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Relations between Parents' Expressive and Instrumental
Traits and
Expectations and
Several Early Adolescent Outcomes

A thesis submitted in partial fulfillment of the
requirements
for the degree of Master of Science at Virginia Commonwealth
University

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ABSTRACT

RELATIONS BETWEEN PARENTS' EXPRESSIVE AND INSTRUMENTAL
TRAITS AND EXPECTATIONS AND SEVERAL EARLY ADOLESCENT
OUTCOMES

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The purposes of this study were: (1) to determine the degree to which parents' instrumental and expressive expectations are predicted by their instrumental and expressive personality characteristics, (2) to determine the degree to which these parental trait and expectation variables predict several selected early adolescent outcomes, and (3) to examine differences between the findings for sons and the findings for daughters.

The subjects were 174 seventh-grade girls and 103 seventh-grade boys and their mothers and fathers. All members of these triads filled out questionnaires and participated in interaction sessions. Data from the parental and child expectations Q-Sort, parental responses to the Personal Attributes Questionnaire (PAQ), and child responses to questions concerning their self-esteem,

self-consciousness, educational aspirations, and views of their parents were all employed in this study. The PAQ was viewed as measuring instrumental and expressive traits rather than the global constructs of masculinity and femininity. It was hypothesized that parental traits would be positively but moderately predictive of parental expectations. It was also predicted that parental traits (to a lesser degree) and parental expectations (to a greater degree) would be predictive of all child outcomes (the androgyny hypothesis). Differences between sons and daughters were predicted with respect to all of the child outcomes. Analyses were run separately for each parent-child dyad via hierarchical regressions (with forward selection procedures being applied at each step). Also, the median split technique was applied to the PAQ data and differences between the four resulting groups were assessed with ANOVAs. Differences between the son and daughter findings were assessed with t-tests.

It was found that parental traits were predictive of parental expectations only for the father/daughter dyad. Fathers' expectations were predictive of many of the male child outcomes and mothers' traits were predictive of many of the female child outcomes. It was hypothesized, on the basis of the present findings, that same-sex parents are more influential with respect to their children than opposite-sex parents. Other implications of these findings were discussed.

Parental expressive traits were predictive of child self-esteem for same-sex dyads. The importance throughout early childhood of parental warmth and acceptance for resulting child outcomes may underlie such findings. These stable parenting behaviors may be tapped by parental report on the PAQ. Parental expectations were predictive of child self-expectations but only for sons. Also, the androgyny hypothesis was not supported by these data. The median split and regression analyses yielded similar findings, with regressions being the preferred method.

It was found that girls experience lower levels of self-esteem and higher levels of self-consciousness than boys. Such a finding was in line with the Gender Intensification Hypothesis (Hill & Lynch, 1983). It was also found that both instrumental and expressive expectations were seen as more important by parents of daughters than by parents of sons. To explain such results, additional analyses were run whereby pubertal status was taken into account. Directions for future research were discussed.

INTRODUCTION

Central to the present study are questions of how certain parent variables affect important early adolescent outcomes. One principal interest is in the degree to which parents' instrumental and expressive expectations for their children are predicted by their instrumental and expressive personality characteristics. The terms instrumental and expressive will be defined and explained later in this introduction. The purpose of this portion of the study is to test the notion (contrary to common claims) that what parents report they are (i.e., personality characteristics) is only moderately related to what they report they expect of their children.

A second principal interest has to do with the predictive utility that these parenting variables have for several relevant child outcomes. These child outcomes will be described later. It is useful before doing so to describe the overall working hypothesis of this study. It will be hypothesized that relevant child outcomes are predicted better by parental expectations than by parental personality characteristics. What a parent is will have less of an impact on what a child believes or does than what a parent expects or does. This notion is fundamental to the

hypotheses that will be advanced below and will be discussed in detail later.

First, a review of the literature on masculine and feminine personality characteristics will be presented. In this review, it will be argued that the current masculinity and femininity measures may really be measuring instrumental and expressive personality characteristics. Following this discussion, issues involving the relationship between parental personality characteristics and expectations in terms of instrumentality and expressiveness will be presented. In addition, relevant literature on the predictive utility of the parental variables for the child outcome variables will also be discussed. A summary of the hypotheses and major aspects of this study will be presented at the end of this introduction section. It should be mentioned that this study is based on data already collected as part of the research program on Social Relations in Early Adolescence conducted by John P. Hill at the Boys Town Center for the Study of Youth Development (Hill, 1980b).

Instrumentality and Expressiveness as Personality Variables

One of the measures which will be used in this study is the Personal Attributes Questionnaire (PAQ; Spence, Helmreich, & Stapp, 1974). It will be argued that this instrument is best thought of as measuring "facets of the

more global domain of masculinity and femininity... namely, instrumental and expressive personality traits, respectively (Lubinski, Tellegen, & Butler, 1983, p.429)." The discussion will begin with an overview of the relevant literature. It should be mentioned that although this portion of the introduction is detailed, the information presented is necessary since in this study interpretations concerning the PAQ will be formulated in a manner which significantly departs from much of the current literature.

Gender Identification and Sex Roles

Initially, sex was treated as a dichotomous variable so as to look at the differences between males and females. Furthermore, the degree to which one accepts his or her biological sex is thought of as the level of one's gender identification (Spence & Helmreich, 1978). Sex roles, on the other hand, have been defined by Block (1973) as "the constellation of qualities an individual understands to characterize males and females in his culture (p.512)." In psychology, these qualities could include sex-differentiating personality characteristics, behaviors, attitudes, abilities, preferences or expectations. Thus, it can be seen that certain stereotypic expectations exist in every society with respect to how males and females should behave.

The degree to which one adopts the expected male sex role or female sex role is very difficult to assess. One may ask if we are talking about one's behaviors, one's personality characteristics, or one's attitudes. Also, as Angrist (1969) and Hill and Lynch (1983) point out, the role that a person adopts is expressed differently over time and across different social settings. One may behaviorally adhere very closely to role expectations in one situation but may violate these expectations, with no negative consequences, in another situation. As a result, one may have an overall preference for a certain sex role but may behaviorally express whatever role happens to be appropriate in a given situation.

In addition to the situational variables, there are certain individual differences which may vary the expression of adopted sex roles. Spence and Helmreich (1978) point out that differences between people may exist in their "attitudes toward the appropriateness of maintaining traditional sex role distinctions, personal preferences for certain kinds of activities, and perceptions (realistic or unrealistic) of the positive or negative consequences of acting in certain ways (p.14)." In result, certain personality and situational variables mediate the behavioral expression of one's adopted sex role attitudes.

On the other hand, one's personality characteristics, as opposed to one's behaviors, can be seen to be less situationally dependent (Spence & Helmreich, 1978). Thus, sex roles are more easily, and probably more accurately, studied when they are defined as beliefs about self or as personality characteristics. It is for this reason that Spence and Helmreich chose to study sex roles (i.e., masculinity and femininity) in terms of personality variables rather than as behavioral outcomes (Spence & Helmreich, 1978). To support this stand, they state that "the literature... suggests the utility of traitlike notions when one's intent is to understand the implications of individual differences for broad areas of real-life functioning (p.15)." A discussion regarding the relationship between personality variables and behaviors will be presented in a later section.

Masculinity and Femininity

Constantinople (1973) has raised the question of whether the personality variables masculinity (M) and femininity (F) are anchors of a single bipolar dimension or if they are two independent (orthogonal) dimensions. In her review of then existing M-F tests (The Attitude-Interest Analysis Test, Terman & Miles, 1936; The Masculinity-Femininity Scale of the Vocational Interest Blank, Strong, 1936; The Masculinity-Femininity Scale of the MMPI, Hathaway &

McKinley, 1943; The Femininity Scale of the California Psychological Inventory, Gough, 1957; The GAMIN M scale, Guilford & Zimmerman, 1949), she concluded that the available evidence, with regard to M-F scales (ones which use a bipolar scale), suggests that M and F should be measured as independent and separate dimensions. She also raises the important question of what the M-F scales measure. That is, one may ask whether they are measuring the global traits of masculinity and femininity or if they involve a multidimensional analysis of several "subtraits, such as aggressiveness, sensitivity, self-confidence, etc. (p. 405)."

The masculinity and femininity measures which have been developed subsequent to the Constantinople (1973) review have been based on the assumption that a person's scores on the masculinity and femininity subtests are independent (or orthogonal). In his writings, Bakan (1966) has provided a similar conceptualization of the related terms agency and communion. He believes that these constructs "characterize two fundamental modalities in the existence of living forms...Agency manifests itself in self-protection, self-assertion, and self-expansion; communion manifests itself in the sense of being at one with other organisms (p. 14-15)." He goes on to point out that agency is a masculine characteristic which occurs primarily in males and that communion is a feminine characteristic which occurs

primarily in females. He adds, however, that an important task of any male is to attempt to "mitigate agency with communion" (with the task of the female being the reverse) implying that high levels of agency and communion can coexist. (Parsons & Bales (1955) used the terms instrumentality and expressiveness in the same way that Bakan used agency and communion, respectively. In keeping with Spence and Helmreich's (1978) work, the terms instrumentality and expressiveness will be used in the present study.) As with agency (or instrumentality) and communion (or expressiveness), masculinity and femininity have been thought of as coexisting such that the presence of one does not imply the absence of the other.

Consistent with this notion, Bem (1974) and Spence, Helmreich and Stapp (1974) developed measures of masculinity and femininity. The Personal Attributes Questionnaire (PAQ) was developed by the Spence and Helmreich research group and originally was comprised of 55 items primarily drawn from the Sex Role Stereotype Questionnaire developed by Rosenkrantz, Vogel, Bee, Broverman, and Broverman (1968). The 55 items of the original PAQ were selected because they were items that described characteristics "that are not only commonly believed to (stereotypically) differentiate the sexes but on which men and women tend to report themselves as differing (Spence & Helmreich, 1978, p.32)." The PAQ was eventually shortened to 24 items which included eight

masculinity items, eight femininity items and eight M-F items (the M-F items are bipolar in nature). It should also be noted that the items on the PAQ have been shown to be socially desirable in both sexes to some degree (Spence, 1983).

In the past, the PAQ has usually been scored by a median split method (Spence & Helmreich, 1978, 1979a). Persons scoring above the median on the M scale and below the median on the F scale are classified as Masculine. Persons scoring above the median on the F scale and below the median on the M scale are classified as Feminine. Those below the median on both scales or above the median on both scales are classified as Undifferentiated and Androgynous, respectively. It has been assumed that males who have been classified as Masculine and females who have been classified as Feminine have rated themselves as being sex-typed or traditional in their sex role orientation.

The Bem Sex Role Inventory (BSRI; Bem, 1974) will be discussed only briefly since it is not a measure which will be used in this study (but it is relevant to this literature review). Like the PAQ, the BSRI contains socially desirable instrumental and expressive traits which yield a masculinity and femininity score. These scales have been found to be orthogonal (Bem, 1974). Originally, Bem used Androgyny as a label for those who score similarly, regardless of level, on

the M and F scales. Later, however, in keeping with Spence and Helmreich's (1979a) notion that only those who score high on both the M and F scales should be categorized as Androgynous, Bem (1977) concluded that a distinction should be made between high-high and low-low scorers. Thus, the PAQ and the BSRI are now scored in the same way.

Since the development of the PAQ and the BSRI, several investigators have attempted to determine just what it is that the PAQ and the BSRI measure. Even the developers themselves have backed off from many of their original assumptions and conclusions.

Pedhazur and Tetenbaum (1979) have found that the BSRI is factorially complex. In a factor analysis, they found that the BSRI yields four factors each for males and females. In addition, many of the feminine items were not found to be socially desirable. Presumably in response to this study, Bem has shortened her instrument so as to include only those items which are socially desirable (Spence, 1983). The PAQ has not been evaluated as harshly as the BSRI. Helmreich, Spence and Wilhelm (1981) provide very convincing evidence for the psychometric quality of the PAQ. With all samples, the factor analyses yielded two factor structures which were labelled as masculinity/instrumentality and femininity/expressivity. Reliabilities (Cronbach alphas) were also found to be quite high. On the other hand, they

point out that these measures only have construct and predictive validity when they "are regarded narrowly as measures of instrumentality and expressiveness...The PAQ and other instruments cannot be regarded...as all-purpose measures of masculinity and femininity (p. 1107)." Thus, although the scales were labelled Masculinity and Femininity, Spence and Helmreich have begun to be more conservative in their statements about what it is the PAQ measures.

Instrumentality and Expressiveness

Unlike Spence and Helmreich, Bem (1974,1975) believes that the BSRI measures the global concepts of masculinity and femininity and provides an overall measure of a person's sex role identification. Spence (1983) states that:

one of the many implications of this (Bem's) theory is that a measure of restricted empirical content, the BSRI, can be used to infer individuals' global self-concepts of masculinity and femininity and the degree of sex role identification, and therefore to predict other components of that empirically diverse catalog of masculine and feminine attitudes, qualities, and behaviors in addition to instrumental and expressive traits (p.441).

To counter this argument, Spence and Helmreich point out that attitudes, qualities, and behaviors are multidimensional and in many cases cannot be predicted by scores on the BSRI or the PAQ (Helmreich, Spence, & Holahan, 1979; Spence & Helmreich, 1979b; Spence, Helmreich, & Stapp,

1975). They argue that researchers using the PAQ have an "obligation" only to interpret their results as relating to the personality traits of instrumentality and expressiveness and only as being predictive of behaviors which call upon these instrumental and expressive traits. Too many researchers use the PAQ and the BSRI to make statements about a person's role behaviors, personality characteristics, role expectations (perception of what behaviors are expected by others) and attitudes towards such role expectations (Spence & Helmreich, 1980).

Spence and Helmreich maintain that the PAQ and the BSRI are only minimally related to subjects' preference for sex role behaviors such as ironing a cloth napkin or tightening a screw (Helmreich, Spence, & Holahan, 1979). Therefore, a person's "abilities, interests, attitudes, values, and external pressures must be taken into account" when attempting to predict sex role behaviors (Spence & Helmreich, 1980, p.16). Spence and Helmreich acknowledge that their research group should have moved more quickly away from the gender-related labels (i.e., Masculinity and Femininity) that have become so popular (Spence, 1983).

Bem (1974,1975) also claims that those who score high on both the M and F scales of the BSRI and the PAQ (Androgynous individuals) are more behaviorally "flexible" and psychologically healthy than those who endorse only those

items which fall on one or the other of the two scales. Once again, Spence and Helmreich (Spence, 1983; Spence & Helmreich, 1980) remind us that they believe that such extrapolations to many types of behaviors that do not necessarily require instrumental and expressive traits from scores on the PAQ and the BSRI are not warranted. To support this contention, they have reported very low correlations between the PAQ and the Attitudes Towards Women Scale (Spence & Helmreich, 1978). As said before, they also found that the PAQ only accounted for a small amount of the variance in preferences for performing a series of masculine, feminine and neutral activities (Helmreich, Spence, & Holahan, 1979). Such a finding is contrary to what would be expected if the PAQ predicted sex role behaviors. They concluded again that the "PAQ and other similar instruments are largely measures of instrumental and expressive personality traits rather than sex roles and that these personality dimensions are only minimally related to many sex role behaviors (Helmreich, Spence, & Holahan, 1979, p.1631).

Thus, the notion that behavioral flexibility (in a global sense) is highly correlated with high scores on the M and F scales of the PAQ and BSRI has not been supported. In other words, if the M and F scales are not predictive of sex role behaviors, then they must not be measures of the global constructs of masculinity and femininity. It should also be

mentioned that the notion of whether or not masculinity and femininity (as opposed to instrumentality and expressivity) are, in fact, orthogonal constructs is now being seriously questioned (Pedhazur & Tetenbaum, 1979; Spence & Helmreich, 1980).

In summary, masculinity and femininity can be seen to be multidimensional in nature in that they are presumably made up of "a host of factors of various types and degrees of independence (Spence, 1981, p.77)" and, therefore, should not be used as the labels for the characteristics that the PAQ and the BSRI measure. Such use will only serve to further the current conceptual confusion. On the other hand, it is perfectly reasonable to hypothesize that a "true" measure of masculinity and femininity (should one ever be developed) will predict sex role behaviors. But for now, the evidence that the PAQ and the BSRI do not predict such behaviors lends support to the notion that these instruments are only measures of instrumental and expressive traits which are hypothesized only to predict behaviors which call upon these instrumental and expressive traits. (To test this hypothesis, Holmbeck and Bale (1984) have recently found significant correlations between masculinity scores on the PAQ and BSRI and socially desirable self-reported instrumental behaviors. It was also found that femininity scores were predictive of socially desirable expressive behaviors.)

The only reason that Spence and Helmreich (Helmreich, Spence & Holahan, 1979; Spence & Helmreich, 1979b) have employed the terms masculinity and femininity is because their scales differentiate between the sexes to a certain degree. From their perspective, androgyny, as a term, only refers to those who are high in instrumental and expressive traits. Although Spence and Helmreich agree with the notion that scores on their measures have implications for behaviors across situations, instrumentality and expressiveness are not seen as equal to or as the sole determinant of behaviors (Spence & Helmreich, 1979b) as would be the case with masculinity and femininity. Thus, in this study, it seems most appropriate, given the limited nature of the PAQ, to discuss any significant predictions made by the PAQ in terms of the predictiveness of instrumentality and expressiveness, per se, rather than of the all-encompassing terms of masculinity and femininity.

Instrumentality and Expressiveness as Continuous Variables

Most studies which have used the PAQ and the BSRI have relied exclusively on the median split method of scoring. Such a scoring method transforms continuous data into nominal data consisting of four categories. This procedure has been discussed earlier and is outlined in detail in Spence and Helmreich (1978). They justify the use of such a system by saying that "the categorization method we have

developed has turned out to be both easier to communicate conceptually and more parsimonious computationally (Spence & Helmreich, 1978, p.36)." Although they admit that there is a substantial loss of information when employing such a technique, they argue that the use of multiple regression techniques provides no substantial increases in the amount of variance accounted for (thus indicating to them that it is not necessary to employ such techniques).

Besides the loss of information inherent in the median split method, another obvious problem with this technique is the lack of reliability of categorizing those subjects who are very near the median. It is quite possible, when using such a system, that individuals whose M and F scores are very similar can be categorized differently and individuals whose scores are quite different to be given the same label. In a critique of this scoring technique, Pedhazur and Tetenbaum (1979) also point out that since medians are determined based on the sample being used, an individual may be labelled in one way when they are part of a specific type of group and in another way when they are part of another group. In addition, although Bem uses the median split technique in her research, she points out that by using a multiple regression procedure, one is able to determine the independent effects of the M and F scores on the dependent variable (Bem, 1977). Since the goal of the present study is to compare the independent effects of the parental PAQ

scale scores and parental instrumental and expressive expectations as to their predictive utility for selected child outcomes, the median split technique can be seen to be inappropriate for the reasons noted above.

The best illustration of the use of regression techniques in this type of research was in two recent studies by the same investigators (Lubinski, Tellegen, & Butcher, 1981; 1983). The analyses of the current study will lean rather heavily on their work. In their research, Lubinski et al. (1981,1983) use hierarchical regression techniques to predict personality variables (derived from the Differential Personality Questionnaire which was developed by Tellegen (1982)) with PAQ scale scores. For this type of study, such analyses seemed very appropriate. On the other hand, as Spence (1983) points out, "they (were) after larger theoretical game." Lubinski et al. (1981,1983) use the MxF interaction as an operational definition of androgyny. Although such interactions of main effects are important to look at in regression analyses, such a conceptualization of androgyny, from Spence's point of view, does not have strong theoretical or empirical support in the literature. Tellegen and Lubinski (1983) disagree. They cite several papers which lend support to this notion (Bem, 1979; Hargreaves, Stoll, Farnworth, & Morgan, 1981; Harrington & Anderson, 1981; Kaplan & Bean, 1976).

In the present study, a conservative approach will be taken. The measures will be treated as continuous variables and interactions will be tested. On the other hand, because the specifics of just how the two scales (instrumentality and expressiveness) interact (if at all) has not been conclusively determined, it seems inappropriate and premature at this time to view androgyny as a simple multiplicative interaction between the two scales. Assumptions such as an equal weighting between instrumentality and expressiveness within androgyny are implicit in the simple multiplicative notion but as yet have not been conclusively shown to be the case.

One possibility is to discuss results of this study in terms of the predictive utility of androgyny if both instrumental and expressive main effects come out significant. Such an interpretation assumes an additive model for androgyny. In this case, we would be assigning a label to people who score high on instrumentality and expressiveness. On the other hand, it seems more appropriate to speak merely of the predictive utility of the variables used in the analyses rather than assigning labels to particular occurrences of those variables. As stated earlier, all results will be reported in terms of child outcomes being predicted by high and low levels of parental instrumentality and expressiveness and interactions between the two. (It should be mentioned at this point that all

relevant analyses in the present study will also be run by subjecting the PAQ data to the median split technique so as to enable this researcher to compare results of the different types of analyses and compare the findings of this study with those of previous studies in the literature.)

Treatment of the Parental Personality Variables

Following is a summary of how the parental instrumental and expressive personality variables will be treated:

1. Scores on the two scales of the Personal Attributes Questionnaire (PAQ) will be viewed as measuring levels of instrumentality and expressiveness rather than levels of masculinity and femininity.
2. The scales of the PAQ will be treated as continuous variables. Interactions between the scales will be tested. In addition, the scores will be dichotomized using the median split technique so as to facilitate intra- and inter-study comparisons.

In the next section, the relevant research on parental instrumentality and expressiveness, as measured in terms of personality characteristics and expectations/goals, will be presented. Later, the focus will be on how well and in what ways these parental variables predict important child outcomes.

Relations between Parental Instrumental and Expressive
Traits and Expectations

In the present study, parental instrumentality and expressiveness will be examined in two ways. They will be measured in terms of parental personality characteristics and in terms of parental expectations and goals for their child. The correlations between these measures will be studied as will their correlations with the child outcomes. In this section, relevant literature concerning the relationship of parental personality characteristics and expectations to each other will be reviewed. Later, the literature on the relationship between these parental variables and the child outcomes will be examined.

At the outset, it should be mentioned that there is a relative dearth of literature in this area of parent-child relations in early adolescence. Only three studies are directly relevant (Hill, 1967; Lynch, 1981; Spence & Helmreich, 1978) and a few others are only peripherally related. Some work has been done which looks at the relationship between parental masculinity and femininity and relevant child outcomes. Far less work has been done on parental expectations. Only the Hill (1967) study directly compares parental characteristics and expectations with respect to how they relate to a child outcome. Thus, this study is somewhat exploratory in nature and the hypotheses that will be proposed will be based on a piecing together of several relevant studies.

In a related study which used a portion ($N = 48$) of the data for fathers and daughters from the larger data set which will be used in the present study (the data have already been collected for this study and the procedures will be explained in more detail in the Methods section), Lynch (1981) investigated the differences between traditional and androgynous fathers with respect to their instrumental and expressive expectations for their pre- and postmenarcheal daughters. Based on a review of the literature, Lynch predicted that "androgynous fathers will place more importance on instrumental achievement characteristics and goals for their daughters than traditionally masculine fathers will (and that) this difference will be greater in fathers of late pubertal girls than those of early pubertal girls (p.36)."

