in the adolescent's perceived career aspirations as a function of maternal employment.

Significant differences were found on the dependent variable. Therefore, Hypothesis 1 was rejected. Adolescents with employed mothers tended to select jobs (careers) in a higher categorical level, according to Hollingshead, than adolescents with unemployed mothers.

**Hypothesis 2:** There is no difference in the adolescent's attitude toward parents as a function of maternal employment.

No significant differences were found on the dependent variable. Therefore, Hypothesis 2 was not rejected.

**Hypothesis 3:** There is no difference in the adolescent's self-esteem as a function of maternal employment.

No significant differences were found on the dependent variable. Therefore, Hypothesis 3 was not rejected.
Hypothesis 4: There is no difference in the number of household responsibilities performed by the adolescent as a function of maternal employment.

No significant differences were found on the dependent variable. Therefore, Hypothesis 4 was not rejected.

Hypothesis 5: There is no difference in the adolescent's school grade performance as a function of maternal employment.

No significant differences were found on the dependent variable. Therefore, Hypothesis 5 was not rejected.

Hypothesis 6: There is no difference in the adolescent's popularity among school peers as a function of maternal employment.

No significant differences were found on the dependent variable. Therefore, Hypothesis 6 was not rejected.

Hypothesis 7: There is no difference in the adolescent's ability to make friends with members of the opposite sex as a function of maternal employment.
No significant differences were found on the dependent variable. Therefore, Hypothesis 7 was not rejected.

Hypothesis 8: There is no difference in the adolescent's frequency of involvement in extracurricular activities as a function of maternal employment.

No significant differences were found on the dependent variables. Therefore, Hypothesis 8 was not rejected. However, some interaction effects occurred which indicates variance from some source of interaction between the two main effects.

Hypothesis 9: There is no difference in the adolescent's ability to get along with brothers and sisters as a function of maternal employment.

No significant differences were found on the dependent variable. Therefore, Hypothesis 9 was not rejected.

Hypothesis 10: There is no difference in social adjustment of adolescents as a function of sex.

Significant differences were found on four of the dependent variables of adjustment, therefore, there was
a significant effect for sex. Thus, Hypothesis 10 was rejected. The number of chores, the amount of help given to Dad, the ability to get along with girls, and the selection of jobs after completion of education differed as to the sex of the adolescent.

In response to the research question pertaining to the intervening variables, there were several interesting correlations (12 out of a possible 96) such as birth order and its relationship to grades in school, and how well the adolescent gets along with siblings and members of the opposite sex. The age of the adolescent (early/late adolescence) showed positive correlations between the adolescent's self-esteem and getting along with siblings. Also, the younger the adolescent, the fewer jobs maintained outside the home. The mother's educational level was positively related to how well the adolescent got along with boys and members of the opposite sex, while for the subsample of adolescents with working mothers, the mother's job satisfaction was positively related to how well the adolescents got along with girls. Mother's job satisfaction was negatively related to the number of years of school the adolescent perceived himself/herself to complete. The length of maternal employment was negatively related to the adolescent's rating of the mother, while the older the child when the mother first entered the labor force, the higher the rating given by the adolescent.
Other analyses concerning the intervening variables were regressions performed on the subsample of adolescents with employed mothers where length of maternal employment, age of child at onset of employment, job satisfaction, and sex were treated as independent variables in relationship to the adjusted residual scores. Six rather weak significant effects were found, however, they were most likely a result of sampling error or a single outlying subject as was indicated on the scattergrams.

Implications

This study has many implications for both family scholars, practitioners, and dual-work family members concerned with the effect of maternal employment on adolescent adjustment. Although maternal employment and its effect on children has received considerable attention, there is little conclusive evidence related to long-term effects of maternal employment, particularly during the adolescent years. Also, the lack of controls of important intervening variables in prior studies perpetrate the need for specific research on adolescent social adjustment. The crucial stage of adolescence as well intensifies the impact of the family on his/her adjustment. Reports from parents and professionals are valuable in projecting long-term effects on adjustment in the dual-work or father-only employed family; however
acquiring information from an adolescent population, as is represented in this study's sample, may be a more accurate attempt in acquiring information to make such predictions. Application of research findings from this study as related to effects of maternal employment on adolescent adjustment may help eliminate many negative assumptions often associated with maternal employment and adolescent adjustment.

**Family Practitioners**

In the applied area of family studies, the following implications/considerations appear warranted as a result of this study:

1. The role of the American woman has clearly changed, with the mother role occupying less and the wage-earner role occupying more of her adult life. These changes have significance for the man's role too, with corresponding adjustments beginning to appear in the form of a more active fathering role and a decreased emphasis on the breadwinner role. The discrepancy between these new adult role requirements and the existing socialization practices creates much potential conflict. In order to diminish traditional socialization patterns, training and awareness of persons, rather than males and females, may be accomplished through formal educational classes in parenting, in
family life education programs, and recognition that eliminating masculine and feminine roles may enhance adolescent adjustment.

2. Bernard (1975) has pointed out that the female's socialization may not be appropriate preparation for modern motherhood or academic/occupational goals. This certainly indicates the need for the development of coping skills in a society of ambiguous role expectations as well as encouragement of a greater diversity of career and/or family choices in educational, religious, legal, and family institutions. The social adjustment of adolescents may depend in part on their abilities to accept the challenges of their parents' sex roles.

3. Increase in the man's role as parent can be expected from the increase in the woman's dual role of mother and wage earner. As men become more involved in the parent role and increase their appreciation for this role, new socialization practices should develop which will allow both boys and girls to develop the positive emotions of warmth and thus achieve a higher level of adjustment. Father's increased participation in child rearing will facilitate the development of independence and achievement in girls as well as boys, possibly lessening the sex differences that still seem to exist.
4. By understanding the conflicts and overload dilemmas experienced by dual-work parents, professionals such as marriage counselors and other family practitioners, will be better able to facilitate positive methods of coping with the problematic aspects of this lifestyle in order to facilitate and assist maintenance of valuable goals and skills of parenting.

5. Practitioners who work in family and marital counseling have a unique opportunity to provide input for parents who are experiencing the many strains associated with the dual-work lifestyle. One available strategy is to provide group experiences for dual-work couples. By sharing common problems, couples would come to feel a sense of community with other dual-career families thus lessening their feelings of guilt and alienation. Common problem groups would also be helpful as a way to pool knowledge and systemize information on available resources (babysitters, domestic helpers, etc.).

6. Groups made up of couples at differing stages in the life cycle could provide anticipatory socialization experiences for the younger couples who have not yet faced some of the dilemmas. Role-playing exercises such as re-enacting common household dramas would facilitate the learning of specific conflict resolution skills and provide couples with a sense of mutual
support and commonality from other group members, including their adolescent children.

7. Helping dual-career couples learn the skills for implementing family meetings in their homes would probably provide the opportunity for families to change and grow over time as the needs of the family group and individuals change. Creating equitable parent-child as well as husband-wife relationships provides an opportunity for all members to contribute to the rules that govern family living. Tolerance of less than ideal circumstances and allocations of responsibilities would be enhanced if all family members could share openly their thoughts and feelings in relationship to problems and constraints perhaps unique to the dual-work family.

8. Input from family practitioners in terms of management skills if division of labor and fuel allocation is indeed a stress, can help families organize and plan activities in an effective and efficient way.

9. Dual-career marriages often have at least one child (Bebbington, 1973) and seldom more than two (Leslie & Leslie, 1977). They typically do not have children until the wives are well established in their careers. This is in contrast to their conventional counterparts who first have children and then enter the labor force (Rapoport & Rapoport, 1971). The wives in these couples are viewed as risking loss of many sources
of social support from the larger society (Rapoport & Rapoport, 1976). Thus the need arises in helping these families effectively defend their choice as they cope with societal and peer pressures. Self-acceptance and consensus of their chosen roles is essential to a successful relationship. The family practitioner may actually assist the family in identifying themselves as "facilitators" capable of complimenting and supporting one another as they integrate family and work.