To test this hypothesis, she used the Personal Attributes Questionnaire (PAQ) (Spence, Helmreich & Stapp, 1974) and a Q-Sort which contained items which tapped instrumental and expressive expectations and goals. Parents were asked to "sort these cards as to how important you think each characteristic or goal should be to your daughter right now in her life." Items were categorized into instrumental and expressive expectations based on ratings by staff members working on the "Family Relations in Early Adolescence" project of which John P. Hill was the principal investigator (Hill, 1980b). (Because this Q-Sort measure will be used in

this study, more will be said about it in the Methods section). Median split techniques were used to select fathers that could be labelled as traditional and androgynous. Daughters were grouped into pre- and postmenarcheal. Thus, Lynch used a 2x2 ANOVA design with 12 families in each cell. She used this design for both instrumental and expressive expectations (the dependent variables).

She found that traditional fathers tend to place less importance on instrumental expectations in post versus premenarcheal daughters and that androgynous fathers place more importance on such expectations in post versus premenarcheal daughters. These findings, with respect to traditional versus androgynous fathers, were reversed for expressive expectations.

When the results were collapsed across menarcheal status, no main effect was found for the PAQ categories with respect to instrumental and expressive expectations. This finding suggests that menarcheal status is a very important variable to take into consideration. Without using this variable, there were no differences between traditional and androgynous fathers with respect to their instrumental and expressive expectations. On the other hand, this same data could be analyzed in a different way. Rather than using the median split technique to categorize parents on the basis of

their PAQ scores, one could examine the correlations between instrumental and expressive personality characteristics and instrumental and expressive expectations. By studying the relationships between these variables in their raw form, interesting and significant relationships may be found. For example, Spence and Helmreich (1980) and Holmbeck and Bale (1984) would predict that scores on the PAQ will be predictive of behaviors and attitudes which draw on significant levels of instrumental and expressive traits. Insofar as one can think of instrumental and expressive expectations as tapping instrumental and expressive traits, respectively, significant correlations between instrumental personality characteristics and instrumental expectations and between expressive personality characteristics and expressive expectations would be expected.

Spence and Helmreich (1978) have also considered the relations between parental characteristics and their behaviors. They state that:

it seems quite conceivable that these parental characteristics (instrumentality and expressivity) are themselves correlated with the socialization techniques the parent employs...Commonsense considerations suggest that parents' masculinity and femininity and their child-rearing behaviors are not only correlated but also interact with each other in complex ways (pp.142-143).

Although Spence and Helmreich (1978) did not report analyses which looked at the relationship between parental instrumental and expressive personality characteristics and

instrumental and expressive expectations and goals, they did report some analyses which are relevant. On the basis of a factor analysis of their Parental Attitudes Questionnaire (please note that this is not the same as the Personal Attributes Questionnaire) which was filled out by high school students with regard to their parents' attitudes and behaviors, they labelled one of the factors "Male Achievement Standards." Such a factor seems to be tapping instrumental expectations. Some of the items on this factor are as follows: "My mother encouraged me to do my best on everything I did," and "If I go on after I finish my education and have a very successful career, my parents will be very pleased." Although this factor only emerged in the factor analysis for males, it was applied to further analyses for both males and females. No such factor emerged which could be labelled as "expressive expectations" for the boys or the girls.

In general, they found that children who reported that their parents are androgynous also report that these parents exhibit significantly higher levels of instrumental expectations (i.e Male Achievement Standards). Families in which both parents were masculine were not seen as displaying such high levels of instrumental expectations. Thus, one could conclude that it may be that a person who exhibits a combination of instrumental and expressive personality characteristics is more likely to display

instrumental expectations. Such a conclusion is basically a statement of what has been called the "androgyny hypothesis." That is, a person who reports having significant levels of both instrumental and expressive personality characteristics (an androgynous person) is more likely to exhibit instrumental expectations.

It should also be noted that such an hypothesis results from data that is entirely based on high school children's reports concerning their parents. The data which will be employed for this portion of the present study will include parents' report of themselves rather than the children's report of the parents' personality characteristics and will include early adolescents (age 12) rather than high school students. Also, different measures of expectations will be used and will include measures of both instrumental and expressive expectations. Thus, the present study will ask similar questions with different measures and different reporters.

In summary, discrepancies exist in the literature as to whether or not there is a relationship between the PAQ and instrumental and expressive expectations. Although the Lynch (1981) data includes a portion of the data which will be included in the present study, it only involved analyses with fathers and daughters and the cell sizes were extremely small. Given Spence and Helmreich's (1978) hypotheses and

partially confirmatory findings that instrumental and expressive personality characteristics do predict expectations that draw upon instrumental and expressive traits, similar hypotheses will be advanced here.

Therefore, it is hypothesized that:

1. Instrumental and expressive personality characteristics as measured by the PAQ will positively predict instrumental and expressive expectations, respectively, in both mothers and fathers. It is also predicted that such correlations will be significantly positive but moderate (so as to be consistent with the Spence and Helmreich findings). Their work suggests that what parents report they are (i.e., personality characteristics) is positively correlated, but only moderately so, with what they expect of their children.
2. It is also predicted that instrumental and expressive personality characteristics will additively combine (i.e. will both enter into hierarchical regression equations as significant predictors) to positively predict higher levels of both instrumental and expressive expectations. (It should be mentioned that no data are available which supports or refutes our hypotheses regarding expressive expectations. Thus, these hypotheses are somewhat speculative). No significant interaction effects are expected.

3. In keeping with hypothesis 2 above, it is also predicted that when the parental PAQ data is subjected to the median split technique, androgynous mothers and fathers will have the highest levels of instrumental and expressive expectations.

Predictions with regard to the child outcomes will be theoretically similar to those advanced above (additive combinations of instrumentality and expressivity being predictive) so as to give the study some internal consistency and because evidence for such hypotheses has been found by Spence and Helmreich (1978). On the other hand, this hypothesis has not achieved undisputed support. Baumrind (1982), for example, has shown some evidence that sex-typed parents are more effective persons and parents and produce more competent children. Thus, it should be kept in mind that the hypotheses advanced here have not received universal support.

Parental Instrumental and Expressive Personality
Characteristics and Expectations as Predictors of
Selected Child Outcomes

As mentioned earlier, little research has been done which combines all of the variables that will be used in this study. Therefore, hypotheses will be built on a review of several disparate but related studies. This portion of the study concerns whether parental personality characteristics

or parental expectations are better predictors of relevant child outcomes. The child outcomes that will be examined here are as follows: self-esteem, self-consciousness, the child's own instrumental and expressive expectations and goals for himself or herself, how much a child wants to be like his or her parents (a parental attractiveness variable), the child's view of his or her parent's life satisfaction (also a parental attractiveness variable) and the child's self-reported level of educational aspiration. Each of these variables will be addressed separately.

The dependent variables just listed were chosen for the following reasons:

1. Since this study is exploratory to some degree (with respect to the parental independent variables chosen), child outcome variables which are commonly used in parent-child studies have been selected.
2. For reasons which will be clear later, these dependent variables lend themselves to hypotheses based on the predictability of the parental independent variables.
3. More specifically, self-esteem has been used as an outcome variable in numerous studies which employ measures of masculinity/instrumentality and femininity/expressiveness. As Whitley (1983) points out, the relation between sex-role orientation and self-esteem has been of enormous concern. (In fact,

- he presents a meta-analytic review of 35 such studies). Self-consciousness has not been used as frequently but its use is warranted because it clearly is influential in adolescent development.
4. Children's self-expectations and educational aspirations can be seen to be important outcomes of parental socialization techniques (i.e., parental expectations). In addition, educational aspirations is a commonly used child outcome variable (Kandel & Lesser, 1972; Spence & Helmreich, 1978).
 5. The parental attractiveness variables are somewhat exploratory. On the other hand, it will be interesting to determine what the contributions of parental expectations and personality characteristics are to how the child rates his or her parent's level of "attractiveness."
 6. Also, since the data that will be used in this study have already been collected, the child outcome variables that were selected had to have been available in Hill's (1980b) "Family Relations in Early Adolescence" data set.

At this point, it is important to provide the reader with a qualification. Those who do research in this area have found that numerous parental behaviors, attributes and expectations are impinging on any one child outcome at any one time. Coopersmith (1967) notes that "first and foremost

there are virtually no parental patterns of behavior or parental attitudes that are common to all parents of children with high self-esteem (p.239)." Spence and Helmreich (1978) come to a similar conclusion when they note that clusters of certain behaviors are more important than single behaviors in determining child outcomes. Thus, in the present study, it seems important to note that, regardless of the findings, since single variables will be used as predictors, the reader should keep in mind that it will be impossible to make global statements about parenting in general. Rather, the purpose of this study is to compare the predictive utility with respect to important child outcomes of two parenting variables; personality characteristics and expectations/goals.

Self-Esteem and Self-Consciousness

Most of the work that has been done in this area has involved self-esteem rather than self-consciousness. Some studies have been conducted which have investigated the relationship between children's PAQ scores and their self-esteem. Far fewer studies have looked at the relationship between parents' PAQ scale scores and their children's self-esteem. The issue of parental report versus child report has seen much attention in the literature (Spence & Helmreich, 1978). However, because the child correlates of parental report are virtually unknown,

parents' report of their own attributes will be used rather than the children's perceptions of their parents' attributes. In this way, one can get at whether or not what a parent thinks he or she is or does is predictive of what the child thinks he or she is or does.

By using a meta-analysis technique (Glass, McGraw & Smith, 1981) on 35 studies which included a total of 6,424 females and 5,692 males, Whitley (1983) tested hypotheses based on three models of the relation between sex role orientation and self-esteem. These models are as follows: the congruence model (congruence between one's sex role orientation and gender is thought to yield a higher self-esteem), the androgyny model (higher self-esteem scores are assumed to occur in those who exhibit high scores on both the masculinity and femininity scales), and the masculinity model (higher self-esteem scores are assumed to be obtained by those who have high masculinity scores irrespective of their femininity scores). Whitley found that subjects' self-ratings of masculinity (on the BSRI or the PAQ) are more highly correlated with self-esteem than either their femininity scores or MxF interactions, thus showing evidence for the masculinity model. Although this study is not directly related to the present parent-child issues, mention is warranted here because of the extremely large sample size that was employed.

In a study related to the present one, Lamke (1982) looked at the relationship between early adolescents' self-report on the PAQ, BSRI, and a self-esteem measure. By employing multiple regression analyses, she found that in both males and females and with both the PAQ and the BSRI, masculinity significantly predicted self-esteem. Femininity did not account for any variance after masculinity was entered into the equation.

Spence and Helmreich (1978) report that their data indicates that one's level of agentic characteristics (i.e., score on the Masculinity scale of the PAQ) is highly correlated with one's level of self-esteem (between .64 and .72 for males and females from the high school and college samples). Scores on the Femininity scale were also related but to a lesser degree (.22 to .26). It should be noted that such findings are for students' self-reports on the PAQ and the self-esteem measure. With regard to the child's perception of parental sex role orientation and its relation to child self-esteem, very significant trends were found for both male and female children. Children with Androgynous parents (high on the Masculinity and Femininity scales) were found to have the highest self-esteem. (No correlations between parental PAQ scores (child report) and child self-esteem were reported.) Thus, it may be that the presence of parental expressiveness, as well as the presence of parental instrumentality, is an important antecedent of child self-esteem.

With respect to instrumental expectations, Spence and Helmreich found moderately high correlations between child-reported parental achievement standards and child self-esteem (.30 for females and .34 for males). Actually, it is interesting to note that self esteem correlated higher with the achievement standards variable than with any of the other 10 parent behavior scales. (Although Spence and Helmreich call them parent behavior scales, many of the items reflect parental attitudes and expectations). Thus, how a child perceives his or her parent's achievement expectations seems to have significant implications for how the child views his or her level of self-esteem.

Spence and Helmreich (1978) studied the relationship between parental sex role orientation and behaviors and child self-esteem in more detail by identifying "a series of constellations of parent behaviors that could be specified independently of parent classification on the PAQ scales (p.194)." Such constellations were developed in a different way (but still on the same data) from the parent behavior scales discussed above. The parent behavior scales were created via factor analysis procedures. The parent behavior constellations were developed by using a statistical technique called Automatic Interaction Detection developed by Sonquist, Baker and Morgan (1973). Here the behavior scales are used as predictors of self-esteem and the resulting constellations are really clusters of parents and

students showing similar clusters of attributes. The result is a set of clusters of parent-child combinations which are independent of the couple types created from the PAQ scores. The purpose of such a procedure is to look at the independent contributions of parental behaviors and personality characteristics to child self-esteem. That is, one variable can be studied in isolation while another is held constant. They concluded that "parent behaviors may affect self-esteem independently of perceived parental attributes (i.e., personality characteristics measured by the PAQ) (p.199)." In relation to the present study, these results suggest that we may find that parental behaviors and personality characteristics not only predict child self-esteem but that each accounts for a unique portion of the variance in this child outcome. (Please note that this author has been very careful to speak only of predictive utility rather than causation since the design of this study and most other studies in this research area have used correlational rather than quasi-experimental or experimental designs).

As mentioned above, Lynch (1981) looked at a portion of the sample which will be used in the present study. She compared families that included at least one androgynous parent (parental report on the PAQ) with families with no androgynous parents with respect to the self-esteem and self-consciousness of the child. The families were also

divided along these two child variables by the median split technique. Chi-square analyses of the data were not significant. Again, it must be noted that because of the small N and statistical techniques employed, significant effects may not have been detected. For example, in the Lamke (1982) paper cited earlier, she found that, in males, masculinity scores were significant predictors of self-esteem scores in a multiple regression analysis. On the other hand, when the male adolescents were broken up into groups with the median split technique, no significant differences were found between the groups with respect to their self-esteem scores. It may be that the median-split methodology "washes out" significant findings. Thus, the analysis technique that is employed is an important consideration.

Baumrind (1982) presents relevant data from her Family Socialization and Developmental Competence Project. In her study, she assessed whether androgynous parents produce more competent children. A competent child, according to Baumrind, is one who is high in social assertiveness, social responsibility, and cognitive competence. Her findings suggest that sex-typed parents produce the most competent children (males and females). Androgynous and Undifferentiated parents (as determined by scores on the BSRI) were found to produce less competent children. It should be noted that these children were all 9 years old

(slightly younger than the group which will be used in the present study). Also, her results are based on the use of median split techniques and ANOVA statistical methods, rather than multiple regression techniques. In addition, parental expectations were not studied.

It is important to note the implications that Baumrind's data has for the present study. For fathers of sons and daughters, Baumrind would probably predict that masculinity would be positively predictive of child self-esteem and paternal femininity would be negatively predictive. For mothers of sons and daughters, the opposite would be predicted. On the other hand, Spence and Helmreich would probably predict that, for fathers and mothers, both masculinity and femininity would be positively predictive of child self-esteem (similar to the androgyny hypothesis).

Given the lack of consistency in the literature, it is somewhat difficult to formulate hypotheses concerning the relationship between parental personality characteristics and expectations and child self-esteem and self-consciousness. With the exception of the Baumrind data, which seems to be the least relevant to the present study, instrumentality consistently seems to be an important predictor of self-esteem. Much more disagreement exists in the literature with respect to the expressiveness domain and its predictive utility for self-esteem.

Also, no data has been reported which looks at the relationship between expressive expectations and child self-esteem and self-consciousness. However, since some support has been given for the hypothesis that parents high in instrumentality and expressiveness produce children with higher levels of self-esteem (Spence & Helmreich, 1978), such an hypothesis will be advanced here. (As stated earlier, such an hypothesis is also appropriate for consistency purposes). It is hypothesized, therefore, that parental instrumentality and expressiveness as measured by the PAQ and the expectations Q-Sort will be positively predictive of child self-esteem and self-consciousness for both boys and girls. That is, it is predicted that parents who have high scores on both the masculinity and femininity scales of the PAQ or on both the instrumental and expressive scales of the expectations Q-Sort will have children with heightened self-esteem and less self-consciousness. In addition, it will be hypothesized that expectations, rather than personality characteristics, will be better predictors of self-esteem and self-consciousness (and all other child outcomes for that matter). The rationale behind this latter prediction will now be discussed.

Hill (1967) compared parents' attitude towards mathematics with parents' expectations concerning their children's performance in mathematics with respect to how they influence their children's attitude towards

mathematics. Scores based on the similarity and accordance between parents and sons were created. Similarity scores were based on discrepancies between the parents' and children's attitudes towards mathematics. Such scores could be thought of as the degree to which the child modelled himself or herself after the parent. (Modeling theorists would say that children tend to model themselves after the same sex parent; Payne & Mussen, 1956). It was predicted by Hill that modeling was not an adequate explanation for parental influence in and of itself because "rather than merely imitating the overt behavior of the parent of the same sex, it may be argued that the child internalizes parental expectations for his behavior (p. 778)." To illustrate this point, it is quite conceivable that a father may not be achievement oriented himself but may have strong achievement expectations for his son. Because of these expectations, the son may turn out to be highly motivated in mathematics, even though his father was not motivated himself (Hill, 1964).

Accordance scores for the Hill (1967) study were based on discrepancies between parental expectations and the children's attitudes toward mathematics. Such a score was conceived of as a measure of the degree to which a child behaved in accordance with his or her parents expectations. In general, role theorists (Brim, 1960; Parsons, 1955) have identified such expectations as having important

implications for child outcomes. That is, it is assumed that "parents are more likely to place consistent sanctions on behavior they expect of the child than behavior solely in imitation of their own general characteristics (Hill, 1967, p. 779)."

Hill (1967) found that father-son accordance was greater than mother-son accordance, suggesting that the father is the most important parent with respect to the development of the sex-role attitudes of the son. The finding which is more relevant to the present study is that father-son accordance was more common than father-son similarity. Such a result indicates that the father's expectations for the son have more of an effect on the child's attitudes than the father's own attitudes. It should also be mentioned that this result was even more common in those fathers who expressed warmth towards their sons and those who were more involved in child rearing. Such results are consistent with Johnson's (1963) reciprocal role theory. Johnson believes that the father is the critical parent and that internalization of expectations is the critical process. The father is seen as important because he, rather than the mother, differentially responds to sons and daughters. The conclusion to be drawn from the Hill (1967) data is that child outcomes cannot be explained entirely by modeling of parental characteristics, and that the internalization of parental expectations, or the lack thereof, probably has more of an impact than any modeling which occurs.

Hill (1964) and Block (1978) have shown that parental expectations change in the sex-typed direction when their children enter early adolescence. Thus, it appears that parental expectations seem to fluctuate with (and possibly cause to some degree) the changes in the adolescent's self-image, attitudes and behaviors. It can be seen that parental expectations clearly have a powerful impact on children. To illustrate this, it should be mentioned that a syndrome has been identified by Stinchcombe (1964) whereby low-ability children will persist in believing that they are going to college (as a result of their parents' expectations) even though they repeatedly fail in school. We can now see one reason why the hypothesis that expectations will be better predictors of child outcomes than PAQ scores is logical. With respect to child outcomes, parental personality characteristics seem to be much more predictively distant than parental expectations. A discussion will now be presented which focuses on how discrepancies seem to exist between girls and boys with respect to their parents' expectations, their own self-esteem and their own level of self-consciousness.

Hill and Lynch (1983) point out that "it has been argued that there is an acceleration of gender-differential socialization during adolescence, perhaps at the onset of puberty or shortly after, and perhaps especially for girls (p.201)." They call this notion the Gender Intensification

Hypothesis. In their literature review, Hill and Lynch point out that numerous differences exist between boys and girls following the onset of puberty where none existed before. Girls tend to experience more disruptions in self-esteem and self-consciousness than boys, they develop more intimate friendships, they are less likely to take risks and are less aggressive than boys. Because of this evidence and since the girls in our sample are farther along in their pubertal development than the boys (in this sample the girls and the boys are the same age indicating that the girls will be more physically mature), we should see more disruptions in self-esteem and self-consciousness in girls than in boys.

In addition, we should see differences between girls and boys with respect to the levels of parental expressive and instrumental expectations. Because of the evidence supporting the Gender Intensification Hypothesis, one should expect to see higher levels of parental expressive expectations for girls and higher levels of instrumental expectations for boys. If this is found to be the case, one should find that the discrepancy between the expressive and instrumental expectations is greater for girls than for boys because of the girls' advanced pubertal status (indicating that parental expectations are more sex-typed for girls than for boys).

One last issue which must be addressed is the degree of differential parental influence. With respect to sons, Hill (1967) predicted that fathers have more influence than mothers. Although it is thought that the son initially identifies with the mother, the socialization task of the father becomes one of "defeminization" and "masculinization" of the son. Therefore, it could be assumed that the father's expectations will be most discordant with respect to those characteristics which are most central to the feminine role (Hill, 1967). On the other hand, Lynn (1969) believes that because of the fathers' "lack of salience" the sons will identify just as closely with the mothers as with the fathers. Lynn also predicts that females will identify more closely with their mothers than their fathers. Spence and Helmreich (1978), on the other hand, predicted and found that with respect to the development of instrumental and expressive traits, males are more influenced by their fathers and females are more equally influenced by both parents. (They also hypothesized that child outcomes such as self-esteem probably have similar parental antecedents). With respect to sons, there is agreement between these data and the Hill (1967) data. Thus, since the Spence and Helmreich (1978) and Hill (1967) studies are more similar to ours than any of the others that have been done in this area, similar hypotheses will be advanced here. That is, in terms of variance accounted for, the fathers' PAQ scores and

expectations will be more highly predictive of the male child outcomes and both parents' attributes and expectations will yield nearly equivalent predictability for the female child outcomes. In summary, several hypotheses have been suggested in this section:

1. Parental instrumentality and expressiveness, as measured by the PAQ and the expectations Q-Sort will be positively predictive of child self-esteem and self-consciousness for all four dyads (father-son, mother-son, father-daughter, and mother-daughter). No significant instrumentality and expressiveness interactions will be hypothesized.
2. It is also predicted that when the parental PAQ data is subjected to the median split technique, androgynous fathers and mothers will have children with the highest self-esteem and the lowest self-consciousness. That is, undifferentiated parents should have children with the highest self-consciousness.
3. Parental expectations will account for more variance in all of the child outcomes than parental personality characteristics.
4. For girls, parental expressive expectations will be greater than for boys. Parental instrumental expectations will be greater for boys than for girls. If these two results are found, it is predicted that

the discrepancy between expressive and instrumental expectations will be greater for the girls than for the boys.

5. The girls in the present sample should experience lower levels of self-esteem and higher levels of self-consciousness than the boys.
6. In terms of variance accounted for, the fathers' PAQ scores and expectations will be more highly predictive of all male child outcomes and both parents' attributes and expectations will be equally predictive of all female child outcomes.

Please note that hypotheses 3 and 6 above apply to all of the child outcomes in this study and will, therefore, not always be repeated in the subsequent sections on the remaining child outcome variables. Also, it should be mentioned that variables will be created in such a way that values on the variables can be compared for our four dyads.

Child Instrumental and Expressive Expectations

On the basis of her review of the achievement motivation literature, Lynch (1981) hypothesized that "androgynous fathers may be more likely than traditional fathers to behave in ways that will encourage their daughters' achievement (p.29)." As a result, she went on to predict that daughters with androgynous fathers would be more likely

to have instrumental expectations on themselves. With respect to the latter prediction, no significant results were found. That is, daughters with androgynous fathers did not differ from daughters with traditional fathers with respect to their self-reported instrumental expectations and goals. The relationship between parental expectations and child expectations was not studied. The differences between this study and the Lynch study (which have already been noted) lead us to believe that we may be more likely to find statistically significant relations in this study where there were none in the Lynch study.

Turning now to parental expectations, one might argue that early adolescents' expectations for themselves may be more in line with the self-expectations of the members of their peer group. On the other hand, Kandel and Lesser (1972) have data which indicates that "interactions with peers support, express and specify for the peer context the values of parents and other adults...Our data indicate that in areas of importance adolescents display high concordance with both parents and peers, or low concordance with both (p.168)." Thus, insofar as expectations are seen as an important value we might expect that parental and child expectations may be in line with each other. To further emphasize this point, Hill (1980) reviews data which indicates that "...young peoples' neighborhood and social friends... tend to come from families with similar values.

Such similarities are a major basis for friendship choices among young adolescents (p.43)." Thus, in this portion of the study, it will be predicted that:

1. Both parental instrumental and expressive expectations will be positively predictive of child instrumental and expressive expectations.
2. With respect to the PAQ, it will be predicted that parental instrumental and expressive personality characteristics will be predictive of child expectations in the same way as parental expectations, but less so. Also, it is predicted that androgynous mothers and fathers (as determined by the median split technique) will have children with higher levels of instrumental and expressive expectations.
3. Self-reported expressive expectations are expected to be greater for girls than for boys. Self-reported instrumental expectations are expected to be greater for boys than for girls. Also, if these results are found, the discrepancy between expressive and instrumental self-reported expectations is expected to be greater for the girls than the boys (see earlier arguments in the self-esteem section for a presentation of the rationale for this hypothesis).

Parental Attractiveness Variables

Two variables will be studied which fall into this category: the degree to which a child wants to be like his or her parents and the child's view of his or her parents' life satisfaction. Such variables could be thought of as being indicative of the degree to which a parent influences his or her child and/or the degree to which the child sees the parents as "attractive." For our purposes, it would be interesting to discover what types of and to what extent parental expectations and parental personality characteristics predict child perceptions of parental attractiveness.

Lynch (1981) looked at both of these variables for daughters with respect to parental PAQ classification. Again, she found no differences between daughters who had androgynous fathers and daughters who had traditional fathers. In this study (and as discussed earlier), we will look at the same variables but with more subjects and different analyses.

It can also be seen that the degree to which a child sees a parent as "attractive" will, to a certain extent, determine the degree to which the child models the parent. Spence and Helmreich (1978) provide a very interesting discussion of the modeling notion of parental attractiveness and parental influence. On the one hand, they say, for

example, that an androgynous father will be an attractive model for his son because of his personality characteristics and his behaviors. That is, these qualities could be thought of as inducing the child to model himself after this "attractive" father (p. 143). On the other hand, Spence and Helmreich go on to ask the same hypothetical question with respect to Undifferentiated parents (those low in masculinity and femininity). That is, do Undifferentiated children become that way because they are modeling themselves after their Undifferentiated parents? Spence and Helmreich would answer "no" to this question. Rather, they state that:

a more reasonable assumption is that, in the absence both of an individual who can serve as a model of instrumental and expressive characteristics and the kinds of parental support and encouragement that permit the child to develop, the child may fail by default (emphasis mine) to acquire these socially desirable characteristics...Children may model themselves after their parents, but parental socialization techniques have effects on children over and above those that determine the attractiveness of the parent as a model, effects that may themselves be enhanced by parental masculinity and femininity (p.143).

Such an argument (parental behaviors are primary and traits are secondary in terms of their influence on child outcomes) fits well with what has been hypothesized thus far. Rather than merely looking at the more distally influencing parental personality characteristics, it seems that if one looked at parental expectations and goals for their children, one may find a more significant relationship with

variables such as those which tap how much a child wants to be like his or her parents. As has been said before, it is being argued here that parental expectations are better predictors of child outcomes than parental personality characteristics. It is very important to note that although favorable parental personality characteristics may make the parent appear to be a more attractive model, the child probably will not want to be like his or her parents if they use parenting techniques which are not effective.

The following hypotheses will be advanced:

1. For all four dyads, both parental instrumentality and expressiveness as measured by the PAQ and expectations Q-Sort will be positively predictive of the degree to which a child wants to be like his or her parents and the degree to which the child views the parent as satisfied with his or her life. No significant interactions will be predicted.
2. It is also predicted that when the parental PAQ data is subjected to the median split technique, androgynous mothers and fathers will have children who most want to be like their parents and who view their parents as the most satisfied.
3. Expectations will account for more variance in these child variables than the parental personality characteristics.

4. Given the earlier discussion concerning the differential degree of parental influence over boys and girls, it is predicted that boys will want to be like their fathers more than they want to be like their mothers and that girls will want to be like both parents equally. In the same way, one would predict that boys would not differ from girls in terms of how much they want to be like their fathers but girls will want to be like their mothers to a greater degree than do boys.

Level of Educational Aspiration

Insofar as educational aspirations are related to instrumental self-expectations and goals, the same hypotheses will be advanced here as were advanced for the child instrumental expectations. Before presenting the hypotheses, it should be mentioned that Spence and Helmreich (1978) looked at the relationship between self-reported (rather than parental) PAQ scores and educational aspirations. For both males and females, Masculine and Androgynous children had the highest educational aspirations. Similar results will be predicted when using the parental PAQ scores.

The hypotheses for this variable are:

1. Parental instrumentality and expressiveness as measured by the PAQ and expectations Q-Sort will be positively predictive of educational aspirations as reported by the child. It is also predicted that androgynous parents will have children with the highest educational aspirations.
2. The parental personality characteristics will be less predictive (in terms of variance accounted for) than parental expectations.
3. In line with the Gender Intensification Hypothesis (Hill & Lynch, 1983) and the findings of Spence and Helmreich (1978), it will be hypothesized that self-reported educational aspirations will be higher for boys than for girls.

Summary of the Major Aspects of the Study

The major aspects of the present study are as follows:

1. This study significantly departs from the Lynch (1980) study. All parent-child dyads will be studied rather than just the father-daughter dyad. Analyses will involve multiple regressions and correlations of raw scores in addition to median split techniques. Finally, parental expectations will be used as an independent variable (predictor of child outcomes) and a dependent variable rather than just a dependent variable.

2. As Spence (1983) has recently said, the PAQ only measures facets of the more global and multidimensional domains of masculinity and femininity. These facets have been labelled instrumentality and expressiveness. Scores on the PAQ will be interpreted as such (even when the median split technique is employed).
3. The age group (12 year olds) which will be used in this study differs from that studied in most previous research in this area. Baumrind (1982) used nine year olds and Spence and Helmreich used high school and college age students.
4. Parental report of their personality characteristics and expectations will be employed. As already mentioned, child report of these parental variables was used in the Spence and Helmreich (1978) study. It seems appropriate to use parental report since it is so rarely used by researchers in this area.
5. In the first phase of the study, the relationship between parental personality characteristics (independent variable) and parental expectations (dependent variable) will be examined. Following this analysis, the relationship between parental personality characteristics and parental expectations (independent variables) and the child outcomes (dependent variables) will be studied.

Hypotheses

The Relationship between Parental Personality Characteristics and Parental Expectations

- 1.1) It is predicted that instrumental and expressive personality characteristics will additively combine (i.e. will both enter into a regression equation as significant main effects) to positively (although moderately) predict parental instrumental and expressive expectations.
- 1.2) It is predicted that when the parental PAQ data is subjected to the median split technique, androgynous parents will have the highest levels of instrumental and expressive expectations.

Parental Instrumental and Expressive Personality Characteristics and Expectations as Predictors of Selected Child Outcomes

Self-Esteem and Self-Consciousness

- 2.1) Parental instrumentality and expressiveness as measured by the PAQ and the expectations Q-Sort will be predictive of child self-esteem (positively) and self-consciousness (negatively) for all parent-child dyads.
- 2.2) Androgynous parents are predicted to have children with the highest self-esteem and the lowest self-consciousness. That is, undifferentiated parents should have children with the highest self-consciousness.

- 2.3) The girls in this sample should experience lower levels of self-esteem and higher levels of self-consciousness than the boys.

Child Instrumental and Expressive Expectations

- 3.1) Parental instrumental and expressive expectations will be positively predictive of child instrumental and expressive expectations. With respect to personality characteristics, it is predicted that parental instrumental and expressive personality characteristics will also be positively predictive of child expectations in the same way as parental expectations.
- 3.2) Androgynous parents are predicted to have children with the highest levels of instrumental and expressive expectations.

Parental Attractiveness Variables

- 4.1) For all four dyads, parental instrumentality and expressiveness as measured by the PAQ and expectations Q-Sort will be positively predictive of the degree to which a child wants to be like his or her parents and the degree to which the child views the parent as satisfied.

- 4.2) Androgynous parents are predicted to have children who most want to be like them and who view their parents as being the most satisfied.
- 4.3) It is predicted that boys will want to be like their fathers more than they want to be like their mothers and girls will want to be like both parents equally. Also, boys should not differ from girls in terms of how much they want to be like their fathers but girls will want to be like their mothers to a greater degree than do boys.

Level of Educational Aspirations (Child Report)

- 5.1) Parental instrumentality and expressiveness as measured by the PAQ and expectations Q-Sort will be positively predictive of educational aspirations as reported by the child.
- 5.2) Androgynous parents are predicted to have children who have the highest educational aspirations.
- 5.3) Self-reported educational aspirations will be higher for boys than for girls.

General Hypotheses

- 6.1) Parental expectations will account for more variance in all of the child outcomes than parental personality characteristics.
- 6.2) In terms of variance accounted for, the fathers' PAQ scores and expectations will be more highly predictive of all male child outcomes and both parents' PAQ scores and expectations will be equally predictive of all female child outcomes.
- 6.3) For girls, parental expressive expectations will be greater than for boys. Parental instrumental expectations will be greater for boys than for girls. If these results are found, it is predicted that the discrepancy between parental expressive and instrumental expectations will be greater for girls than for boys.
- 6.4) For girls, self-reported expressive expectations will be greater than for boys. Self-reported instrumental expectations are expected to be greater for boys. Also, if these results are found, it is predicted that the discrepancy between expressive and instrumental self-reported expectations will be greater for the girls than for the boys.

METHOD

Overall Description of the Research Program

This research program was conducted between 1978 and 1981 by John P. Hill at the Boys Town Center for the Study of Youth Development, Boys Town, Nebraska. The program included two streams of data collection: a field stream and a laboratory stream. Those families participating in the field stream were given questionnaires in their homes by "messengers" who were working on the project. Families who participated in the laboratory stream were asked to fill out questionnaires as well as perform various interactional tasks which were videotaped. It is the data collected from those families who participated in the laboratory stream that will be employed in the present study.

Families who participated had to meet the following criteria: the family had to be intact such that the child who was involved in the study was living with his or her natural parents, the child had to be a seventh-grader, and he or she had to be a first-born. The rationales for these criteria are detailed in Hill (1980b).

Subjects

Subjects for this study were 174 seventh-grade girls and 103 seventh-grade boys and their families who were recruited for the laboratory stream from eight school districts in Omaha, Nebraska. Principals of the schools in these districts were asked to provide lists of students who fit the criteria mentioned above. Letters were then sent out, with the principal's signature, to eligible families. Of the school districts which participated, 95-100% of the principals were cooperative. The letters to the families were followed up with phone calls requesting their participation. The staff members who made these calls provided the families with a brief description of the laboratory tasks. Approximately 40% of the families agreed to participate. The most common reason for refusal was that the family did not have enough time. No differences in socioeconomic status were noted between those who agreed to participate and those who declined. Approximately 31% of the sample was Catholic.

Procedure

All families who participated in the laboratory stream of the study came to the Boys Town Center to fill out the questionnaires and participate in the interaction sessions. A supervisor, an administrator and an equipment operator

were all present during the interaction sessions for each family. All families signed consent forms for video and audiotaping.

Prior to beginning the interaction tasks, all families participated in a warm-up game of pick-up-sticks. This brief task was taped and played back to each family so as to aid the families in feeling more comfortable with the format of the interaction session.

The mother, father, and child all filled out questionnaires during the laboratory session. Since many of the interaction tasks were dyadic, the third family member could be filling out his or her questionnaire in a separate room while the other two members were participating in a task. Six tasks were employed during the session: the Structured Family Interaction Task (SFIT; Ferreirra, 1963), a blockstacking task (Rosen & D'Andrade, 1959), modified versions of the anagrams and patterns tasks (Rosen & D'Andrade, 1959), a variation of the anagrams task, and a Q-Sort of instrumental and expressive expectations and goals (Lynch, 1981). Only the data from the parent and child questionnaires and the Q-Sort are relevant to the present study.

Measures and Tasks (Parental)

The Personal Attributes Questionnaire (PAQ)

This 24-item questionnaire was developed by Spence, Helmreich, and Stapp (1974) and Spence and Helmreich (1978). As detailed in the introduction of the present study, the PAQ was originally made up of 55 bipolar items taken from a set of over 130 items developed by Rosenkrantz, Vogel, Bee, Broverman, and Broverman (1968). Of the 55 original items, 23 were assigned to the Masculinity scale, 18 were assigned to the Femininity scale, 13 were assigned to the Masculinity-Femininity scale, and one was not classifiable. Placement of items into these three scales were based on ratings of introductory psychology students. The entire pool of 130 items was administered to the students and they were to rate the following individuals on each item: the typical adult male, the typical adult female, the typical male college student, the typical female college student, the ideal individual of each sex, and themselves.

Initially, the pool was reduced to 55 items by selecting those items that differentiate between the sexes and on which males and females report themselves as differing (Spence & Helmreich, 1978). The ideal ratings were then used to categorize the items into the three scales mentioned above. An item was assigned to the Masculine scale "if the mean ratings of both the ideal man and the ideal woman fell

on the same side of the scale midpoint and toward the stereotypically masculine pole (p. 33)." The same rationale holds for those items which were assigned to the Femininity scale except that the ratings fell toward the stereotypically feminine pole. Thus, a masculine item, for example, is one which differentiates between the sexes as they report about themselves. That is, one pole is usually endorsed by one sex as being characteristic of themselves and the other pole is endorsed by the other sex as being characteristic of themselves. On the other hand, there is one pole (the masculine pole) of the item which is seen as being a characteristic to strive for in both males and females. The item is labelled Masculine since the stereotypically masculine pole is socially desirable to some degree in both sexes (Spence & Helmreich, 1978).

The Masculinity-Femininity items are different in that even the ideal ratings do not fall at the same pole. Thus, one pole is socially desirable for one sex and the other is socially desirable for the other sex. It should be mentioned that Spence and Helmreich have tested for social desirability response biases as a possible contaminant but have found no evidence for such biases.

The short form was developed later and consists of eight Masculinity items, eight Femininity items and eight M-F items. The 24 final items were chosen from the larger pool

of 55 on the basis of part-whole correlations (Spence & Helmreich, 1978). This shorter version will be used in the present study. Each item consists of two poles which anchor a 5 point scale. The participant is to choose which of the five points best applies to him or her. As already mentioned in the introduction, mother and father raw scores on the Masculinity and Femininity scales will be employed and will be construed as measuring instrumental and expressive personality characteristics, respectively. For analyses requiring the median split technique, the mean of the medians of the mothers' and fathers' responses on the Masculinity and Femininity scales of the PAQ will be employed. In the present sample, the M scale median that was employed was 21 and the F scale median was 22.5. In Spence and Helmreich's (1978) high school sample, the medians employed were 20 and 23 for the M and F scales, respectively. (Spence and Helmreich recommend using sample-specific medians). The PAQ was included in the parents' questionnaire and a copy of it is in Appendix A.

Q-Sorts

The Q-Sort which will be used in this study was designed to measure the level of instrumental and expressive expectations of parents and their children. It was developed by Lynch (1981) and included items from the following sources: Carlson's (1965) measure of

personal-social orientation, the California Q-Set (Form III) (Block, 1961), Baruch's (1976) child rearing values questionnaire, The Adolescent Society questionnaire (Coleman, 1961), The Personal Attributes Questionnaire (Spence & Helmreich, 1978; Spence, Helmreich, & Stapp, 1974) and other literature on achievement motivation and behavior (Rosen & D'Andrade, 1959; Hoffman, 1972). Some of the items have been modified somewhat.

Initially, 53 items made up the original Q-Sort deck. The items were sorted into four piles (instrumental skills, instrumental goals, interpersonal skills, and interpersonal goals) by eight staff members working on the "Family Relations in Early Adolescence" research project. Eventually, the deck was narrowed to 40 items and the skills vs. goals distinction was dropped. Thirty-seven of the final items were appropriately sorted into instrumental or expressive piles by at least 8 of 10 sorters and 2 were sorted appropriately by 7 of 10 sorters. One was only sorted appropriately by 6 of 10 sorters and was, therefore, not included in either the instrumental or expressive scale. As a result, there were 20 items which were believed to tap expressive expectations/goals and 19 items which were believed to tap instrumental expectations/goals.

For the parents Q-Sort (their expectations and goals for their children), the participants were instructed to place

the 40 items in seven piles which ranged from "most important" to "least important." They were told to "sort these cards as to how important each characteristic or goal should be to your daughter (son) right now in her (his) life (Hill, 1980b, p.31)." They were also constrained with respect to how many cards they could put in each pile. The number of items to be put in each pile (from most important to least important) was as follows: 3,5,7,10,7,5,3. Parents not only did these sorts individually but also did a third sort whereby they discussed their differences and came up with a sort on which they both agreed. The children also sorted the same deck with respect to how important the expectations/goals were to them right now.

Unfortunately, if the instrumental and expressive expectation scales specified by Lynch (1981; see above) were used in this study, they would have been highly negatively correlated (very near -1.0) because, for example, the placement of the instrumental items automatically determines the placement of the expressive items. Therefore, some changes in the scales had to be made in order to test the hypotheses in this study. It should be noted that all of the M and F items from the PAQ were incorporated into the Q-sort (some of them had to be reworded to a minor degree) except one of the M scale items. This item ("feels very superior") was not included in the Q-Sort because of social desirability problems which would have resulted if it was

placed in an expectations context. The expectations scales which were used, therefore, were the eight expressive (F scale) items and seven of the eight instrumental (M scale) items from the PAQ. The inclusion of only these items serves to decrease the interscale correlation and also facilitates comparisons between the analyses involving the Q-Sort scales and those involving the PAQ scales. Scores which represent instrumental and expressive expectations will be derived by summing the appropriate items. It should be mentioned that all of the Q-Sort items had to be reversed scored since they ranged from "most important" to "least important" rather than the reverse. A copy of the Expectations Q-Sort is included in Appendix B.

Measures and Tasks (Child)

Self-Esteem and Self-Consciousness

Items which measure adolescent self-esteem and self-consciousness have been taken from the Simmons, Rosenberg, and Rosenberg (1973) Interview Schedule. These items were summed so as to arrive at composite scores for self-esteem and self-consciousness. Some of the items had to be reversed scored (and variations thereof) so that a high score on an item represented a high level of self-esteem or self-consciousness. A list of these self-esteem items can be found in Appendix C and the self-consciousness items can be found in Appendix D.

Child Instrumental and Expressive Expectations

As mentioned above, the children did a Q-Sort on the same set of items that the parents sorted. Again, composites for instrumental and expressive expectations will be derived by summing the appropriate (reversed scored) items. A copy of these items can be found in Appendix B.

Parental Attractiveness Variables

Four items from the child questionnaire were used to derive scores on these variables. One of the items reflects the degree to which the child would like to be the kind of person his or her father (or mother) is. This item has come from the questionnaires used by Kandell and Lesser (1972) and it had to be reversed scored. The other three items were generated by the staff of the "Family Relations in Early Adolescence" research project and they reflect the degree to which the child views his parents as satisfied, happy, and successful. These three items were summed into one composite score which was labelled "parental satisfaction with life" (from the child's perspective). It should be mentioned that each child answered all four of these questions with respect to each parent. A copy of these items is in Appendix E.

Level of Educational Aspiration

One item was used for this variable and it came from the work of Kandel and Lesser (1972). A copy of this item is in Appendix F.

RESULTS

Internal Consistency of and Intercorrelations between Variables

Prior to running the analyses which test the hypotheses presented earlier, scales (where appropriate) were tested for internal consistency by employing Cronbach alphas. Alphas were not computed for the following parent variables: instrumental and expressive expectations. The rationale for not examining the internal consistency of these variables is that the Q-Sort method of data collection precludes such an examination. With the Q-Sort, if three items are put in pile 7, other items cannot be placed in this pile. Given this process, Cronbach alphas are seriously underestimated. For there to be an internal consistency value of 1.0, all subjects would have to be able to put all of the items from a given scale in one pile. Since this is not possible, it is meaningless to investigate internal consistency via Cronbach alphas with these data.

Also, alphas were not computed for the following child variables: instrumental and expressive expectations, be-like-father (i.e. the degree to which children want to be like their father), be-like-mother, and educational

aspirations. The rationale for not computing alphas for the first two is the same as that presented above. The last three early adolescent outcomes are only made up of one item each and, therefore, alphas cannot be computed.

For the remaining parent variables (the PAQ scale), the alphas are listed in Tables 1 and 2. Alphas for fathers' personality traits are in Table 1 and alphas for mothers' personality traits are in Table 2. One can see that for fathers and mothers of boys and girls, the alphas ranged from .68 to .80. Such alphas were determined to be adequate for subsequent analyses.

For the remaining early adolescent variables (self-esteem, self-consciousness, father satisfaction, and mother satisfaction) the alphas are presented for boys and girls in Table 3. As can be seen, the alphas range from .62 to .80 for girls and boys. Such alphas were adequate enough to proceed with the analyses without making modifications in the scales.

To be certain that all variables were independent of each other and that they were measuring something unique, correlations between all variables were computed. The parental correlations are listed in Tables 1 and 2. The correlations which are of interest here (when determining independence of variables) are those between the PAQ scales and those between the Q-Sort scales. Other correlations in

Table 1

Cronbach Alphas and Intercorrelations of the Four Father Variables

	Alpha (boys)	PAQ M-Scale	PAQ F-Scale	I Expect	E Expect	Alpha (girls)
PAQ M-Scale	.68	----	.16	.15	-.08	.80
PAQ F-Scale	.73	.13	----	-.16	.22	.80
I Expect	N/A	.15	.06	----	-.55	N/A
E Expect	N/A	.07	.11	.15	----	N/A

Note. Correlations for the Father/Daughter dyad are above the diagonal and correlations for the Father/Son dyad are below. N/A=Not Applicable.

n (Boys)=103 and n (Girls)=174

For boys: r (.05)=.17, r (.01)=.23, r (.001)=.30. For girls: r (.05)=.13, r (.01)=.18, r (.001)=.23.

Table 2

Cronbach Alphas and Intercorrelations of the Four Mother Variables

	Alpha (boys)	PAQ M-Scale	PAQ F-Scale	I Expect	E Expect	Alpha (girls)
PAQ M-Scale	.75	----	.24	.04	-.02	.75
PAQ F-Scale	.77	.31	----	.03	.06	.78
I Expect	N/A	.01	-.08	----	-.54	N/A
E Expect	N/A	-.01	-.02	.30	----	N/A

Note. Correlations for the Mother/Daughter dyad are above the diagonal and correlations for the Mother/Son dyad are below. N/A=Not Applicable.

n (Boys)=103 and n (Girls)=174

For boys: \underline{r} (.05)=.17, \underline{r} (.01)=.23, \underline{r} (.001)=.30. For girls: \underline{r} (.05)=.13, \underline{r} (.01)=.18, \underline{r} (.001)=.23.