10. The presence of and expected continued increase in number of dual-career marriages have definite implications for the clinician. It is imperative that training (initial and continuing) of marriage and family clinicians increasingly focus on the uniqueness of each family system, subsequently eliminating the notion of one family model and including non-sexist counseling (Price-Bonham & Murphy, 1980).

11. Many dual-work couples were not dedicated to this lifestyle when they married or even after birth of children and most probably considered it only to be temporary. Couples may need to clarify how their marriage contract has changed and decide whether they can cope with such changes. They may need help in accommodating the differences in their coping abilities and the speed of their emotional commitment to the existence of changes which are already fact (Price-Bonham
Help in accepting personal relationship limitations, resentment over "role overload," reallocation of everyday tasks, decision of whether to have children and the realization of such an impact on the marriage may demand clinical attention. Children would increase demands on time, money, and family tasks -- thereby multiplying dilemmas which will need solution.

12. Persons in dual-work relationship often appear motivated by the dictum of being best at everything. Putting this demand on every area of life, including marriage, parenting, career and recreation results in individual and relationship strain. The therapist may need to assist them and their children, as this study indicates higher career aspirations for children with employed mothers, in accepting their human limitations and in prioritizing areas of personal and relationship investment.

13. The tendency for adolescents with employed mothers to have higher career aspirations than adolescents with unemployed mothers points to the need for encouragement from parents and appropriate vocational guidance services at the secondary school level. The opportunity to enhance career choices of adolescents should be strengthened by the family and secondary school system as well.
14. Educators at all levels of the public school system as well as educators associated with adult education and continuing education have an opportunity to help remove the stigma associated with maternal employment and adjustment of children. As this study indicated, maternal employment appears to have no detrimental effect on adolescent adjustment, and there may in fact be positive benefits as a result of the dual-work family. There is a most apparent need for generally educating the public concerning the necessity (in many cases) and benefits for all family members which can result from the dual-work family.

15. Organizations and institutions in which work takes place must also carry responsibility in the personal lives of their participants. For example, could an early afternoon carpool deliver and pick up teenagers from music lessons, football practice, doctor's appointments, etc.? Could an institution provide a recreation center, study area, game room, etc. for teens to utilize until parents were off work? It appears that organizations can more fully take into account their involvement and responsibility for the personal and familial consequences of work conditions and work arrangements.
Research and Theory Development

In the areas of future research thrusts and theory construction, the findings of this study point to the following suggestions:

1. The studies that compare families of working and nonworking mothers to ascertain the effects of employment require careful precision matching, lest the differences, or the lack of differences, observed turn out to be merely a function of selective factors.

2. As the dual-work family becomes an increasingly common occurrence, additional research is required to examine the effects of the socialization process on children, specifically adolescent adjustment on a long-term basis as well as work history and socialization patterns of women. Greater research utilization of the more encompassing and scientific longitudinal studies is needed to more accurately determine effective means of socialization which enhances adolescent adjustment.

3. This study suggested that there were few differences in adolescent adjustment between dual-work and father-only employed families. However, additional research is needed to determine factors which contribute to a child's adjustment in such family situations, utilizing those conceptual frameworks (e.g. systems and symbolic interactionist frameworks) that might best ascertain these adjustment processes.
4. In research as well as policy, one must consider the joint effects of work and family system memberships. It is not enough to ask what kinds of work situations (occupations) maximize and minimize the prospects for family well-being and what kinds of personal-familial arrangements maximize and minimize the prospects for well-being at work; rather one must consider the interaction of the work situation and family dynamics. What kinds of families are most vulnerable to stresses introduced by the nature of the occupational worlds with which members interact? How does personal stress-producing work affect the lives of other people close to the worker? And how do strained family processes affect the prospects for satisfying work life, for people in different kinds of occupational situations, for women as well as men?