Table 3

Cronbach Alphas and Intercorrelations of the Nine Child Variables

	Al-B	SE	SC	I-Ex	E-Ex	Befa	Bemo	Fas	Mos	Edu	Al-G
SE	.76	---	-.45	.06	-.12	.17	.11	.22	.24	.23	.80
SC	.64	-.34	---	-.01	.00	-.15	-.15	-.02	-.03	-.11	.62
I-Ex	N/A	.00	.20	---	-.49	.08	-.04	.03	-.05	.00	N/A
E-Ex	N/A	-.15	.01	-.32	---	.01	.06	.00	.04	-.05	N/A
Befa	N/A	.29	-.04	.04	-.06	---	.37	.29	.32	.08	N/A
Bemo	N/A	.24	-.10	.18	-.04	.45	---	.10	.34	.03	N/A
Fas	.73	.26	-.15	.06	-.12	.30	.19	---	.59	.05	.69
Mos	.78	.33	-.21	.01	-.18	.33	.40	.63	---	.12	.69
Edu	N/A	.00	-.19	.17	-.15	.04	.15	.22	-.04	---	N/A

Note. Correlations for Daughters are above the diagonal and correlations for Sons are below. Al-B= Alpha (boys), Al-G= Alpha (girls), SE= self-esteem, SC= self-consciousness, I-Ex= I-Expectations, E-Ex= E-Expectations, Befa= be-like-father, Bemo= be-like-mother, Fas= father satisfaction, Mos= mother satisfaction, Edu= educational aspirations, and N/A= Not Applicable.

n (Boys)=103 and n (Girls)=174

For boys: \underline{r} (.05)=.17, \underline{r} (.01)=.23, \underline{r} (.001)=.30. For girls: \underline{r} (.05)=.13, \underline{r} (.01)=.18, \underline{r} (.001)=.23.

these tables will be more relevant when testing the hypotheses.

As can be seen in Table 1, the PAQ scale (M and F) intercorrelations for fathers were .13 for boys and .16 for girls. The same intercorrelations for mothers are in Table 2 and were .31 for boys and .24 for girls. Such correlations were lower for fathers than mothers but, in general, the scales seem to be independent. For example, for mothers of boys, their PAQ M scale scores only accounted for about 9% of the variance in the F scale scores. Although the correlations for mothers were significant, such significance is somewhat misleading since it is a function of the sample size (which is rather large) as well as of the magnitude of the underlying relation.

With respect to the intercorrelations between the parental expectation scales, the correlation for fathers of boys (in Table 1) was .15 and the correlation for fathers of girls was -.55. The same correlations for mothers (in Table 2) were .30 for boys and -.54 for girls. The trend here is for there to be a low to moderate positive correlation between parental instrumental and expressive expectations with respect to boys and moderate negative correlations with respect to girls. The implications of such findings will be discussed later, but for the purposes here it seems that the scales are relatively independent, especially for boys. For

girls, only 25-30% of the variance in instrumental expectations are accounted for by expressive expectations so the analyses will be done as dictated. The problems that may be encountered as a result of the moderate correlations between these scales do not seem to outweigh the importance of being able to directly compare the PAQ and Q-Sort analyses (given the equivalence of the items).

With respect to the intercorrelations between the child variables (in Table 3), they ranged from .00 to .63 for the boys and from .00 to .59 for the girls. The highest correlations for boys and for girls were between mother satisfaction and father satisfaction. Since the analyses were done using data from dyads (father/son, mother/son, father/daughter, and mother/daughter) such correlations should not be considered when determining variable independence. The same reasoning applies to the be-like-mother and be-like-father variables. For boys, all other correlations were .40 (between mother satisfaction and be-like-mother) or below and were -.49 (between instrumental and expressive expectations) or less for girls. It should be noted that the correlation between instrumental and expressive self- expectations for boys was moderately negative (the reverse of what was found for parental expectations with respect to boys). In general, it appears that the child variables are independent and, as a result, the analyses involving these child variables were done as dictated.

Prior to presenting the more specific results from all of the analyses of the present study, tables which give a more global picture of the findings are presented first. These tables are meant for reference only. Given that the results which are to follow are rather complex, these tables (Tables 4-7) should serve as a helpful guide to the reading of the subsequent sections. Tables 4 and 5 include summaries of the multiple regression results with parental personality characteristics and parental expectations, respectively, as predictors (hypotheses 1.1, 2.1, 3.1, 4.1, and 5.1). Table 6 provides a summary of the median-split analyses (hypotheses 1.2, 2.2, 3.2, 4.2, and 5.2). Table 7 includes a summary of all analyses where sons and daughters were compared (hypotheses 2.3, 4.3, 5.3, 6.3, and 6.4).

Table 4

Summary of Multiple Regression Results with Parental Personality Characteristics as Predictors

Hypotheses and Dependent Variables	Parent-Child Dyad			
	Father-Son	Father-Daughter	Mother-Son	Mother-Daughter
1.1				
Par I-Exp	--	-E, +I	--	--
Par E-Exp	--	+E	--	--
2.1				
Self-Est	+E	--	(+I)	+E, (-IxE)
Self-Con	--	--	--	(-E), +IxE
3.1				
Chd I-Exp	--	--	-E	--
Chd E-Exp	--	--	--	--
4.1				
Be-lik-par	+E	--	--	--
Par Satis	+I	(-IxE)	--	+I
5.1				
Educ Aspir	--	--	--	(-IxE)

Note. For Dependent Variables: Par=Parent, Chd=Child, I-Exp= instrumental expectations, E-Exp= expressive expectations, Self-Est= self-esteem, Self-Con= self-consciousness. For Predictors: I= instrumental personality characteristics, E= expressive personality characteristics, IxE= the personality characteristics interaction. The direction of the significant predictors is indicated. Those predictors in parentheses are marginally significant ($p < .10$).

\underline{n} (son dyads)=103 and \underline{n} (daughter dyads)=174.

Table 5

Summary of Multiple Regression Results with Parental Expectations as Predictors

Hypotheses and Dependent Variables	Parent-Child Dyad			
	Father-Son	Father-Daughter	Mother-Son	Mother-Daughter
2.1				
Self-Est	(-E)	--	--	--
Self-Con	-IxE	--	-IxE	--
3.1				
Chd I-Exp	+I	--	+I	--
Chd E-Exp	+E	--	+E, (+I), (+IxE)	+E
4.1				
Be-lik-par	-E	--	--	--
Par Satis	--	--	-I	--
5.1				
Educ Aspir	(+E)	--	--	-E

Note. For Dependent Variables: Par=Parent, Chd=Child, I-Exp= instrumental expectations, E-Exp= expressive expectations, Self-Est= self-esteem, Self-Con= self-consciousness. For Predictors: I= instrumental expectations, E= expressive expectations, IxE= the expectations interaction. The direction of the significant predictors is indicated. Those predictors in parentheses are marginally significant ($p < .10$).

n (son dyads)=103 and n (daughter dyads)=174.

Table 6

Summary of Median-Split Analyses with the PAQ
Categories as the Independent Variable

Hypotheses and Dependent Variables	Parent-Child Dyad			
	Father-Son	Father-Daughter	Mother-Son	Mother-Daughter
1.2				
Par I-Exp	--	--	--	--
Par E-Exp	*	*	--	--
2.2				
Self-Est	--	--	** A>M	** F>U,M
Self-Con	--	--	**	*** U>M,F
3.2				
Chd I-Exp	--	--	--	--
Chd E-Exp	--	--	--	--
4.2				
Be-lik-par	--	--	--	--
Par Satis	*	* F>U	--	--
5.2				
Educ Aspir	--	--	--	--

Note. For Dependent Variables: Par=Parent, Chd=Child, I-Exp= instrumental expectations, E-Exp= expressive expectations, Self-Est= self-esteem, Self-Con= self-consciousness. PAQ Groups: A= Androgynous, M= Masculine, F= Feminine, U= Undifferentiated. Significant differences between groups are noted as are the significant results of the Duncan Multiple Range Tests.

n (son dyads)=103 and n (daughter dyads)=174.

* $p < .10$. ** $p < .05$. *** $p < .10$.

Table 7

Summary of Analyses Comparing Boys and Girls on Several of the Parent and Child Variables

Hypotheses and Dependent Variables	Predicted	Results	Hypothesis Confirmed?
2.3			
Self-Est	B>G	B>G	yes
Self-Con	G>B	G>B	yes
4.3			
Be-lik-fa	B=G	B>G	no
Be-lik-mo	G>B	G>B	yes
5.3			
Educ Aspir	B>G	B=G	no
6.3			
Fa I-Exp	B>G	G>B	opposite
Mo I-Exp	B>G	G>B	opposite
Fa E-Exp	G>B	G>B	yes
Mo E-Exp	G>B	G>B	yes
6.4			
Chd I-Exp	B>G	G>B	opposite
Chd E-Exp	G>B	G>B	yes

Note. For Dependent Variables: Par=Parent, Chd=Child, I-Exp= instrumental expectations, E-Exp= expressive expectations, Self-Est= self-esteem, Self-Con= self-consciousness. Results: B=Boys, G=Girls. All differences are significant at the .05 level or less.

n (Boys)=103 and n (Girls)=174.

The Relationship between Parental Personality
Characteristics and Parental Expectations

Hypothesis 1.1

It was predicted that PAQ personality characteristics would combine additively to predict both types of parental expectations. The correlations between these variables for fathers and mothers are in Tables 1 and 2, respectively. The results for fathers of boys and girls are in Table 8 and the results for mothers are in Table 9. In all analyses, the independent variables were the main effects of instrumental and expressive personality characteristics (the M and F scales of the PAQ) and their interaction and the dependent variables were instrumental and expressive expectations. The main effects were forced into the equation in a forward selection manner (regardless of their significance level) so as to allow for the testing of the interaction (Cohen & Cohen, 1983). The first main effect that is chosen is the one with the highest squared correlation with the dependent variable. The interaction was then entered after the main effects.

It should be mentioned, before proceeding further, that it is conceivable that because of the difference between the number of families with boys (103) and the number of families with girls (174), a variable with a given partial r

can be significant in the girl analyses but nonsignificant in the boy analyses. It should also be mentioned that marginally significant findings (between $p = .05$ and $p = .10$) will be reported. The results for instrumental expectations will now be presented.

Instrumental expectations. As can be seen in Table 8, the Multiple R (after the main effects and the interaction were entered into the equation) between parental personality characteristics and parental instrumental expectations for fathers of sons was .17 ($R^2 = .03 = 3\%$ of the variance was accounted for in expectations by the personality traits; $R^2 = R$ -squared). None of the main effects or the interaction significantly increased the R^2 . For fathers of daughters, the Multiple R was .24 ($R^2 = .06$). For this dyad, the expressive personality characteristics variable (the PAQ F scale) was negatively predictive (the partial r is negative) and increased the R^2 significantly by .02 ($p < .05$). The instrumental personality characteristics variable was positively predictive above and beyond expressive personality characteristics and significantly increased the R^2 by .03 ($p < .05$).

As can be seen in Table 9, the Multiple R for mothers of sons was .09 ($R^2 = .01$) and the Multiple R for mothers of daughters was .06 ($R^2 = .00$). None of the independent variables was a significant predictor of the mothers' instrumental expectations for girls or boys.

Table 8

Summary of Regression Analyses of Effects of Fathers' Personality Characteristics on Instrumental and Expressive Expectations

Step	Var	BOYS			Step	Var	GIRLS		
		Par-r	R	R2-Change			Par-r	R	R2-Change
Instrumental Expectations									
1	I	.15	.15	.02	1	E	-.16	.16	.02**
2	E	.05	.16	.00	2	I	.18	.24	.03**
3	IxE	-.05	.17	.00	3	IxE	.00	.24	.00
Expressive Expectations									
1	E	.11	.11	.01	1	E	.22	.22	.05***
2	I	.06	.13	.00	2	I	-.12	.25	.01
3	IxE	.01	.13	.00	3	IxE	.05	.25	.00

Note. I=PAQ M-scale, E=PAQ F-scale, IxE=MxF interaction. Independent variables entered at step 1= I and E; at step 2= IxE.

n (boys)= 103, n (girls)= 174.

* $p < .10$. ** $p < .05$. *** $p < .01$.

Table 9

Summary of Regression Analyses of Effects of Mothers' Personality Characteristics on Instrumental and Expressive Expectations

BOYS					GIRLS				
Step	Var	Par-r	R	R2-Change	Step	Var	Par-r	R	R2-Change
Instrumental Expectations									
1	E	-.08	.08	.00	1	I	.04	.04	.00
2	I	.04	.08	.00	2	E	.02	.05	.00
3	IxE	.03	.09	.00	3	IxE	-.04	.06	.00
Expressive Expectations									
1	E	-.02	.02	.00	1	E	.06	.06	.00
2	I	.00	.02	.00	2	I	-.04	.07	.00
3	IxE	-.05	.05	.00	3	IxE	-.11	.13	.01

Note. I=PAQ M-scale, E=PAQ F-scale, IxE=MxF interaction. Independent variables entered at step 1= I and E; at step 2= IxE.

n (boys)= 103, n (girls)= 174.

* p <.10. ** p <.05. *** p <.01.

Expressive expectations. As can be seen in Table 8, the Multiple R for fathers of sons between parental personality characteristics and expressive expectations was .13 (R² =.02). None of the independent variables was a significant predictor of expressive expectations. For fathers of daughters, the Multiple R was .25 (R² =.06). The expressiveness trait variable was positively predictive and significantly increased the R² by .05 ($p < .01$). No other independent variables were significant predictors. In Table 9, it can be seen that the Multiple R for mothers of sons was .05 (R² =.00) and was .13 (R² =.02) for mothers of daughters. No independent variables were significantly predictive in either of these analyses.

In summary, hypothesis 1.1 was not confirmed for the following dyads: fathers of sons, mothers of sons, and mothers of daughters. For fathers of daughters, the hypothesis was partially confirmed. For this dyad, instrumental personality characteristics positively predicted instrumental expectations and expressive personality characteristics positively predicted expressive expectations. Contrary to the hypotheses, expressive personality characteristics were negatively predictive of instrumental expectations for this dyad.

Hypothesis 1.2

It was predicted that androgynous parents would have the highest levels of instrumental and expressive expectations for their children. The mothers and fathers were classified as undifferentiated, masculine, feminine, or androgynous by making use of the median split technique described earlier. The means, standard deviations, and ANOVA results for the different types of expectations for the four PAQ groups are in Tables 10 and 11. The father and mother data for sons is in Table 10 and the mother and father data for daughters is in Table 11.

Instrumental expectations. For all dyads, the differences in instrumental expectations between the PAQ categories were assessed via ANOVA procedures. No significant effect of PAQ category upon instrumental expectations was found for any dyad.

Expressive expectations. Again, the differences in expressive expectations between PAQ categories were assessed with ANOVA procedures. For fathers of sons, results indicated that there were marginally significant differences between the PAQ groups with respect to expressive expectations, $F(3,102)=2.22$, $p < .10$. A posteriori Duncan Multiple Range Tests (p values must be less than .05 for there to be a significant difference; the harmonic mean of the cell sizes was employed for all Duncan tests done in

Table 10

Parental Expectations Means, Standard Deviations, and ANOVA Results for PAQ Undifferentiated, Masculine, Feminine, and Androgynous Parents of Sons

Parental Expectations	PAQ Category				F-value	Duncan Results
	Undiff	Masc	Fem	Androg		
Father I						
M	27.00	29.34	27.67	29.78	.99	-----
SD	6.38	6.73	6.38	5.75		
Father E						
M	30.62	32.14	30.00	35.13	2.22*	-----
SD	6.65	6.60	7.40	6.02		
Mother I						
M	27.76	28.75	27.90	27.79	.05	-----
SD	5.95	5.23	6.48	7.52		
Mother E						
M	30.33	32.38	32.12	32.18	.52	-----
SD	5.03	5.76	6.20	6.40		

Note. I= instrumental expectations, E= expressive expectations.

\bar{n} (father-undiff)=24, \bar{n} (father-masc)=50, \bar{n} (father-fem)=6, \bar{n} (father-androg)=23, \bar{n} (mother-undiff)=21, \bar{n} (mother-masc)=8, \bar{n} (mother-fem)=40, \bar{n} (mother-androg)=34,

* $p < .10$. ** $p < .05$. *** $p < .01$.

Table 11

Parental Expectations Means, Standard Deviations, and ANOVA Results for PAQ Undifferentiated, Masculine, Feminine, and Androgynous Parents of Daughters

Parental Expectations	PAQ Category				F-value	Duncan Results
	Undiff	Masc	Fem	Androg		
Father I						
M	33.46	34.35	32.83	33.09	1.22	-----
SD	4.19	4.01	4.72	4.10		
Father E						
M	34.70	34.47	37.67	36.96	2.12*	-----
SD	7.35	5.98	8.18	5.69		
Mother I						
M	33.02	34.14	33.25	33.04	.39	-----
SD	4.59	3.63	3.33	3.01		
Mother E						
M	35.50	35.78	35.67	35.42	.03	-----
SD	6.40	5.74	4.76	6.02		

Note. I= instrumental expectations, E= expressive expectations.

\bar{n} (father-undiff)=37, \bar{n} (father-masc)=79, \bar{n} (father-fem)=12, \bar{n} (father-androg)=46, \bar{n} (mother-undiff)=44, \bar{n} (mother-masc)=14, \bar{n} (mother-fem)=63, \bar{n} (mother-androg)=53,

* $p < .10$. ** $p < .05$. *** $p < .01$.

this study because cell sizes were always unequal) revealed that there were no significant differences between the groups. Upon inspection of the means, however, it can be seen that the androgynous group did have the higher mean. For mothers of sons, no significant differences in expressive expectations were found between the PAQ groups, $F(3,102)=.52$, $p >.10$.

For fathers of daughters, a marginally significant difference was found between the groups, $F(3,174)=2.12$, $p <.10$, but a posteriori Duncan tests revealed that there were no significant differences between the groups. Upon inspection of the means in Table 11, however, it appears that the feminine fathers and the androgynous fathers had the highest group means. With respect to mothers of daughters, no significant differences were found between the PAQ groups, $F(3,173)=.03$, $p >.10$.

In summary, hypothesis 1.2 was not confirmed for any of the dyads with respect to parental instrumental expectations. Also, it was not confirmed for the following dyads with respect to expressive expectations: mothers of sons and mothers of daughters. Marginally significant results were found for the fathers of sons and fathers of daughters with respect to expressive expectations, with androgynous fathers having high (but not significantly higher) means.

Parental Instrumental and Expressive Personality
Characteristics and Expectations as Predictors of
Selected Child Outcomes

Hypothesis 2.1 (Self-Esteem and Self-Consciousness)

It was predicted that parental instrumental and expressive traits and expectations would all be positively predictive of child self-esteem and negatively predictive of child self-consciousness for all dyads. The correlations between the parental scales and the child variables are in Tables 12 (father/son), 13 (father/daughter), 14 (mother/son), and 15 (mother/daughter). The multiple regression results for fathers' and mothers' personality traits (for boys and girls) are in Table 16 and 17, respectively and the results for fathers' and mothers' expectations (for boys and girls) are in Tables 18 and 19, respectively. (Results for all of the early adolescent outcome variables appear in these tables.)

Self-esteem predicted by parental personality traits. As can be seen in Table 16, the Multiple R between parental personality characteristics and child self-esteem for the father/son dyad was .22 (R² =.05). Expressive personality characteristics were positively predictive of the sons' level of self-esteem and significantly increased the R² by .05 (p <.05). No other independent variables were significant predictors. For fathers and daughters, the Multiple R was .05 (R² =.00). for this dyad, none of the independent variables was significantly predictive.

Table 12

Intercorrelations of the Parent and Child
Variables for Fathers and Sons

	PAQ M-Scale	PAQ F-Scale	I-Expectations	E-Expectations
SE	.01	.22	-.07	-.17
SC	.02	-.06	.00	-.08
I-Ex	.02	.06	.46	.02
E-Ex	.12	.09	.16	.28
Befa	.07	.23	.00	-.26
Fas	.23	.15	-.07	.05
Edu	.15	.06	-.06	.16

Note. SE= self-esteem, SC= self-consciousness, I-Ex= I-Expectations, E-Ex= E-Expectations, Befa= be-like-father, Fas= father satisfaction, Edu= educational aspirations.

n =103.

r (.05)=.17, r (.01)=.23, r (.001)=.30.

Table 13

Intercorrelations of the Parent and Child
Variables for Fathers and Daughters

	PAQ M-Scale	PAQ F-Scale	I-Expectations	E-Expectations
SE	.02	-.04	.04	-.04
SC	-.02	-.01	-.04	.02
I-Ex	-.02	.00	-.02	.02
E-Ex	-.02	-.07	.07	.05
Befa	.10	.10	.01	.10
Fas	.09	.06	.08	-.04
Edu	-.04	-.01	-.02	.04

Note. SE= self-esteem, SC= self-consciousness, I-Ex= I-Expectations, E-Ex= E-Expectations, Befa= be-like-father, Fas= father satisfaction, Edu= educational aspirations.

n =174.

r (.05)=.13, r (.01)=.18, r (.001)=.23.

Table 14

Intercorrelations of the Parent and Child
Variables for Mothers and Sons

	PAQ M-Scale	PAQ F-Scale	I-Expectations	E-Expectations
SE	.19	.18	-.13	.01
SC	-.08	-.12	-.07	-.13
I-Ex	-.02	-.20	.39	.08
E-Ex	-.02	.04	.26	.35
Bemo	-.15	.05	-.08	-.04
Mos	.08	.08	-.27	.03
Edu	-.02	.03	.06	-.10

Note. SE= self-esteem, SC= self-consciousness, I-Ex= I-Expectations, E-Ex= E-Expectations, Bemo= be-like-mother, Mos= mother satisfaction, Edu= educational aspirations.

n =103.

r (.05)=.17, r (.01)=.23, r (.001)=.30.

Table 15

Intercorrelations of the Parent and Child
Variables for Mothers and Daughters

	PAQ M-Scale	PAQ F-Scale	I-Expectations	E-Expectations
SE	.02	.17	.08	-.11
SC	-.02	-.12	-.06	.06
I-Ex	.03	.02	.01	-.01
E-Ex	-.10	-.01	-.04	.20
Bemo	.03	.04	.10	-.08
Mos	.20	.06	.09	.02
Edu	.06	.01	.13	-.20

Note. SE= self-esteem, SC= self-consciousness, I-Ex= I-Expectations, E-Ex= E-Expectations, Bemo= be-like-mother, Mos= mother satisfaction, Edu= educational aspirations.

n =174.

r (.05)=.13, r (.01)=.18, r (.001)=.23.

Table 16

Summary of Regression Analyses of Effects of Fathers' Instrumental and Expressive Personality Characteristics on the Early Adolescent Outcomes

Step	Var	BOYS			Step	Var	GIRLS		
		Par-r	R	R2-Change			Par-r	R	R2-Change
Self-Esteem									
1	E	.22	.22	.05**	1	E	-.04	.04	.00
2	I	-.02	.22	.00	2	I	.02	.04	.00
3	IxE	.00	.22	.00	3	IxE	-.01	.05	.00
Self-Consciousness									
1	E	-.06	.06	.00	1	I	-.02	.02	.00
2	I	.03	.07	.00	2	E	-.01	.03	.00
3	IxE	.04	.08	.00	3	IxE	-.03	.04	.00
Instrumental Self-Expectations									
1	E	.06	.06	.00	1	I	-.02	.02	.00
2	I	.02	.07	.00	2	E	.00	.02	.00
3	IxE	-.07	.10	.00	3	IxE	.06	.06	.00
Expressive Self-Expectations									
1	I	.12	.12	.01	1	E	-.07	.07	.00
2	E	.08	.14	.00	2	I	-.01	.07	.00
3	IxE	.13	.19	.02	3	IxE	-.06	.10	.00
Be-Like-Father									
1	E	.23	.23	.05**	1	E	.10	.10	.01
2	I	.04	.23	.00	2	I	.08	.13	.00
3	IxE	.09	.25	.01	3	IxE	.02	.13	.00
Father Satisfaction									
1	I	.23	.23	.05**	1	I	.09	.09	.01
2	E	.12	.26	.01	2	E	.05	.10	.00
3	IxE	.07	.27	.00	3	IxE	-.14	.17	.02*
Educational Aspirations									
1	I	.15	.15	.02	1	I	-.04	.04	.00
2	E	.04	.16	.00	2	E	.00	.04	.00
3	IxE	-.04	.16	.00	3	IxE	.00	.04	.00

Note. I=PAQ M-scale, E=PAQ F-scale, IxE=MxF interaction.
Variables entered at step 1= I and E; at step 2= IxE.

n (boys)= 103, n (girls)= 174.

* p < .10. ** p < .05. *** p < .01.

Table 17

Summary of Regression Analyses of Effects of Mothers' Instrumental and Expressive Personality Characteristics on the Early Adolescent Outcomes

Step	Var	BOYS			Step	Var	GIRLS		
		Par-r	R	R2-Change			Par-r	R	R2-Change
Self-Esteem									
1	I	.19	.19	.04*	1	E	.17	.17	.03**
2	E	.13	.23	.02	2	I	-.02	.17	.00
3	IxE	.01	.23	.00	3	IxE	-.14	.22	.02*
Self-Consciousness									
1	E	-.12	.12	.01	1	E	-.13	.13	.02*
2	I	-.04	.13	.00	2	I	.01	.13	.00
3	IxE	-.15	.20	.02	3	IxE	.24	.27	.06***
Instrumental Self-Expectations									
1	E	-.20	.20	.04**	1	I	.03	.03	.00
2	I	.04	.20	.00	2	E	.01	.04	.00
3	IxE	-.03	.20	.00	3	IxE	-.04	.05	.00
Expressive Self-Expectations									
1	E	.04	.04	.00	1	I	-.10	.10	.01
2	I	-.03	.05	.00	2	E	.01	.10	.00
3	IxE	-.04	.06	.00	3	IxE	-.06	.12	.00
Be-Like-Mother									
1	I	-.15	.15	.02	1	E	.04	.04	.00
2	E	.10	.18	.01	2	I	.02	.04	.00
3	IxE	-.04	.19	.00	3	IxE	-.03	.05	.00
Mother Satisfaction									
1	I	.08	.08	.01	1	I	.20	.20	.04***
2	E	.05	.10	.00	2	E	.01	.20	.00
3	IxE	-.06	.11	.00	3	IxE	.00	.20	.00
Educational Aspirations									
1	E	.03	.03	.00	1	I	.06	.06	.00
2	I	-.03	.04	.00	2	E	-.01	.06	.00
3	IxE	.10	.10	.01	3	IxE	-.13	.15	.02*

Note. I=PAQ M-scale, E=PAQ F-scale, IxE=MxF interaction.
Variables entered at step 1= I and E; at step 2= IxE.

\bar{n} (boys)= 103, \bar{n} (girls)= 174.

* $p < .10$. ** $p < .05$. *** $p < .01$.

Table 18

Summary of Regression Analyses of Effects of Fathers' Instrumental and Expressive Expectations on the Early Adolescent Outcomes

Step	Var	BOYS			Step	Var	GIRLS		
		Par-r	R	R2-Change			Par-r	R	R2-Change
Self-Esteem									
1	E	-.17	.17	.03*	1	I	.04	.04	.00
2	I	-.05	.18	.00	2	E	-.02	.04	.00
3	IxE	.16	.24	.02	3	IxE	.06	.08	.00
Self-Consciousness									
1	E	-.08	.08	.00	1	I	-.04	.04	.00
2	I	.01	.08	.00	2	E	.01	.04	.00
3	IxE	-.22	.24	.05**	3	IxE	-.06	.07	.00
Instrumental Self-Expectations									
1	I	.46	.46	.21****	1	I	-.02	.02	.00
2	E	-.06	.46	.00	2	E	.00	.02	.00
3	IxE	.08	.47	.00	3	IxE	-.02	.03	.00
Expressive Self-Expectations									
1	E	.28	.28	.08***	1	I	.07	.07	.00
2	I	.13	.30	.02	2	E	.11	.13	.01
3	IxE	.05	.31	.00	3	IxE	.01	.13	.00
Be-Like-Father									
1	E	-.26	.26	.06***	1	E	.10	.10	.01
2	I	.04	.26	.00	2	I	.08	.13	.01
3	IxE	-.03	.26	.00	3	IxE	.03	.13	.00
Father Satisfaction									
1	I	-.07	.07	.00	1	I	.08	.08	.01
2	E	.06	.09	.00	2	E	.01	.08	.00
3	IxE	.03	.10	.00	3	IxE	.08	.11	.00
Educational Aspirations									
1	E	.16	.16	.03*	1	E	.04	.04	.00
2	I	-.09	.19	.01	2	I	.01	.04	.00
3	IxE	.11	.22	.01	3	IxE	.07	.08	.00

Note. I=I-Expect., E=E-Expect., IxE=IxE interaction.
Variables entered at step 1= I and E; at step 2= IxE.

n (boys)= 103, n (girls)= 174.

* p <.10. ** p <.05. *** p <.01. **** p <.001.

Table 19

Summary of Regression Analyses of Effects of Mothers' Instrumental and Expressive Expectations on the Early Adolescent Outcomes

BOYS					GIRLS				
Step	Var	Par-r	R	R2-Change	Step	Var	Par-r	R	R2-Change
					Self-Esteem				
1	I	-.13	.13	.02	1	E	-.11	.11	.01
2	E	.05	.14	.00	2	I	.02	.12	.00
3	IxE	.10	.17	.01	3	IxE	-.05	.12	.00
Self-Consciousness									
1	E	-.13	.13	.02	1	I	-.06	.06	.00
2	I	-.03	.14	.00	2	E	.03	.07	.00
3	IxE	-.20	.24	.04**	3	IxE	.00	.07	.00
Instrumental Self-Expectations									
1	I	.39	.39	.15****	1	E	-.01	.01	.00
2	E	-.04	.40	.00	2	I	.00	.01	.00
3	IxE	-.08	.40	.00	3	IxE	-.10	.10	.01
Expressive Self-Expectations									
1	E	.35	.35	.12****	1	E	.20	.20	.04****
2	I	.18	.39	.03*	2	I	.08	.22	.01
3	IxE	.18	.42	.03*	3	IxE	.08	.23	.01
Be-Like-Mother									
1	I	-.08	.08	.01	1	I	.10	.10	.01
2	E	-.02	.09	.00	2	E	-.03	.10	.00
3	IxE	-.04	.09	.00	3	IxE	-.03	.10	.00
Mother Satisfaction									
1	I	-.27	.27	.07***	1	I	.09	.09	.01
2	E	.12	.29	.01	2	E	.09	.13	.01
3	IxE	-.08	.30	.01	3	IxE	-.02	.13	.00
Educational Aspirations									
1	E	-.10	.10	.01	1	E	-.20	.20	.04****
2	I	.10	.14	.01	2	I	.03	.20	.00
3	IxE	.02	.14	.00	3	IxE	-.06	.20	.00

Note. I=I-Expect., E=E-Expect., IxE=IxE interaction.
 Variables entered at step 1= I and E; at step 2= IxE.
 n (boys)= 103, n (girls)= 174.
 * $p < .10$. ** $p < .05$. *** $p < .01$. **** $p < .001$.

As can be seen in Table 17, the Multiple R for mothers and sons was .23 (R² =.05). Instrumental personality characteristics were positively predictive and significantly increased the R² by .04 (marginal; (p <.10). No other predictors were significant. It should be noted, however, that expressive personality characteristics were significantly correlated with child self-esteem for this dyad. (The correlation for expressive traits was .18 as opposed to .19 for instrumental traits.) For mothers and daughters, the Multiple R was .22 (R² =.05). Expressive personality characteristics were positively predictive and significantly increased the R² by .03 (p <.05). The IxE interaction was negatively predictive and significantly increased the R² by .02 (marginal; p <.10). Such a negatively predictive interaction (marginal) by itself would indicate that those mothers with high I and low E personality characteristics and those with high E and low I personality characteristics would tend to have daughters with the highest self-esteem. (Regression lines can be plotted by employing unstandardized regression weights to demonstrate this; Cohen & Cohen, 1983.) Given that it occurs in conjunction with a positively predictive expressive variable, one can conclude that it seems that it is those mothers who are high in E and low in I traits ("feminine" mothers) who have daughters with the highest levels of self-esteem.

Self-esteem predicted by parental expectations. As can be seen in Table 18, the Multiple R for fathers and sons between parental expectations and child self-esteem was .24 (R² =.06). Expressive expectations were negatively predictive and significantly increased the R² by .03 (marginal; p <.10). No other predictors were significant. For fathers and daughters, the Multiple R was .08 (R² =.01). None of the independent variables was significantly predictive.

As can be seen in Table 19, the Multiple Rs for mothers and sons and for mothers and daughters were .17 (R² =.03) and .12 (R² =.01), respectively. None of the independent variables was significant for either of these dyads.

Self-consciousness predicted by parental personality traits. As can be seen in Table 16, the Multiple Rs for the father/son and father/daughter dyads between parental personality traits and child self-consciousness were .08 (R² =.01) and .04 (R² =.00), respectively. No independent variables were predictive.

As can be seen in Table 17, the Multiple Rs for the mother/son and mother/daughter dyads were .20 (R² =.04) and .27 (R² =.07), respectively. No predictors were significant for the mother/son dyad. For the mother/daughter dyad, expressiveness was negatively predictive and significantly increased the R² by .02 (marginal; p <.10). Also, the IxE

interaction was positively predictive and significantly increased the R² by .06 (p <.01) for this dyad. Given the direction of these two findings, it seems that mothers who are low in both E and I personality characteristics ("undifferentiated" mothers) tend to have daughters who are high in self-consciousness. (Regression lines can be plotted to confirm this conclusion.)

It should be noted that such a result is somewhat different than if the analyses revealed two significant negative main effects even though the final conclusion seems similar. In the present case of the positive interaction and the negative main effect, one finds that in addition to those mothers low in I and E traits, those mothers high in I and E traits also tend to have daughters with higher self-consciousness. In the case of two negative main effects with no interaction, such mothers (those high in I and E traits) will have daughters lower in self-consciousness. Such findings can also be seen in Table 23, which will be presented later.

Self-consciousness predicted by parental expectations.

As can be seen in Table 18, the Multiple R_s between parental expectations and child self-esteem for the father/son and father/daughter dyads were .24 (R² =.06) and .07 (R² =.00), respectively. For the father/son dyad, the IxE interaction was negatively predictive and the R² was increased

significantly by .05 ($p < .05$). Such an interaction indicates that fathers with low levels of I and high levels of E expectations or high levels of I and low levels of E expectations tend to have sons with a higher level of self-consciousness. For the father-daughter dyad, there were no significant predictors.

As can be seen in Table 19, the Multiple R_s for the mother/son and mother/daughter dyads were .24 (R_2 = .06) and .07 (R_2 = .00), respectively. For the mother/son dyad, the IxE interaction was negatively predictive and significantly increased the R_2 by .04 ($p < .05$). This interaction can be interpreted in the same manner as the interaction for the father/son dyad above. For the mother/daughter dyad, the independent variables were not significantly predictive.

In summary, with respect to self-esteem, the predictive utility of parental personality traits (hypothesis 2.1) was not confirmed for the father/daughter dyad. It was partially confirmed for the other three dyads. Expressive traits were positively predictive for the father/son and the mother/daughter dyads (and positively correlated for the mother/son dyad) and instrumental traits were positively predictive (marginal) for the mother/son dyad. In addition, the IxE interaction was negatively predictive (marginal) for the mother/daughter dyad and the implications of such an interaction were discussed.

With respect to the predictive utility of parental expectations for self-esteem hypothesis 2.1 was not confirmed for the following dyads: father/daughter, mother/son, and mother/daughter. Contrary to the hypothesis, expressive expectations were negatively predictive of self-esteem (marginal) for the father/son dyad.

With respect to self-consciousness, the parental personality variables were not predictive for the following dyads: father/son, father/daughter, and mother/son. It was partially confirmed, however, for the mother/daughter dyad with expressive personality traits being negatively predictive (marginal). Also, the IxE interaction was positively predictive for this dyad.

The predictive utility of parental expectations for child self-consciousness was not confirmed for any of the dyads. A significant and negative relationship between the IxE interaction and self-consciousness, however, was found for both the father/son and mother/son dyads.

Hypothesis 2.2 (Self-Esteem and Self-Consciousness)

It was predicted that androgynous parents would have children with the highest self-esteem and the lowest self-consciousness. (One may also find that undifferentiated parents have children with the highest

self-consciousness.) The means, standard deviations, and ANOVA results for all of the child outcomes for the four PAQ groups are in Tables 20 (fathers and sons), 21 (mothers and sons), 22 (fathers and daughters), and 23 (mothers and daughters).

Self-esteem. For all dyads, differences between the PAQ groups (with respect to self-esteem) were assessed with ANOVA procedures. Results indicated that for fathers and sons, there were no significant differences between the groups, $F(3,102)=1.19$, $p > .10$. For mothers and sons, however, significant differences between the groups were found, $F(3,102)=3.34$, $p < .05$. A posteriori Duncan tests revealed that the androgynous mothers had sons with higher levels of self-esteem than masculine mothers. For fathers of daughters, no significant differences were found, $F(3,173)=.94$, $p > .10$. For mothers of daughters, significant differences were found between the PAQ groups, $F(3,173)=3.28$, $p < .05$. A posteriori tests revealed that feminine mothers had daughters with higher self-esteem than undifferentiated or masculine mothers.

Self-consciousness. With respect to fathers and sons, results revealed that there were no differences between the PAQ groups with respect to child self-consciousness, $F(3,102)=1.66$, $p > .10$. For mothers and sons, significant differences were found, $F(3,102)=2.89$, $p < .05$. Although

Table 20

Child Outcome Means, Standard Deviations, and ANOVA Results
for PAQ Undifferentiated, Masculine, Feminine,
and Androgynous Fathers of Sons

Child Outcome	PAQ Category				F-value	Duncan Results
	Undiff	Masc	Fem	Androg		
Self-Esteem						
M	22.54	22.94	24.47	23.72	1.19	-----
SD	3.35	2.80	2.40	2.43		
Self-Con.						
M	14.06	13.51	11.94	14.05	1.66	-----
SD	1.80	2.35	3.25	2.34		
I-Expect.						
M	28.75	28.84	28.00	29.13	.07	-----
SD	6.54	5.01	5.55	4.71		
E-Expect.						
M	29.42	30.28	28.83	32.04	.98	-----
SD	5.06	6.32	8.56	4.70		
Be-Like-Fa						
M	3.37	3.32	3.74	3.63	.92	-----
SD	.81	.86	.76	.98		
Fa-Satis.						
M	11.67	12.68	11.83	13.15	2.26*	-----
SD	2.18	1.98	2.40	2.30		
Educ. Asp.						
M	3.92	4.34	4.00	4.28	1.51	-----
SD	1.10	.74	1.26	.61		

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations.

n (father-undiff)=24, n (father-masc)=50, n (father-fem)=6,
n (father-androg)=23,

* p <.10. ** p <.05. *** p <.01.

Table 21

Child Outcome Means, Standard Deviations, and ANOVA Results
for PAQ Undifferentiated, Masculine, Feminine,
and Androgynous Mothers of Sons

Child Outcome	PAQ Category				F-value	Duncan Results
	Undiff	Masc	Fem	Androg		
Self-Esteem						
M	22.84	21.88	22.50	24.30	3.34**	A>M
SD	2.89	3.56	3.03	2.06		
Self-Con.						
M	13.58	14.11	14.34	12.83	2.89**	-----
SD	1.86	2.41	2.40	2.24		
I-Expect.						
M	29.10	29.00	28.85	28.62	.04	-----
SD	5.01	5.45	6.02	4.72		
E-Expect.						
M	29.57	31.88	30.48	30.44	.30	-----
SD	5.16	7.18	5.55	6.45		
Be-Like-Mo						
M	3.11	2.50	3.34	3.04	1.85	-----
SD	1.04	.92	.94	.97		
Mo-Satis.						
M	11.61	11.50	11.81	12.25	.53	-----
SD	2.22	1.77	2.22	2.22		
Educ. Asp.						
M	4.46	4.12	4.10	4.19	.83	-----
SD	.48	.64	.84	1.06		

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations.

n (mother-undiff)=21, n (mother-masc)=8, n (mother-fem)=40,
n (mother-androg)=34,

* $p < .10$. ** $p < .05$. *** $p < .01$.

Table 22

Child Outcome Means, Standard Deviations, and ANOVA Results
for PAQ Undifferentiated, Masculine, Feminine,
and Androgynous Fathers of Daughters
 PAQ Category

Child Outcome	Undiff	Masc	Fem	Androg	F-value	Duncan Results
Self-Esteem						
M	21.45	22.43	21.44	22.05	.94	-----
SD	3.49	2.74	3.39	3.60		
Self-Con.						
M	14.59	14.50	15.08	14.21	.58	-----
SD	2.38	2.13	1.50	2.24		
I-Expect.						
M	30.44	30.34	31.17	30.15	.14	-----
SD	4.57	4.83	3.38	5.45		
E-Expect.						
M	34.42	34.87	34.08	34.02	.25	-----
SD	5.05	5.60	5.48	6.16		
Be-Like-Fa						
M	2.81	2.99	2.92	3.20	1.47	-----
SD	.66	.85	1.00	.93		
Fa-Satis.						
M	11.73	12.48	13.58	12.47	2.58*	F>U
SD	1.95	2.14	1.83	2.17		
Educ. Asp.						
M	4.30	4.15	4.17	4.25	.33	-----
SD	.68	.87	.83	.82		

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations.

n (father-undiff)=37, n (father-masc)=79, n (father-fem)=12, n (father-androg)=46,

* $p < .10$. ** $p < .05$. *** $p < .01$.

Table 23

Child Outcome Means, Standard Deviations, and ANOVA Results
for PAQ Undifferentiated, Masculine, Feminine,
and Androgynous Mothers of Daughters
 PAQ Category

Child Outcome	Undiff	Masc	Fem	Androg	F-value	Duncan Results
Self-Esteem						
M	21.30	21.09	22.99	21.81	3.28**	F>U,M
SD	3.18	3.48	2.73	3.43		
Self-Con.						
M	15.26	13.90	13.92	14.66	3.91***	U>M,F
SD	2.16	2.73	1.93	2.13		
I-Expect.						
M	29.80	31.00	30.57	30.43	.32	-----
SD	4.57	4.93	4.73	5.23		
E-Expect.						
M	33.94	35.00	34.76	34.51	.22	-----
SD	5.61	6.64	4.86	6.22		
Be-Like-Mo						
M	3.40	3.57	3.44	3.42	.12	-----
SD	.99	1.16	.98	.86		
Mo-Satis.						
M	11.93	12.64	11.48	12.09	1.38	-----
SD	2.04	2.53	2.46	2.07		
Educ. Asp.						
M	4.12	4.28	4.23	4.23	.25	-----
SD	.74	.91	.81	.87		

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations.

n (mother-undiff)=44, n (mother-masc)=14, n (mother-fem)=63,
n (mother-androg)=53,

* p <.10. ** p <.05. *** p <.01.

Duncan Multiple Range tests revealed no significant differences (at the .05 significance level) between the groups, feminine mothers had sons with the highest self-consciousness and androgynous mothers had sons with the lowest self-consciousness.

For fathers and daughters, no significant differences were found between the PAQ groups, $F(3,173)=.58$, $p > .10$. For mothers and daughters, analyses revealed significant differences between the groups, $F(3,173)=3.91$, $p < .01$. A posteriori tests indicated that undifferentiated mothers had daughters with the highest self-consciousness and masculine and feminine mothers had daughters with significantly lower levels of self-consciousness.

In summary, with respect to self-esteem, hypothesis 2.2 was not confirmed for the following dyads: father/son and father/daughter. For mothers and sons, hypothesis 2.2 was confirmed with androgynous mothers having sons with the highest self-esteem. With respect to mothers and daughters, feminine mothers had daughters with the highest self-esteem (but not significantly higher than the daughters of androgynous mothers).

The results for self-consciousness revealed that hypothesis 2.2 was not confirmed for the father/son dyad or the father/daughter dyad. It was confirmed for the mother/daughter dyad, however, with undifferentiated mothers

having daughters with the highest levels of self-consciousness. The ANOVA analysis was significant for the mother/son dyad but no significant differences between the groups were found with the a posteriori procedures.

Hypothesis 2.3 (Self-Esteem and Self-Consciousness)

It was predicted that girls should experience significantly lower levels of self-esteem and higher levels of self-consciousness than the boys. Both of these predictions were confirmed. The girls demonstrated significantly lower levels of self-esteem (\underline{M} =22.05, \underline{SD} =3.19) than the boys (\underline{M} =23.11, \underline{SD} =2.85), t (275)= 2.78, p <.01. Also, girls demonstrated significantly higher levels of self-consciousness (\underline{M} =14.48, \underline{SD} =2.17) than the boys (\underline{M} =13.67, \underline{SD} =2.31), t (275)= -2.95, p <.01.

Hypothesis 3.1 (Child Self-Expectations)

It was predicted that parental instrumental and expressive personality characteristics and expectations are predictive of child instrumental and expressive expectations.

Child instrumental expectations predicted by parental personality traits. As can be seen in Table 16, the Multiple \underline{R} s for the father/son and father/daughter dyads between parental personality traits and child instrumental

expectations were .10 ($R^2 = .01$) and .06 ($R^2 = .00$), respectively. None of the main effects or interactions significantly increased the R^2 for either of these dyads. The Multiple R_s for the mother/son and mother/daughter dyads (in Table 17) were .20 ($R^2 = .04$) and .05 ($R^2 = .00$), respectively. Expressive personality characteristics were negatively predictive for the mother/son dyad and increased the R^2 significantly by .04 ($p < .05$). The main effects and the interaction were not significantly predictive for the mother/daughter dyad.

Child instrumental expectations predicted by parental expectations. As can be seen in Table 18, the Multiple R_s between child instrumental expectations and parental expectations for the father/son and father/daughter dyads were .47 ($R^2 = .22$) and .03 ($R^2 = .00$), respectively. For the father/son dyad, parental instrumental expectations were positively predictive and significantly increased the R^2 by .21 ($p < .001$). None of the main effects or the interaction was significant for the father/daughter dyad.

The Multiple R_s for the mother/son and mother/daughter dyads (Table 19) were .40 ($R^2 = .16$) and .10 ($R^2 = .01$), respectively. With respect to the mother/son dyad, parental instrumental expectations were positively predictive and significantly increased the R^2 by .15 ($p < .001$). None of the effects was significantly predictive for the mother/daughter dyad.