5. There may be potential hazards in the dual-worker parenting situation; yet, as this study indicates there are no indications of disadvantages to adolescent adjustment and perhaps even advantages to adjustment in this environment of dual-work parenting. There is a greater chance that the father will be involved rather than disengaged or inaccessible, and this has been shown to benefit both his wife and children. The increased repertoire of parental role models can enrich as well as confuse identifications and life choices
that the developing young person makes. This study indicates no differences in the perception of how "good" his/her mother or father is as a function of maternal employment status. However, the field remains one of great challenge and many new perspectives to the selection of research topics and the formulation of meaningful conceptualization are now available.

6. Replication of the study with a much larger scale random sample is needed to decrease the possibility of sampling error. In order to effectively assess the influence of a large number of dependent variables and intervening variables, as was attempted, additional subjects would increase cell size and the power of the statistical procedures.

7. Considering the problems of studying adolescents, it is recommended that future studies combine the two methodologies of the perception/survey completed by adolescents with direct observations of the adolescent.
APPENDICES
APPENDIX A
Parents Permission for Participation

I ______________________ (name of parent) freely and voluntarily consent to participate in a research project concerned with parents and teen-agers perception of family life. Specifically the purpose of the study is to obtain information from parents and teen-agers concerning attitudes and behaviors in your family life. The research is to be performed under the direction of Dr. Patrick C. McKenry, who is authorized to use the services of others in the performance of the research.

The procedure is as follows: I will complete a paper and pencil questionnaire (the questions will be multiple choice or fill-in-blank). I understand that I will not put my name on any material that is to be returned to the researchers.

I understand that my participation is completely voluntary and I have the privilege of not participating in the project or ceasing to participate at any time. However, due to the anonymity of the questionnaire, it will be impossible to withdraw the data once I have turned it in.

I understand that any further inquiries I make concerning this procedure will be answered. I understand my identity will not be revealed in any publication, document, recording, videotape, photograph, computer data storage, or in any other way which relates to this research.

Date ___________________________ Signature ___________________________
Parents Permission for Child Participation

I __________________________ (name of parent) freely and voluntarily consent for ____________________ (name of child) to participate in a research project concerned with parents and teen-agers perception of family life. Specifically the purpose of the study is to obtain information from parents and teen-agers concerning attitudes and behaviors in your family life. The research is to be performed under the direction of Dr. Patrick C. McKenry, who is authorized to use the services of others in the performance of the research.

The procedure is as follows: My child will complete a paper and pencil questionnaire (the questions will be multiple choice or fill-in-blank). I understand that my child will be instructed not to put his/her name on any material that is to be returned to the researchers.

I understand that my child's participation is completely voluntary and that my child has the privilege of not participating in the project or ceasing to participate at any time. However, due to the anonymity of the questionnaire, it will be impossible to withdraw your child's data once it is turned in.

I understand that any further inquiries I make concerning this procedure will be answered. I understand my identity or that of my child will not be revealed in any publication, document, recording, video-tape, photograph, computer data storage, or in any other way which relates to this research.

_________________________________  __________________________
Date                                    Signature
APPENDIX C
The Behavioral and Social Sciences Review Committee has taken the following action:

1. Approve (_____ Waiver of written consent)

2. Approved with conditions

3. Disapprove

with regard to the employment of human subjects in the proposed research entitled: THE IMPACT OF MOTHER'S EMPLOYMENT ON THE FAMILY'S DEFINITION OF THE MALE ROLE

Patrick C. McKenry is listed as the principal investigator.
Fam Rel & Hum Dev
Campbell
1787 Neil Ave.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subject Review Committee for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the Research Committee, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: 04/16/90
Signed: (Chairperson)

cc: Original-Investigator
Ken Sloan
Development Officer
File

Form PA-025
Rev. 10/79
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