Child expressive expectations predicted by parental personality traits. As can be seen in Table 16, the Multiple Rs between parental personality traits and child expressive expectations for the father/son and father/daughter dyads were .19 (R² =.04) and .10 (R² =.01), respectively. None of the predictors was significant for either of these dyads. The Multiple Rs for the mother/son and mother/daughter dyads (Table 17) were .06 (R² =.00) and .12 (R² =.01), respectively. Again, none of the predictors was significant.

Child expressive expectations predicted by parental expectations. As can be seen in Table 18, the Multiple Rs between parental expectations and child expressive expectations for the father/son and the father/daughter dyads were .31 (R² =.10) and .13 (R² =.02), respectively. For fathers and sons, parental expressive expectations were positively predictive and significantly increased the R² by .08 (p <.01). None of the effects was significantly predictive for the father/daughter dyad.

The Multiple Rs (in Table 19) for the mother/son and mother/daughter dyads were .42 (R² =.18) and .23 (R² =.05), respectively. In the case of the mother/son dyad, analyses revealed several significant results. Parental expressive expectations were positively predictive and significantly increased the R² by .12 (p <.001). Parental instrumental

expectations were positively predictive and significantly increased the R² by .03 (marginal; p <.10). The IxE interaction was positively predictive and significantly increased the R² by .03 (marginal; p <.10). Given the directions of the findings for this dyad, the results indicate that mothers who have high levels of I and E expectations have sons with significantly higher levels of expressive self-expectations (even more so than if there were just two positive main effects). For the mother/daughter dyad, parental expressive expectations were positively predictive and significantly increased the R² by .04 (p <.01).

In summary, with respect to child instrumental expectations, the predictive utility of parental personality traits (hypothesis 3.1) was not confirmed for the following dyads: father/son, father/daughter, and mother/daughter. Contrary to the hypothesis, expressive personality traits were negatively predictive of child instrumental expectations for the mother/son dyad. It was also found that parental instrumental expectations were very predictive of child instrumental expectations in both of the son dyads. On the other hand, the hypothesis was not confirmed for either of the daughter dyads.

With respect to child expressive expectations, the predictive utility of parental personality traits was not

confirmed for any of the dyads. Parental expressive expectations were positively predictive for all of the dyads except for the father/daughter dyad. Also, marginal significant findings were noted for parental instrumental expectations (positive) and the IxE interaction (positive) for the mother/son dyad, thus providing further support for the hypothesis.

Hypothesis 3.2 (Child Self-Expectations)

It was predicted that androgynous parents would have children with the highest levels of instrumental and expressive self-expectations. The means, standard deviations, and ANOVA results for the PAQ groups with respect to these dependent variables for all dyads are in Tables 20- 23. Again, the analyses were done with ANOVA procedures.

Child instrumental self-expectations. With respect to this child variable, the hypothesis was not confirmed for any of the dyads. The results were as follows: fathers and sons, $F(3,102)=.07$, $p > .10$; mothers and sons, $F(3,102)=.04$, $p > .10$; fathers and daughters, $F(3,173)=.14$, $p > .10$; and mothers and daughters, $F(3,173)=.32$, $p > .10$.

Child expressive self-expectations. Again, the hypothesis was not confirmed for any of the dyads. The results were as follows; fathers and sons, $F(3,102)=.98$, p

$>.10$; mothers and sons, $F(3,102)=.30$, $p >.10$; fathers and daughters, $F(3,173)=.25$, $p >.10$; and mothers and daughters, $F(3,173)=.22$, $p >.10$.

Hypothesis 4.1 (Parental Attractiveness Variables)

It was predicted that parental instrumental and expressive traits and expectations are positively predictive of the degree to which a child wants to be like his or her parents and the degree to which the child views his or her parents as satisfied.

"Be-Like-Parent" predicted by parental personality traits. As can be seen in Table 16, the Multiple R_s between parental personality characteristics and the be-like-parent variable for the father/son and father/daughter dyads were .25 ($R^2 = .06$) and .13 ($R^2 = .02$), respectively. For the father/son dyad, expressive personality traits were positively predictive and significantly increased the R^2 by .05 ($p <.05$). None of the predictors was significant for the father/daughter dyad. The Multiple R_s for the mother/son and mother/daughter dyads (in Table 17) were .19 ($R^2 = .04$) and .05 ($R^2 = .00$), respectively. None of the independent variables was significantly predictive for either of these dyads.

"Be-Like-Parent" predicted by parental expectations. As can be seen in Table 18, the Multiple R_s between parental

expectations and the be-like-parent variable for the father/son and father/daughter dyads were .26 ($R^2 = .07$) and .13 ($R^2 = .04$), respectively. For the father/son dyad, expressive expectations were negatively predictive and significantly increased the R^2 by .06 ($p < .01$). None of the predictors for the father/daughter dyad was significant. The Multiple R_s for the mother/son and mother/daughter dyads (Table 19) were .09 ($R^2 = .01$) and .10 ($R^2 = .01$), respectively. None of the predictors was significant for either of these dyads.

Parental satisfaction predicted by parental personality traits. As can be seen in Table 16, the Multiple R_s between the parental personality variables and the parental satisfaction variable (child report) for the father/son and father/daughter dyads were .27 ($R^2 = .07$) and .17 ($R^2 = .03$), respectively. For the father/son dyad, parental instrumental personality traits were positively predictive and significantly increased the R^2 by .05 ($p < .05$). For the father/daughter dyad, the IxE interaction was negatively predictive and significantly increased the R^2 by .02 (moderate; $p < .10$). Such an interaction indicates that there is a trend for fathers high in instrumental and low in expressive personality traits or high in expressive and low in instrumental traits to have daughters that see them as more satisfied.

As can be seen in Table 17, the Multiple Rs for the mother/son and mother/daughter dyads were .11 (R₂ =.01) and .20 (R₂ =.04), respectively. None of the predictors was significant for the mother/son dyad. On the other hand, parental instrumental traits were positively predictive and significantly increased the R₂ by .04 (p <.01) for the mother/daughter dyad.

Parental satisfaction predicted by parental expectations.

As can be seen in Table 18, the Multiple Rs for the father/son and father/daughter dyads for these variables were .10 (R₂ =.01) and .11 (R₂ =.01), respectively. None of the predictors was significant for either of these dyads. The Multiple Rs for the mother/son and mother/daughter dyads (in Table 19) were .30 (R₂ =.09) and .13 (R₂ =.02), respectively. For the mother/son dyad, instrumental expectations were negatively predictive and significantly increased the R₂ by .07 (p <.01). None of the predictors was significant for the mother/daughter dyad.

In summary, with respect to the be-like-parent variable, parental expressive personality characteristics were significantly predictive (positive) for the father/son dyad, thus partially confirming hypothesis 4.1. None of the personality variables was significantly predictive for any of the other dyads. Parental expectations were not positively predictive of the be-like-parent variable for any

of the dyads. Contrary to hypothesis 4.1, expressive expectations were negatively predictive of this variable for the father/son dyad.

With respect to the parental satisfaction variable, hypothesis 4.1 was partially confirmed for the father/son and the mother/daughter dyads in that instrumental traits were positively predictive. It was not confirmed for any of the other dyads (with respect to parental traits). It should be mentioned that the IxE personality trait interaction was moderately significant (negative predictor) for the father/daughter dyad and the implications of such an interactional trend were discussed. Parental expectations were not positively predictive for any of the dyads. Contrary to the hypothesis, instrumental expectations were negatively predictive of parental satisfaction for the mother/son dyad.

Hypothesis 4.2 (Parental Attractiveness Variables)

It was predicted that androgynous parents would have children who most wanted to be like them and who view them as being the most satisfied.

Be-like-parent. The hypothesis was not confirmed for any of the dyads for this variable. The results were as follows: fathers and sons, $F(3,102)=.92$, $p > .10$; mothers and sons, $F(3,102)=1.85$, $p > .10$; fathers and daughters, F

(3,173)=1.47, $p > .10$; and mothers and daughters, $F(3,173)=.12$, $p > .10$.

Parental satisfaction. For fathers and sons, results indicated that there were marginally significant differences between the PAQ groups, with respect to parental satisfaction, $F(3,102)=2.26$, $p < .10$. Although the Duncan tests revealed no significant differences between the groups, upon inspection of the means it can be seen that the androgynous group did have the highest mean. No significant differences were found between the PAQ groups for the mother/son dyad, $F(3,102)=.53$, $p > .10$. For the father/daughter dyad, marginally significant differences were found, $F(3,173)=2.58$, $p < .10$. The Duncan results revealed that the feminine group had a significantly higher mean than the undifferentiated group. No differences were noted for the mother/daughter dyad, $F(3,173)=1.38$, $p > .10$.

Hypothesis 4.3 (Parental Attractiveness Variables)

It was predicted that boys will want to be like their fathers more than they want to be like their mothers and that girls will want to be like both parents equally. For boys, the means of be-like-mother and be-like-father were $M = 3.13$ ($SD = .98$) and $M = 3.43$ ($SD = .87$), respectively. Results confirmed the hypothesis that boys want to be like their fathers more than their mothers, $t(102)=-3.09$, p

<.01. For girls, the means of be-like-mother and be-like-father were \underline{M} =3.44 (\underline{SD} =.96) and \underline{M} =3.00 (\underline{SD} =.85), respectively. Results did not confirm the hypothesis, \underline{t} (173)=5.63, \underline{p} <.001. It appears that girls would prefer to be more like their mothers.

It was also predicted that boys should not differ from girls in terms of how much they want to be like their fathers but girls will want to be like their mothers to a greater degree than do boys. With respect to the first prediction, results revealed that boys (\underline{M} =3.43, \underline{SD} =.87) want to be like their fathers significantly more than do girls (\underline{M} =3.00, \underline{SD} =.85), \underline{t} (275)=3.99, \underline{p} <.001 (contrary to the hypothesis). With respect to the second prediction, results indicated that girls (\underline{M} =3.44, \underline{SD} =.96) want to be like their mother significantly more than do boys (\underline{M} =3.13, \underline{SD} =.98), \underline{t} (275)=-2.54, \underline{p} <.05 (thus confirming the hypothesis).

Hypothesis 5.1 (Educational Aspirations)

It was hypothesized that parental instrumental and expressive personality characteristics and expectations are positively predictive of child educational aspirations.

Educational aspirations predicted by parental personality traits. As can be seen in Table 16, the Multiple \underline{R} s between the parental variables and educational aspiration (in the

child) for the father/son and father/daughter dyads were .16 ($R^2 = .02$) and .04 ($R^2 = .00$), respectively. None of the predictors was significant for either of these dyads. The Multiple R_s for the mother/son and mother/daughter dyads (in Table 17) were .10 ($R^2 = .01$) and .15 ($R^2 = .02$), respectively. None of the predictors was significant for the mother/son dyad. For the mother/daughter dyad, the IxE interaction was negatively predictive and significantly increased the R^2 by .02 (marginal; $p < .10$). Such an interaction indicates that there is a trend for either mothers high in instrumental and low in expressive traits or high in expressive and low in instrumental traits to have daughters who have high educational aspirations.

Educational aspirations predicted by parental expectations. As can be seen in Table 18, the Multiple R_s between parental expectations and this child variable for father/son and father/daughter dyads were .22 ($R^2 = .05$) and .08 ($R^2 = .01$), respectively. For the father/son dyad, parental expressive expectations were positively predictive and significantly increased the R^2 by .03 (marginal; $p < .10$). None of the predictors was significant for the father/daughter dyad. As can be seen in Table 19, the Multiple R_s for the mother/son and mother/daughter dyads were .14 ($R^2 = .02$) and .20 ($R^2 = .04$), respectively. The parental variables were not significantly predictive for the mother/son dyad. For the mother/daughter dyad, expressive

expectations were negatively predictive and significantly increased the R^2 by .04 ($p < .01$).

In summary, with respect to educational aspirations, the predictive utility of parental personality traits (hypothesis 5.1) was not confirmed for any of the dyads. The IxE interaction was negatively predictive (marginal) for the mother/daughter dyad and the implications of this interaction were discussed. The predictive utility of parental expectations was not confirmed for the following dyads: father/daughter and mother/son. It was partially confirmed for the father/son dyad since expressive expectations were marginally predictive in a positive direction. Contrary to the hypothesis, expressive expectations were significantly predictive in a negative direction for the mother/daughter dyad.

Hypothesis 5.2 (Educational Aspirations)

It was predicted that androgynous parents would have children with the highest educational aspirations. This hypothesis was not confirmed for any of the dyads: fathers and sons, $F(3,102)=1.51$, $p > .10$; mothers and sons, $F(3,102)=.83$, $p > .10$; fathers and daughters, $F(3,173)=.33$, $p > .10$; and mothers and daughters, $F(3,173)=.25$, $p > .10$.

Hypothesis 5.3 (Educational Aspirations)

It was predicted that the boys would have higher educational aspirations than the girls. This hypothesis was not confirmed since results revealed that boys (\underline{M} =4.21, \underline{SD} =.85) and girls (\underline{M} =4.21, \underline{SD} =.82) did not significantly differ with respect to this variable, t (275)=-.02, p >.10.

Hypotheses 6.1 and 6.2 (General Hypotheses)

It was predicted that parental expectations account for more of the variance in all of the child outcomes than do parental personality traits (hypothesis 6.1). It was also predicted that the fathers' PAQ scores and expectations are more highly predictive of all male child outcomes and both parents PAQ scores and expectations are equally predictive of all female child outcomes. These analyses were to be done in two ways. Multiple \underline{R} s were to be compared so as to assess the differences predicted above. Also, all relevant variables (for example, all of the PAQ and expectation scales; hypothesis 6.1) could have been put into one regression equation and the forward selection technique could have been employed to determine which variables were the best predictors.

Unfortunately, however, many of the simple correlations in this study were negative. Such results tend to render the proposed second-order analyses uninterpretable. An

assumption underlying these second-order analyses is that all of the first order analyses must be in the predicted direction. Because this assumption was not met, interpreting comparisons, for example, between one Multiple R which is made up of all positive semi-partial correlations and one which is made up of some positive and some negative semi-partial correlations would be very difficult if not impossible. Some rather striking differences were found, however, with respect to child expectations. The results underlying such differences have already been presented and will be discussed again in the next section (Discussion).

Hypotheses 6.3 and 6.4 (General Hypotheses)

These hypotheses will be discussed simultaneously since issues relevant to the first apply to the second. In hypothesis 6.3, it was predicted that parental instrumental expectations are greater for boys than for girls and that expressive expectations are greater for girls than for boys. In hypothesis 6.4, the same predictions were made with respect to child self-expectations. If these results were found, it was also predicted that the discrepancy between expressive and instrumental expectations (parental and child) will be greater for the girls than for the boys. The means, standard deviations, and t-test results which apply to these hypotheses are in Table 24.

Table 24

Expectations Means, Standard Deviations, and T-Test Results
Comparing Sons and Daughters

Expectations Variable	Child Sex		T-Value
	Boys	Girls	
Father I-Expect.			
M	28.80	33.72	-6.98****(a)
SD	6.42	4.13	
Father E-Expect.			
M	32.33	35.40	-3.78****
SD	6.65	6.45	
Mother I-Expect.			
M	27.90	33.20	-7.54****(a)
SD	6.57	3.61	
Mother E-Expect.			
M	31.80	35.56	-5.25****
SD	5.98	5.63	
Child I-Expect.			
M	28.84	30.37	-2.46**
SD	5.30	4.84	
Child E-Expect.			
M	30.39	34.50	-5.80****
SD	5.86	5.60	

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations, (a)= t-value calculated with separate variance estimates because of significantly different variances (degrees of freedom do not equal 275).

n (Boys)=103, n (Girls)=174.

* p <.10. ** p <.05. *** p <.01. **** p <.001.

Analyses pertaining to hypotheses 6.3 and 6.4. As can be seen in Table 24, hypotheses 6.3 and 6.4 were partially confirmed (only for expressive expectations). With respect to fathers' instrumental expectations, fathers were found to have higher levels of instrumental expectations for girls than for boys, $t(152.66) = -6.98$, $p < .001$. The reason that the degrees of freedom does not equal 275 is because the t-value had to be calculated with separate variance estimates (the variances of the two groups were significantly different), which changes the number of degrees of freedom. It was also found that fathers have higher levels of expressive expectations for girls than for boys $t(275) = -3.78$, $p < .001$.

Mothers also have significantly higher levels of expectations for girls: instrumental expectations, $t(139.02) = -7.54$, $p < .001$; and expressive expectations $t(275) = -5.25$, $p < .001$. The same results were also found for the child self-expectations: instrumental expectations, $t(275) = -2.46$, $p < .05$; expressive expectations, $t(275) = -5.80$, $p < .001$. Such results confirm the hypotheses with respect to expressive expectations. Contrary to the hypotheses, parents have higher levels of instrumental expectations for girls. In the same way, girls have higher levels of instrumental self-expectations. Given the nature of the findings, the analyses regarding discrepancies between instrumental and expressive expectations cannot be done.

It should be mentioned that mother and father agreement with respect to these two types of expectations were not equivalent for boys and girls. For boys, the correlation between mother and father instrumental expectations was .76 and the correlation between mother and father expressive expectations was .55. The same correlations for girls were .30 and .38. Thus, it appears that fathers and mothers are in better agreement with respect to their expectations for boys than they are for girls. The implications of such findings and the manner in which these results relate to those just described will be presented in the Discussion section.

Analyses with pubertal status taken into account. Given that the findings with respect to instrumental expectations are counterintuitive, additional analyses involving these expectations were run to examine these results more carefully. Since hypotheses 6.3 and 6.4 were designed as a test of the Gender Intensification Hypothesis (Hill & Lynch, 1983), it could also be hypothesized (on a more complex level) that parents' behaviors and expectations change as a function of the physical changes evident in their adolescent children (Hill, 1980a). Just how families manage their children's pubertal transitions can also be seen to have an impact on how these children view the important issues of adolescence.

More specifically, it was hypothesized that physical changes in the adolescent might well mediate parental expectations. Such relations would be expected for child self-expectations as well, but to a lesser degree, since changes in parental expectations probably impact indirectly on child self-expectations. Thus, instrumental expectations (parental and child) are predicted to be greater for boys who are pubertal versus those who are prepubertal. The opposite results are expected for girls. Also, prepubertal boys and girls should not differ with respect to instrumental expectations but such expectations are predicted to be higher for pubertal boys than for pubertal girls.

To test such hypotheses, two pubertal variables which were used in the "Family Relations in Early Adolescence" research project were employed. Parents and children answered questions concerning, for example, the male child's facial hair, skin problems and physical coordination and the female child's menarcheal status and figure development. For the purposes of this study, it is important to employ pubertal variables from which are generated a good number of prepubertal and pubertal children. It was decided that late occurring events would be used since they yielded a reasonable number of both types of children. As a result, menarche in girls and facial hair development in boys are the late occurring physical change events that were employed

in these analyses. Menarche is one of the best pubertal variables since high agreement between parents and children is typically found in placing the time of menarche (about 80% in this sample).

Parents and children were to report if the pubertal events had not occurred yet, had occurred in the last six months, had occurred in the last year, or had occurred "prior to this time a year ago." Children were categorized as prepubertal if the event had not started yet and pubertal if it had. Child report of the pubertal variables was employed, with parental rating being used for missing values. If no rating was present, then the family was dropped from the analysis. A total of 100 (of 103) families with boys and 173 (of 174) families with girls were used. The means, standard deviations, and t-test results comparing prepubertal and pubertal boys with respect to instrumental expectations are in Table 25. The same results for girls are also in Table 25.

As can be seen in Table 25, fathers' instrumental expectations were higher for pubertal boys than prepubertal boys, $t(98) = -2.28$, $p < .05$ as were mothers' (marginal), $t(98) = -1.97$, $p < .10$. No significant differences in child instrumental expectations were noted, $t(98) = -1.12$, $p > .10$. With respect to prepubertal and pubertal girls, no differences were noted: fathers, $t(171) = -.47$, $p > .10$;

Table 25

Instrumental Expectations Means, Standard Deviations, and T-Test Results Comparing Prepubertal and Pubertal Sons and Daughters

I-Expectations Variable	Pubertal Status		T-Value
	Prepubertal	Pubertal	
Boys			
Father I-Expect.			
M	27.70	30.60	-2.28**
SD	6.42	6.18	
Mother I-Expect.			
M	26.82	29.44	-1.97*
SD	6.83	6.20	
Child I-Expect.			
M	28.40	29.60	-1.12
SD	5.21	5.44	
Girls			
Father I-Expect.			
M	33.57	33.86	-.47
SD	4.14	4.07	
Mother I-Expect.			
M	33.04	33.48	-.78
SD	3.60	3.66	
Child I-Expect.			
M	30.51	30.15	.48
SD	4.83	4.91	

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations, Prepubertal= a rating of 1 (the pubertal event has not started yet) on the facial hair variable for boys or the menarcheal status variable for girls. Pubertal= a rating of 2,3, or 4 (the pubertal event has started) on the pubertal status variables.

\bar{n} (Boys;Prepubertal)=57, \bar{n} (Boys;Pubertal)=43. \bar{n} (Girls;Prepubertal)=106, \bar{n} (Girls;Pubertal)=67.

* $p < .10$. ** $p < .05$. *** $p < .01$.

mothers, $t(171) = -.78$, $p > .10$; and child, $t(171) = .48$, $p > .10$. Thus it seems that at least with respect to parental expectations for boys, such expectations are higher for pubertal boys than prepubertal boys.

Analyses were also run to compare prepubertal boys and girls and pubertal boys and girls. These results are in Table 26. It was predicted that no differences would be found prepubertally between girls and boys but that instrumental expectations would be higher for pubertal boys than pubertal girls. Given that there are much higher levels of such expectations for girls than boys without taking pubertal status into account, it is impossible that both portions of this prediction will be confirmed. On the other hand, the results that did emerge are worth noting.

Prepubertally, instrumental expectations for girls are much higher than those for boys (Table 26): father instrumental expectations, $t(81.70) = -6.23$, $p < .001$; mother instrumental expectations, $t(73.11) = -6.41$, $p < .001$; and child instrumental self-expectations, $t(161) = -2.59$, $p < .05$. With respect to pubertal children, the results for parents again indicated that they have higher instrumental expectations for girls than for boys: father instrumental expectations, $t(65.41) = -3.06$, $p < .01$ and mother instrumental expectations, $t(60.89) = -3.86$, $p < .001$. Close examination of these results for pubertal children reveals

Table 26

Instrumental Expectations Means, Standard Deviations, and T-Test Results Comparing Prepubertal Sons and Daughters and Pubertal Sons and Daughters

I-Expectations Variable	Child Sex		T-Value
	Boys	Girls	
	Prepubertal		
Father I-Expect.			
M	27.70	33.57	-6.23****(a)
SD	6.42	4.14	
Mother I-Expect.			
M	26.82	33.04	-6.41****(a)
SD	6.83	3.60	
Child I-Expect.			
M	28.40	30.51	-2.59**
SD	5.21	4.83	
	Pubertal		
Father I-Expect.			
M	30.60	33.86	-3.06***(a)
SD	6.18	4.07	
Mother I-Expect.			
M	29.44	33.48	-3.86****(a)
SD	6.20	3.66	
Child I-Expect.			
M	29.60	30.15	-.54
SD	5.44	4.91	

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations, Prepubertal= a rating of 1 (the pubertal event has not started yet) on the facial hair variable for boys or the menarcheal status variable for girls. Pubertal= a rating of 2,3, or 4 (the pubertal event has started) on the pubertal status variables. (a)= t-value calculated with separate variance estimates because of significantly different variances (degrees of freedom do not equal 275).

\underline{n} (Boys;Prepubertal)=57, \underline{n} (Boys;Pubertal)=43. \underline{n} (Girls;Prepubertal)=106, \underline{n} (Girls;Pubertal)=67.

* \underline{p} <.10. ** \underline{p} <.05. *** \underline{p} <.01. **** \underline{p} <.001.

that although parental expectations are still higher for pubertal girls, they are less so. This finding occurs because instrumental expectations are higher for pubertal boys than prepubertal boys. On the other hand, with respect to child instrumental self-expectations no significant difference was found between pubertal girls and pubertal boys, $t(108) = -.54$, $p > .10$. This result makes sense since the differences between prepubertal girls and prepubertal boys was not so great with respect to child expectations as was the case with parental expectations. More will be said about the implications of such findings in the Discussion section.

Analyses of Q-Sort items. Analyses were also done to determine which Q-Sort items were seen as more important for males and which were seen as more important for females. Analyses were also done on the items which took pubertal status into account.

For an item to be considered as more important for males than females, the mean of that item for males must be significantly higher than the mean for females at the .01 level of significance with respect to father, mother, and child expectations. The .01 level of significance was employed so as to avoid Type I errors (given the number of analyses that were run).

When pubertal status was not taken into account, the following expectations were seen as being more important for males than females (see Appendix B for a list of the Q-Sort items): "to be able to devote self to others," "to be an intellectual," "to be a person others turn to for reassurance," "to be tactful enough to handle social situations well," "to plan to marry and have a family," "to be able to talk to others in an interesting and entertaining manner," "to plan to support yourself/himself/herself as an adult," "to be able to discuss ideas and issues well," "to be indifferent to others' approval," and "to plan to be a good husband/wife and father/mother." Those items which were seen as being more important for females than males were: "to be self-confident," "to be able to make your/his/her own decisions," "to be understanding of others," "to be able to maintain long-time friendships," "to be aware of the feelings of others," "to be helpful to others," and "to be personally charming." It should be noted that one of the male items was an expressive expectations item. Three of the female items were expressive items and two were instrumental items. Such a finding probably accounts, at least in part, for the fact that higher levels of both instrumental and expressive expectations were found for females.

It should also be noted the parents of boys felt that some of the items were more important than did the parents

of girls (and visa versa), but no such differences were found on these items for child self-expectations. For males, this item was "to aspire to a high prestige occupation." For females, these items were: "to be independent," "to be able to express tender feelings easily," and "to get tasks done on you/his/her own." Male and female children also endorsed expectations differentially for some of the items where no such sex differences were noted for parental expectations. For males, these items were: "to be at ease in a variety of social situations" and "to stand up well under pressure." For females, they were: "to be good at helping people have a good time," and "to be warm in relation to others."

When pubertal status was taken into account, the results for prepubertal children were almost identical to those noted above. The items for prepubertal males were the same except that "to be an intellectual" was not included. The items for prepubertal females were the same except that "to have high aspirations for my/his/her future education" was added. With respect to pubertal children, very few items emerged which were more important for males than females or visa versa. The male items were: "to plan to marry and have a family" and "to be indifferent to others' approval." The female item was "to be understanding of others." The item analyses will be examined in more detail and interpreted in the Discussion section.

Type I Errors and Variance Accounted For

Before proceeding to the Discussion, the results of this study should be put in the proper perspective. Given the number of analyses which were run in this study, it is conceivable that some of the findings were due to chance. That is, it is possible that Type I errors were committed. A Type I error occurs when the null hypothesis is erroneously rejected. Given this potential problem, the Discussion sections will primarily be limited to the interpretation of those findings which seem to fall into distinct patterns. If one interprets all findings which are either significant or marginally significant, one runs the risk of attributing meaning to a result that has occurred by chance.

Another trend in the results was that the R² values are fairly low (except in the case of child expectations). Even if an effect is significant, the R² value gives additional information about the degree of relationship. That is, the R² is the amount of variance in the dependent variable that is accounted for by the independent variable(s). In the present study, it appears that several of the relations are significant but much of the variance is left unaccounted for.

DISCUSSION

This discussion will be subdivided into three parts: relations between parental personality characteristics, parental expectations, and the early adolescent outcome variables, differences between the male and female children with respect to several of the outcome variables, and proposed directions for future research.

Relations between Parental Personality Characteristics, Parental Expectations, and the Child Outcomes

Careful examination of the summary tables (Tables 4-7) reveals that none of the hypotheses (those pertaining to the prediction of parental expectations from parental traits or those involving the prediction of child outcomes from these parental variables) were confirmed for all four dyads. As a result, it appears that the gender of the parent and the child must be taken into consideration in any subsequent discussion. Therefore, rather than examining the hypotheses seriatim, this portion of the discussion will be organized around the dyads and outcome variables. It will also be limited to those results which seem the most patterned. Secondary issues that emerged as a result of this procedure also will be discussed.

Dyadic Interpretations

Father/son. Referring back to Tables 4 and 5, it can be seen that the greatest number of significant relations occurred for the father/son dyad. And even more specifically, most of the significant relations for this dyad occurred in those analyses where child outcomes were to be predicted from parental expectations and not those which concerned parental personality characteristics. The implications of these findings are many.

First, these results are similar to those presented by Hill (1967). In that study, it was found that the fathers' expectations for the sons had a greater effect on sons' attitudes than did the fathers' own attitudes. Such was the case in the present study since it was found that fathers' expectations were more predictive than fathers' personality traits. The present analyses also provide extrinsic validity for the Hill findings since the significant relations occurred across several independent child outcomes.

Second, if modeling was the sole determinant of relations between parent and child variables, one would expect very few relations between expectations and the child outcomes. Given that there were several such relations, it appears that for fathers and sons, the internalization of parental expectations may have an influence on child outcomes

separate from the modeling process. If modeling was the sole determinant of the relations, then one might expect that the child outcomes might be better predicted from parental traits since the modeling of traits could have an indirect effect on the child outcomes. More will be said about modeling when discussing the "Be-like-parent" variable in the section below which concerns differences between sons and daughters.

Third, these results have implications for the study of parents and their children. Most research in the area has been done on males and, as a result, many of the conclusions about females have been inferred from the male findings. At least for the data in this study, such inferences are unwarranted. With the father/daughter dyad, for example, none of the relations between parental expectations and the child outcomes was significant. Such findings provide validation for performing the analyses in the manner in which they were done (i.e. dyadically). On a more complex level, Spence and Helmreich (1978) preferred to examine the relations between father and mother statistical interactions (in the form of couple types) and the child outcomes. Such analyses will be recommended when discussing directions for future research.

Fourth, although many of the relations for the father/son dyad were significant, some of them run contrary to the

hypotheses. The specific relations between expressive traits and expectations and self-esteem and the be-like-father variable are worth noting. The relations between expressive traits and these child variables were positive. Conversely, the relations between expressive expectations and these child outcomes were negative.

Such findings indicate that for this dyad, traits and expectations may have differential effects (possibly causal in nature) on many of the child variables. Also, these findings do not support Spence and Helmreich's (1978) hypothesis that, although the socialization techniques (such as expectations) that parents employ have the greatest impact on child outcomes, parental traits enhance these effects. At least for the father/son dyad, parental traits do not seem to enhance the effects of the expectations. For example, a son seems to want to be like a father who reports expressive traits but does not want to be like a father who has expressive expectations. Perhaps, expressiveness in the father must be expressed subtly for it to have a positive impact on the son. If it appears more overtly, such as in the form of expectations, it may be seen as out of line with broader societal stereotypes and expectations as reflected in the media and the child's peer relations. Perhaps, it is permissible for the father to be (or to perceive himself to be) warm and interpersonally aware in general, but not as permissible for this to be the focus of his expectations for his son while in the parental role.

Mother/daughter. Several significant relations also were found for this dyad. In contrast to the father/son dyad, however, most of these relations occurred in those analyses where child outcomes were predicted by parental personality characteristics rather than by parental expectations (see Tables 4 and 5). Thus, what holds for sons may not necessarily hold for daughters.

Daughters may be more influenced by mothers' personality traits than by mothers' expectations. Again, recall Spence and Helmreich's (1978) hypothesis that parental socialization techniques are primary for parental influence and that parental traits are secondary but still enhance the effects of the socialization techniques. The results for the mother/daughter dyad also run contrary to this hypothesis. In this case, it does not seem that the socialization techniques (in the form of expectations) are primary. Daughters seem to be influenced more by traits ("what the parent is") than by expectations. (Spence and Helmreich do point out, however, that traits and socialization techniques can have independent or joint effects on a given child outcome.)

The finding that parental traits are predictive of child outcomes in the mother/daughter dyad may have emerged because, as we have seen above, the daughters do not have the same expectations for themselves that their parents do.

It was found that the correlations between daughter and parent expectations were typically very low (although this was not the case for sons). It seems that parental expectations could have had more of a predictive effect if they were internalized by their daughters. Thus, Spence and Helmreich (1978) may be correct in their hypothesis that socialization techniques are primary but only when these techniques produce some form of cognitive internalization on the part of the child. Given the data reviewed thus far, it seems that sons internalize more from the parents than the daughters and that daughters may be more influenced by the mothers' traits than are the sons. The modeling notion may, therefore, apply to daughters more than to sons. That is, it may be that daughters model the traits of the mother which then have an impact on the child outcomes.

On a more complex level, the analyses revealed an interesting combination of results for the father/son and mother/daughter dyads (both of which are same-sex dyads). For these dyads, it seems that expressiveness is positively predictive of child self-esteem and the degree to which they want to be like the parent (the latter finding did not reach statistical significance for the mother/daughter dyad). On the other hand, the parents of these dyads are seen by their children as being more satisfied when they report higher levels of instrumental traits. Thus, it is possible that, for same-sex parent-child dyads, those parents that children

want to be like tend to be the same parents that have children with higher levels of self-esteem. On the other hand, they are not necessarily the same parents that appear more satisfied. Such findings are interesting because they indicate that just because a parent appears satisfied does not mean that the child wants to be like them. Such an hypothesis is quite speculative and would need to be tested further for confirmation.

Alternatively, the association of parental "warmth" and "acceptance" with a variety of "positive" child outcomes is ubiquitous in the literature of child development (Martin, 1975). This construct (warmth, acceptance/rejection, or love/hostility) regularly appears in factor analyses of parental behavior, as well (Schaefer, 1959). Parents whose self-reports rate them as high on expressiveness are, given the item content of the Femininity scale from the PAQ, likely to be seen as "warm" in the parental role.

It may be, then, that there are two types of parents being discussed here. Those that are expressive (warm and accepting) may be more involved in parenting and have children who are more attached to them and want to be like them (as a result of their relationship). It has also been found by Sears (1970) that low maternal warmth (for 5 year olds) predicts low self-esteem at age 12. Thus, insofar as parental expressiveness is related to parental warmth and

acceptance, it makes sense that it is predictive of child self-esteem.

Another interesting point is that parental report of their own traits was employed. In such a case, parents are commenting on their own, probably long-standing traits. Thus, if they report being expressive now, they may have been "warm" parents when the child was five years old. Child-report of parental traits would not get at the parent's long-standing traits to the same degree because children probably comment more on the parent's current behavior. Also, the child only sees a portion of the parent's behavior. They see the parents as parents rather than as people.

The second type of parent seems to be more instrumental. That is, such a parent is independent, active, and self-confident. This parent probably appears very satisfied, but may not be as involved in parenting as the type described above. As a result, their children may not want to be like them. Also, a child may be less attached to these parents and this may have a negative effect on the child's self-esteem.

Mother/son. The findings for this dyad confirm much of what has been said already. It was found that the male children's outcomes are predicted better by their parent's expectations than they are by the parent's personality

traits (see Tables 4 and 5). These findings, however, are not as pronounced as was the case with the father/son dyad. Other results which will be presented later indicate that, indeed, sons seem to be more influenced by their fathers than by their mothers.

Father/daughter. Unlike any of the other dyads, parental personality characteristics were predictive of parental expectations for the father/daughter dyad. Also unlike any of the other dyads, the parental variables were not predictive of any of the child outcomes. It appears that fathers of daughters maintain some level of consistency between their traits and expectations. Their daughters, however, may not be internalizing the qualities of their fathers to the same degree as the children of the other parent-child dyads. Given the preponderance of significant results for the mother/daughter dyad, it may be that the daughter internalizes the traits and expectations of her mother at the expense of any internalization of the father's qualities. Thus, to extend what was said earlier, it appears that daughters may be sensitive to their mothers' traits whereas sons are less sensitive to both parent's traits. Also, sons seem to be more sensitive to expectations than daughters (especially with respect to the father's expectations). These hypotheses will be extended further and relevant literature will be presented when discussing the be-like-parent variable in the section on differences between sons and daughters.

The results also indicate that a parent's expectations cannot be predicted from their personality traits unless we are speaking of fathers of daughters. This is true even though the item content of the relevant scales is identical. While Spence and Helmreich (Helmreich, Spence, & Holahan, 1979; Spence & Helmreich, 1980) and Bem (Bem, 1975) have been at odds about the degree to which trait measures should predict role behavior, the surprising finding here is the absence of significant relations for three of the four dyads. Traits do not predict expectations except for one dyad, fathers and daughters.

It may be that these relations only hold for this dyad or that the relations exist (to a lesser degree) in the other dyads but the measures were not sensitive enough to detect them. It is not possible, given the data available here, to determine which is the case.

Spence and Helmreich (1978) did examine the relations between PAQ classification and achievement expectations (similar, in some ways, to instrumental expectations) but all results which are presented are in terms of couple type rather than parent-child dyad. Also, the PAQ classifications in their study were determined by child perceptions. In spite of these differences between the Spence and Helmreich study and the present one, their findings are worth noting. They found that couples with at

least one androgynous parent had the highest level of achievement expectations for sons and daughters. Thus, there is at least some evidence in the literature that parental traits are related to expectations for all dyads. Such relations may not have been found in the present study either because the psychometric properties of the expectations measure were different in this study or because the present sample was younger. With respect to the latter possibility, it may be that parental expectations are less firmly established and vary more over time for younger children than for high school students. No literature is available to confirm or disconfirm this hypothesis.

Child Outcome Interpretations

Seven early adolescent variables were examined: self-esteem, self-consciousness, instrumental self-expectations, expressive self-expectations, be-like-parent, parental satisfaction, and educational aspirations. For all of these variables, it was predicted that parental instrumental and expressive personality traits and expectations would be positively and significantly predictive. It was also predicted that androgynous parents would have children who reported higher levels on all of these variables. (These predictions were reversed for the self-consciousness variable). In this section, interpretations will be presented for each outcome separately since the results vary with outcome.

Self-esteem and self-consciousness. For both of these variables, impressive Cronbach alphas were found and, as should be the case, the scales were only moderately correlated (negatively). These findings support the construct validity of these scales. Also, many of the findings for these variables were significant.

The most interesting finding for self-esteem is that parental traits are more predictive of this child outcome than are parental expectations (see summary Tables 4 and 5 in the Results section). Parental traits were significantly related to self-esteem in the following three dyads: father/son, mother/son, and mother/daughter.

A vast literature exists on the relations between instrumental and expressive traits and self-esteem. The consensus seems to be that both instrumental and expressive traits (as measured by the masculinity and femininity scales of the PAQ) are related to self-esteem with the former being more predictive than the latter (Lamke, 1982; Spence & Helmreich, 1978; and Whitley, 1983). The findings of the present study provide still further support for the hypothesis that instrumental and expressive traits are related to self-esteem.

The findings of this study, however, do not support the findings of Spence and Helmreich (1978) that parental instrumental expectations (called Achievement Standards)

were related to child self-esteem. It should be mentioned that an expectations literature is almost nonexistent. Also, there is more similarity between the trait measures used in other studies and that employed here than is the case with the expectations measures. Thus, it is not surprising that the present findings for traits are more in line with the literature than those for expectations.

The specific findings for self-esteem are interesting for at least two reasons. First, note that parental traits are more predictive of child self-esteem than are parental expectations (see Tables 4 and 5). The literature already presented is in line with this finding but one might ask why such results occurred. The significant relations may be a result of the parent variable. Given that the PAQ seems to tap traits, scores on the PAQ scales would not be expected to vary significantly over time. The expectation scores, on the other hand, could vary significantly over time. It also seems that self-esteem is less likely to change over time than some of the other child outcomes used in this study. Thus, the trait reports may work better for self-esteem because both are variables that may tap long-standing equilibria in parent-child relations.

However, rather than being a function of the continuity of parental characteristics, the findings for self-esteem may be a function of the statistical properties of the

measures. Both the PAQ and the self-esteem measures are internally consistent. Such properties can enhance the level of relationship between a pair of variables. It may also be that there are additional properties of the measures which serve to make self-esteem a "better" child variable than the others.

Second, expressive parental traits were significantly and positively correlated with child self-esteem in the three dyads already mentioned (see Tables 12-15). Instrumental traits were only positively correlated with this child outcome in the mother/son dyad. Such results run counter to most of the current findings already mentioned which suggest that instrumentality is typically predictive of self-esteem. One may ask why such findings occurred.

Previous studies have either employed child report of parental traits or involve respondents' reports of their own personality traits and self-esteem. Actually, most studies concern the latter (i.e. intraindividual relations between traits and self-esteem). Whitley (1983), for example, reviewed 35 such studies. It may be that when we are concerned with relations between parent and child variables, the relations are qualitatively different than those found intraindividually. That is, it seems that expressiveness takes on a whole new importance when we speak of parent traits predicting child self-esteem.

As discussed above, early parental warmth is crucial to later child development. This warmth may form the basis for early attachment which has effects on later self-esteem. Because other studies either examine the relations intraindividually or with child report of parental traits (a perspective which, as mentioned above, is very limited), the predictive utility of parental warmth may never be revealed. It may be that after attachment has occurred, later fluctuations in self-esteem may be more a function of fluctuations in parental instrumentality or one's own level of instrumentality. Parental warmth may be a basic necessary condition for high levels of child self-esteem and shifts in parental instrumentality may cause shifts in self-esteem later in the child's life. Schaefer and Bayley (1960), for example, found that parental warmth is more stable across childhood and adolescence than is parental control. (The assumption here is that parental expressive traits are correlated with parental warmth and that parental instrumental traits are correlated with parental control.) The hypothesis being presented here may explain why experimenters who examine the relations between traits and self-esteem intraindividually find that instrumentality is more predictive of self-esteem than is expressiveness.

The Spence and Helmreich (1978) study was one of the few studies that examined the relations between parental instrumental and expressive traits and child self-esteem.

Although they found that androgynous couples had children with the highest self-esteem, their analyses differed significantly from those of the present study. They employed the median-split technique, they combined parents into couple types, they used child report of parental traits, and their subjects were older. Thus, their differing findings may be a function of a different experimental design.

Given the findings of the present study, it seems that we should not be too quick to conclude that high levels of self-esteem always occur in the presence of (or are caused by) high levels of instrumental traits. Such may be the case within the individual but when we are speaking of relations between parental traits and child self-esteem, it seems that parental expressiveness should be added to the list of positive predictors of child self-esteem (for the reasons already cited). Also, because of the relative dearth of literature on relations between parental traits (parental report) and child self-esteem and because the findings of the present study are consistent and indicate that such relations may be significantly different than those found intraindividually, further study is recommended.

Regardless of the results, it is clear that findings do occur when parental report of their own traits is employed. As was briefly mentioned above, one obvious problem with

employing child report of parental traits is that it is difficult to determine the degree to which the correlations between child perceptions of adult traits and the child outcomes affect the findings. As Spence and Helmreich (1978) point out:

There are multiple slippages between parents' perceptions of themselves and students' perceptions of their parents. Both fathers and mothers may behave somewhat differently at home than in other settings; their actions toward a particular child may be shaped by their attitudes toward that child and by that child's behavior toward them; children's interpretation of their parents' behavior and hence their inferences about their parents' attributes are filtered through their own needs and temperamental characteristics. (p. 217)

Put another way, children's reports of parental "traits" are shaped by their interactions with parents as parents. Parental reports of "traits" presumably tap a broader range of adult's roles. Thus, it seems that more significant relations with child self-esteem would be expected if child report of parental characteristics was employed. Given that significant relations were still found between parental report of parental traits and child self-esteem (although probably lower in magnitude than if child report of these traits had been used), such findings lend credence to the notion that there is a relation between parents' personality characteristics and their children's level of self-esteem and it may occur for the reasons already cited.

For child self-consciousness, personality traits were only predictive for the mother/daughter dyad. These findings paralleled those of self-esteem for the same dyad. Expressive traits were found to be negatively predictive. (The relation was negative because self-consciousness is a "negative" child outcome.) Although the findings for self-consciousness were less pronounced than were those for self-esteem, the results were similar. Given the similarity in the findings and the moderate correlations between the variables, it appears that self-esteem and self-consciousness may be tapping the same latent constructs. On the other hand, fewer relations may have been found for self-consciousness because self-consciousness may not be as stable over time as self-esteem.

Child self-expectations. Significant relations between parental expectations and child expectations occurred for three of the four dyads (the same dyads as those cited when discussing self-esteem above). Overall, these results were more significant (i.e. more variance was accounted for) than any of the others in the present study. The differences between the son and daughter dyads are particularly striking. (Although the next section of this Discussion section is devoted to son and daughter differences, it is more appropriate that the child self-expectations results be discussed here since they involve the predictive utility of the parental variables.) As can be seen in Table 5,

parental instrumental expectations were predictive of child instrumental self-expectations and parental expressive expectations were predictive of child expressive self-expectations for the son dyads. Parental expressive expectations were positively predictive of child expressive expectations in the mother/daughter dyad.

These results are striking for two reasons. First, many of the relations for the son dyads were significant, suggesting that boys are internalizing their parents' expectations to a significant degree. (Recall that child and parent Q-Sorts were done independently.) It is interesting to speculate about how expectations are communicated from parent to child. Hill (1967) points out that "through learning ("internalizing") the expectations of the other for his own behavior, each role encumbant comes to have the capacity to predict the other's behavior and to modify his or her own behavior in the light of such prediction (p.778)." It may be then that the 12 year old children in this study have already begun to master the ability to take the role of the other and see another's perspective. Selman (1981) believes that such a perspective can develop as early as age 9.

Second, the difference between the son and daughter dyads is very pronounced. Far less variance was accounted for in daughter self-expectations than in son self-expectations by

parental expectations. Such results may indicate that daughters are not internalizing their parent's expectations to the same degree and/or the same manner that boys do. On the other hand, the findings may indicate that the daughters have internalized the parental expectations but are more able to decide what is right for them. Given their advanced pubertal maturity, it would seem reasonable to hypothesize that this maturity involves cognitive as well as physical factors.

Parental attractiveness variables. As one would expect, parental attractiveness variables were moderately correlated (positively) for boys and girls. Correlations were not high enough, however, to warrant the creation of a parental attractiveness scale.

Results for the be-like-parent variables were, in general, nonconfirmatory of the hypotheses. Parental traits and expectations were only predictive for the father/son dyad. The difficulties in interpreting these findings for this dyad have already been noted and the implications were discussed.

With respect to parental satisfaction (child report), parental traits and expectations were predictive for some of the dyads. Particularly interesting is the finding that parental instrumental traits were positively predictive of parental satisfaction for the father/son and mother/daughter

dyads. Thus, as alluded to earlier, evidence emerged which indicates that instrumental parents appear satisfied. If one examines the definition of "instrumentality" it gives one a clue as to why this may be the case. As Bakan (1966) pointed out, "agency (or instrumentality) manifests itself in self-protection, self-assertion, and self-expansion (p.15)." Parents who see themselves this way probably appear (at least externally) to be very satisfied. They are proactive and in control. In the same way, those who appear reactive and not in control probably appear less satisfied.

Educational aspirations. The results for this variable were disappointing. None of the results with respect to parental traits or expectations was confirmatory. These results probably occurred because there was so little variability in the responses. Most of the children reported very high educational aspirations. Such variability problems in this study will be explained in more detail later.

The Utility of the Parental Variables as Predictors

Two issues are relevant here. First, it is important to assess the degree of predictive utility that parental instrumentality and expressiveness have for the child outcomes. Second, it is important to assess whether expectations or personality characteristics were better predictors.

Unfortunately, the results indicated that many of the predicted relations between parental instrumentality and expressiveness and the child outcomes were not significant and that some of the significant relations were the opposite of what was predicted. The implications of many of these findings have already been discussed. Also, it has been noted that predictability (both the direction and the magnitude) depends upon both the dyad and the child outcome involved. Given these variations and the absence of directly-related literature, it is not possible to advance a general statement about the predictability of instrumentality and expressiveness. One can say, however, that there were more significant findings than would have been expected by chance. Thus, further investigation of the relations between the parent and child variables of the present study is warranted.

It was also hypothesized that parental expectations would be better predictors of child outcomes than parental traits. As was discussed in the Results section, the hypotheses with respect to "total variance accounted for" (hypotheses 6.1 and 6.2) could not be statistically tested since many of the first order analyses yielded results that were contrary to those predicted. Such findings render higher-order analyses uninterpretable. Upon observation of the summary tables (Tables 4 and 5), it is clear that the utility of traits and expectations as predictors varies as a function of the dyad

and the outcome in the same way as instrumentality and expressiveness. Some possible interpretations of this state of affairs have already been discussed above.

The Androgyny Hypothesis

A consistent finding in this study is that expressiveness and instrumentality were rarely positive predictors of the same child variable. In the case where both parental variables were significant predictors, it was typically found that one was a positive predictor and one was a negative predictor. Such findings run counter to the hypotheses and to the meager literature upon which they were based. In general, these results indicate that the androgyny hypothesis (Bem, 1975; Spence, Helmreich, & Stapp, 1975) is not supported in the present study. Perhaps more importantly, it may not have been supported for early adolescents. Proponents of such a hypothesis would have expected that the highest levels on the child outcomes (in the desirable direction) would have been predicted by high levels of parental instrumentality and expressiveness. Such was rarely the case. Baumrind's (1982) theory that sex-typed parents have the most competent children also did not receive universal support. On the other hand, in this study, it seems that with respect to parental traits, instrumentality was typically the sole predictor for some of the child outcomes (i.e. parental satisfaction) and

expressiveness was typically the sole predictor of others (i.e. self-esteem). Also, as has already been mentioned, the utility of such predictors changed as a function of the dyad, as well.

Thus, the relations between parent and child variables are more complex than was once thought, in that changes in any number of variables can alter the predictability. Because different results were found with respect to mothers and fathers, it may be interesting to test the impact of mother-father statistical interactions on the child variables. Such interactions are probably better tested with multiple regressions (mother and father main effects and interactions in the same equation), rather than with the Spence and Helmreich (1978) couple type methodology. The application of multiple regression to between-parent interactions can be found in Baucom and Aiken's (1984) recent study on sex role identity and marital satisfaction.

In addition, the interactional conception of androgyny as a viable predictor (Lubinski, Tellegen, & Butcher, 1981, 1983) was not supported. That is, the IxE interactions were significantly predictive in a positive direction on only two occasions (which may have been due to chance).

It may be that, in early adolescence, androgynous parenting may be less effectual for the child than at other periods in the life cycle. Given the changes in peer

expectations and peer conformity (Coleman, 1980) and the new cognitive capacities for interpreting peer and media messages, the influence of parents may be drastically reduced. In addition, the traits and expectations of androgynous parents (at higher levels than with other parents) may conflict with those of other people in the child's life.

Multiple Regression Analyses Versus Median-Split Techniques

As would have been expected, the results of the PAQ median split analyses (see Table 6) were very similar to the results which emerged from the regression analyses. Even though they were similar, however, it seemed that some of the more marginal regression results were "washed out" in the median split analyses. Such results make sense since the median split technique produces a loss of information and a loss of variance. Thus, it seems that Lamke's (1982) argument that important and unique information emerges from both types of analyses is not supported by the present study. Even Lamke's example, which presumably supports her view that two types of analyses are needed, is more supportive of the argument being presented here. She found that "while masculinity significantly predicted self-esteem for males, there were no self-esteem differences between the four sex-role categories (p. 1534)." If one examines the simple correlations from her study, one would predict that

for females, for example, androgynous respondents would have the highest self-esteem (since both M and F are highly correlated with self-esteem). In fact, this is what she found. Thus, it seems that when the relations are very significant, the regression analyses and median split analyses yield roughly the same results. When the correlations are only moderate, the regression analyses are more sensitive (presumably because all of the information is available) and therefore yield more significant results than the median split analyses.

The Lack of Variability in Participant Responses

The issue here concerns the type of responses made by children from "normal" families. If one inspects the means for the child variables (see Tables 20-23), and compares them to the highest possible scores that can be obtained on these variables, one sees that there seems to have been a restriction in the range of participant responses. For example, the highest possible self-esteem score is 28. The overall means for sons and daughters were 23.1 and 22.0, respectively. It should be added that the standard deviations were low. Also, with respect to educational aspirations, the highest score is 5 and the mean for both sons and daughters was 4.2. It seems as though most of the children have high self-esteem, want to be like both of their parents, see their parents as satisfied, and have very

high educational aspirations. On the other hand, they did tend to be highly self-conscious (means of 13.7 and 14.5 for sons and daughters, respectively, out of a total of 19). It seems that such response variability problems could have had a major impact on the results. With such an effect, variability is reduced and, as a result, correlations can be reduced.

The Q-Sort Methodology

The results, or lack thereof, for parent and child expectations may have been a function of problems in the measure that was used (the Q-Sort). As explained earlier, the Q-Sort technique forces respondents to put certain numbers of items in each of seven piles. With this type of data collection technique, scale scores can be tempered to a certain degree. For example, a parent who sees all of the instrumental expectation items as vitaly important for their child is not able to express these views with this method. This person may wish to put all eight of the items in pile seven but is unable to because of the item distribution requirements. As a result, such a parent's instrumental score is reduced significantly and, furthermore, the overall variance across subjects is reduced. If the respondents were free to weight the expectations items as they pleased on a Likert-type scale (as they were on the PAQ scale) the results for expectations may have been quite different.

On the other hand, most of the Q-Sort items are socially desirable to a certain degree. It is possible that if participants were required to respond on a Likert-type scale, they may endorse all of the items as important. Such responses would also reduce the overall variance. Thus, with any measure used, the resulting response variability seems to be an important issue.

Differences between Sons and Daughters

Child Outcomes

Self-esteem/ self-consciousness/ educational aspirations.

Most of the predictions that were made for son and daughter differences were based on the Gender Intensification Hypothesis (Hill & Lynch, 1983). The notion here is that "gender differential socialization" accelerates around the time of puberty for both boys and girls. Hill and Lynch reviewed several studies which indicated that pubertal development in the adolescent may bring about a greater stereotyping of parental and peer expectations. Also, presumably as a result of this stereotyping, significant changes have been found in adolescents as they experience the onset of puberty. For example, Simmons, Blyth, Van Cleave, Bush (1979) have found that postpubertal girls have greater self-consciousness and lower self-esteem than

prepubertal girls. Given that the boys and girls in this sample are of the same age, more of the girls should have experienced the onset of puberty (the results of the pubertal measures confirmed this). Because more girls are more mature, perturbations in self-esteem and self-consciousness should have already begun to occur.

It was predicted and found that girls in this sample experience lower levels of self-esteem and higher levels of self-consciousness than the boys. These results are supportive of the Simmons, Blyth, Van Cleave, and Bush (1979) findings and, more generally, the Gender Intensification Hypothesis (Hill & Lynch, 1983). It should be mentioned that no differences were found with respect to educational aspirations. The lack of response variability may have been responsible for this nonsignificant finding.

Be-like-parent. It was predicted that boys want to be like their fathers and that girls want to be like both parents equally on the basis of Spence and Helmreich's (1978) hypotheses and findings. Only the first portion of this hypothesis was supported. Boys did, in fact, want to be like their fathers more than they wanted to be like their mothers but girls wanted to be like their mothers more than they wanted to be like their fathers. This finding fits in nicely with some of the findings discussed earlier. That is, most of the consistency in the findings occurred for the

same-sex dyads. One could hypothesize, as a result of these findings, that it is the same-sex parent that is the most influential in relation to the outcomes studied here. Such a hypothesis runs contrary to the father hypothesis of Johnson (1963), the mother hypothesis of Lynn (1969) and the hypothesis of Spence and Helmreich (1978) wherein they suggest that fathers are more influential with respect to boys and both parents are equally influential for girls.

The hypothesis suggested here reads more like the writings of the early nonpsychoanalytic identification theorists (Payne & Mussen, 1956) who suggested that "children tend to acquire the characteristics of their parents, particularly the parent of the same sex (Spence & Helmreich, 1978, p. 132)." These theorists posit that this type of same-sex identification occurs via modeling and other mechanisms which are explained with social learning principles.

Although modeling could explain some of the phenomena of parent variables predicting child variables, Spence and Helmreich (1978) and Hill (1967) suggest that the process is probably more complicated than was thought by the early modeling theorists. One important issue, which has already been discussed, is that children usually see their parents behave like parents (rather than like people) and are, therefore, limited as to the types of behaviors they can

model. Also, Spence and Helmreich report findings which indicate that children internalize societal expectations which can have a profound effect on their development. Hill (1967) shows evidence that parental expectations can have effects on their children above and beyond parental attitudes. The significant relations between parental expectations and child self-expectations found in the present study also provide additional evidence that parents are influential in other ways besides modeling. In addition, it should be mentioned that parental sanctions on a child's behavior (i.e. reinforcement and punishment) clearly have an influence on a variety of child outcomes.

Parental expectations and child self-expectations. It was predicted that parental and child instrumental expectations would be seen as more important for boys than for girls and that parental and child expressive expectations would be seen as more important for girls than for boys. It was found that both instrumental and expressive expectations were seen as being more important for girls. Such results are supportive of the hypotheses for expressive expectations but not for instrumental expectations.

The finding for instrumental expectations is counterintuitive. Such results could challenge the construct validity of the Q-Sort as a measure of

instrumental expectations. For the present study, the PAQ items (in an expectations format) were employed. This subset of items has been shown to stereotypically differentiate between the sexes to some degree (Spence, Helmreich, & Stapp, 1974). The present results for instrumental expectations run contrary to these findings. Two explanations can be suggested. This subset of Q-Sort items may not be a valid measure of instrumental expectations (even though they were sorted accurately into instrumental and expressive expectations by several trained judges). On the other hand, the measures may be valid, but the predicted differences between the sexes may only occur for pubertal participants (as opposed to prepubertal participants). Such results would be predicted on the basis of the Gender Intensification Hypothesis (Hill & Lynch, 1983) for the reasons cited earlier.

Given the arguments just presented, additional analyses involving expectations were run taking pubertal status (onset of menarche for girls and onset of facial hair growth for boys) into account. It was found that with respect to parental instrumental expectations, such expectations were seen as more important for pubertal boys than prepubertal boys (especially with respect to fathers' instrumental expectations). No differences were found with respect to girls. Analyses were also run comparing prepubertal boys with prepubertal girls and pubertal boys with pubertal

girls. The results for pubertal children revealed that even though instrumental expectations were still higher for girls, they were less so probably due to the increasing importance of instrumental expectations for boys. In addition, whereas child instrumental self-expectations were seen as more important for prepubertal girls than prepubertal boys, no such differences were found when comparing pubertal boys and pubertal girls. Analyses were run (but are not reported here) for all four levels of facial hair status and, indeed, parents (especially the mothers) saw instrumental expectations as being the most important for the most mature sons (level 4; for whom facial hair growth began more than a year ago).

These additional analyses indicate that parents see instrumental expectations as more important for prepubertal girls than prepubertal boys. With increasing physical maturity in the child, however, the importance of parental instrumental expectations seems to remain unchanged for girls but significantly increases with respect to boys (thus partially confirming the Gender Intensification Hypothesis). One could speculate that if we were to look at adolescents who were older than those studied here, we might find that parents see instrumental expectations as much more important for the boys than the girls. We may also see declines in the importance of such expectations with respect to girls. It may be that parental responses to physical change events

do not occur immediately. That is, it may take a period of time for parents to realize that they now have a young adult in the home rather than a child.

Two other findings should be mentioned which may shed some light on the results just reported. It was noted earlier that with respect to both fathers and mothers of girls, instrumental and expressive expectations were significantly correlated in a negative direction. With respect to boys, on the other hand, moderately positive correlations were found between instrumental and expressive expectations for both fathers and mothers. Also, for both types of expectations, it was found that mothers and fathers agreed more with respect to sons than daughters. Son's self-expectations are also more highly correlated with parental expectations than are daughters self-expectations.

Given these findings, it could be hypothesized that, with respect to sons, parents tend to either see both types of expectations as important or they see them both as not important. Conversely, parents of girls tend to see one or the other as important. Thus, the parents of girls who had very high levels of instrumental expectations (making the means higher for girls than for boys) were probably not the same parents who had very high levels of expressive expectations. With boys, however, there tends to be more consistency between parents, between the different types of

parental expectations, and between parent and child expectations. Such findings tend to undermine the validity of the previously cited findings (where levels of parental instrumental expectations were higher for girls than for boys).

Analyses of the Q-Sort items. Analyses concerning which Q-Sort items are seen as more important for males than females and which are seen as more important for females than males were reviewed briefly in the results section. The implications of these analyses will be discussed here. When examining the items for boys, it seems that the parents and the sons themselves felt that it was more important for males (more so than families with girls) to be intellectuals, socially adept, supportive of others, a family person, independent, and indifferent to others' approval. Parents of girls and the daughters themselves felt that it was more important for girls (more so than families with boys) to be helpful to others, understanding of others, aware of others' feelings, personally charming, able to maintain long-term friendships, self-confident, and able to make her own decisions.

In general, most of the items that were more important for males and females correspond with what would be predicted by the Gender Intensification Hypothesis (Hill & Lynch, 1983). On the other hand, some of the findings are

worth examining further. It was more important for a boy to be a family person (i.e. to plan to marry, to have a family, to be a good husband, and to be a good father) than it was for a girl. The means for such items for boys were around 4, which indicates that it is usually not seen as the most or the least important item. For girls, the means were usually about 1.75 which indicates that most parents saw it as one of the least important expectations or goals. Such findings seem counterintuitive. On the other hand, it should be remembered that these children are 12 years old and the instructions which were given for the Q-Sort task were as follows: "Sort these cards as to how important each characteristic or goal should be to your child right now in his/her life." Parents of 12 year old menarcheal girls are probably very concerned about the sexual activities of their daughters. Family planning is the last expectation that most parents would want to impart on their 12 year old girl.

It was also found that parents want their daughters to be self-confident and to be able to make their own decisions to a greater degree than parents of sons. Again, such findings could be interpreted as indicating that parents are worried about the sexual activities of their daughters. If a daughter is able to make her own decisions, she is less subject to peer pressures. (The assumption of the parents may be that the daughter will make the proper decision.) Such findings could also indicate that parents may endorse

certain expectations because they have not yet been met or because the parents are particularly concerned that their daughters may never achieve such a goal to any degree. It is impossible, with these data, to determine the process by which parents decide that a certain expectation is important.

Directions for Future Research

Many directions for future research can be suggested, given the findings of the present study. First, many of the relations in this study should be studied longitudinally. With longitudinal data, one could more easily study the impact of pubertal status on expectations. (Also, as mentioned earlier, older adolescents should be studied.) In addition, causation could be inferred with such data where it cannot be inferred in the present study. The parental antecedents of child outcomes (such as self-esteem) are better studied longitudinally. Second, the hypotheses which pertained to "total variance accounted for" should be tested with other more predictable parent and child variables. Third, other populations should be studied if for no other reason than to increase the response variance in the independent and dependent variables. Fourth, a far more serious conceptual examination of the relations between traits and expectations and between ways of measuring each is indicated. Fifth, it would be interesting to examine

peer and media expectations to determine their relations with various child outcomes. Sixth, interactions between mother and father variables should be assessed as to their predictive utility for child outcomes. Such interactions were predictive in a recent study (Baucom & Aiken, 1984). The importance of combining mother and father variables has been stressed by Spence and Helmreich (1978).

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Appendix A
PERSONAL ATTRIBUTES QUESTIONNAIRE

Personal Attributes Questionnaire*

The items below inquire about what kind of person you think you are. Each item consists of a pair of characteristics, with the numbers 1-5 in between. For example:

Not at all artistic 1....2....3....4....5 very artistic

Each pair describes contradictory characteristics--that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The numbers form a scale between the two extremes. You are to choose a number which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose 1. If you think you are pretty good, you might choose 4. If you are only medium, you might choose 3, and so forth.

*This measure was devised by Spence & Helmreich (1978).

CIRCLE THE NUMBER THAT BEST DESCRIBES YOU

SCALE	ITEM		
M-F	1. Not at all aggressive	1....2....3....4....5	Very aggressive
M	2. Not at all independent	1....2....3....4....5	Very independent
F	3. Not at all emotional	1....2....3....4....5	Very emotional
M-F	4. Very submissive	1....2....3....4....5	Very dominant
M-F	5. Not at all excitable in a major crisis	1....2....3....4....5	Very excitable in a major crisis
M	6. Very passive	1....2....3....4....5	Very active
F	7. Not at all able to devote self completely to others	1....2....3....4....5	Able to devote self completely to others
F	8. Very rough	1....2....3....4....5	Very gentle
F	9. Not at all helpful to others	1....2....3....4....5	Very helpful to others
M	10. Not at all competitive	1....2....3....4....5	Very competitive
M-F	11. Very home-oriented	1....2....3....4....5	Very worldly
F	12. Not at all kind	1....2....3....4....5	Very kind
M-F	13. Indifferent to others' approval	1....2....3....4....5	Highly needful of others' approval
M-F	14. Feelings not easily hurt	1....2....3....4....5	Feelings easily hurt
F	15. Not at all aware of feelings of others	1....2....3....4....5	Very aware of feelings of others

M	16. Can make decisions easily	1.....2.....3.....4.....5	Has difficulty making decisions
M	17. Gives up very easily	1.....2.....3.....4.....5	Never gives up easily
M-F	18. Never cries	1.....2.....3.....4.....5	Cries very easily
M	19. Not at all self-confident	1.....2.....3.....4.....5	Very self-confident
M	20. Feels very inferior	1.....2.....3.....4.....5	Feels very superior
F	21. Not at all understanding of others	1.....2.....3.....4.....5	Very understanding of others
F	22. Very cold in relations with others	1.....2.....3.....4.....5	Very warm in relations with others
M-F	23. Very little need for security	1.....2.....3.....4.....5	Very strong need for security
M	24. Goes to pieces under pressure	1.....2.....3.....4.....5	Stands up well under pressure

Appendix B
Q-SORT ITEMS

Q-sort Items*

- | | |
|---|--|
| 1. To be kind | 17. To plan to support yourself/himself/herself as an adult |
| 2. To be able to devote self to others | 18. To be gentle |
| 3. To figure things out for yourself/himself/herself before asking for help | 19. To be an active person |
| 4. To be an intellectual | 20. To do well in competitive situations |
| 5. To be an person others turn to for reassurance and advice | 21. To do the best you/he/she can in most situations |
| 6. To be tactful enough to handle social situations well | 22. To be able to make your/his/her own decisions |
| 7. To be independent | 23. To be popular with kids your/his/her own age |
| 8. To plan to marry and have a family | 24. To have high aspirations for my/his/her future education |
| 9. To be at ease in a variety of social situations | 25. To be able to discuss ideas and issues well |
| 10. To be ambitious | 26. To be understanding of others |
| 11. Does not give up easily; is persistent | 27. To stand up well under pressure |
| 12. To be able to talk to others in an interesting | 28. To be able to maintain |
| 13. To be self-confident | 29. To be aware of the feelings of others |
| 14. To aspire to a high prestige occupation | 30. To be able to perform tasks well |
| 15. To get along well with adults | 31. To be able to stand up for your/his/her own rights |
| 16. To behave in a sympathetic and considerate manner | 32. To be helpful to others |

*This measure was devised by Lynch (1981).

33. To be personally charming
34. To be indifferent to approval
35. To be able to express tender feelings easily
36. To be good at helping people have a good time
37. To get tasks done on your/his/her own
38. To plan to be a good husband/wife and father/mother
39. To be a person who is willing to take some risks
40. To be warm in relation to others

Appendix C
CHILD SELF-ESTEEM QUESTIONS

Child Self-Esteem Questions

Some students your age told us how they sometimes feel. Please circle how often you feel like these kids do.

	A Lot <hr/>	A Little <hr/>	Not At All <hr/>
*1. One student said: "I'm not much good at anything." Do you feel like this?	1	2	3
2. A different student said: "I think most people who know me like me." Do you feel like this?	1	2	3
*3. Another student said: "There's a lot wrong with me." Do you feel like this?	1	2	3
*4. A student told us: "I am no good." Do you feel like this?	1	2	3
5. Another student said: "I think lots of kids wish they could be more like me." Do you feel like this?	1	2	3
*6. Another student said: "I think I am no good at all." Do you feel like this?	1	2	3
7. A student said: "I usually do well at most things I try." Do you feel like this?	1	2	3
*8. Everybody has some things about him/her which are good and some things about him/her which are bad. Are more of the things about you...			
_____ 1. Good			
_____ 2. Bad			
_____ 3. Both about the same			
*9. How happy are you with the kind of person you are?			
_____ 1. Very happy			
_____ 2. Pretty happy			
_____ 3. Not very happy			
_____ 4. Not at all happy			

*Items included on the Simmons, Rosenberg, and Rosenberg (1973) Scale. Others were devised by the staff of the "Family Relations in Early Adolescence" Research Project.

Appendix D
CHILD SELF-CONSCIOUSNESS QUESTIONS

Child Self-Consciousness Questions*

1. Let's say some grown-up or adult visitor came into class and the teacher wanted them to know who you were, so she asked you to stand up and tell them a little about yourself. Would you . . .

_____ 1. Like that
 _____ 2. Not like it
 _____ 3. Not care

2. If the teacher asked you to get up in front of the class and talk a little bit about your summer, would you be . . .

_____ 1. Very nervous
 _____ 2. A little nervous
 _____ 3. Not at all nervous

3. If you did get up in front of the class and tell them about your summer, would you . . .

_____ 1. Think a lot about how all the kids were looking at you
 _____ 2. Think a little bit about how all the kids were looking at you
 _____ 3. Not think at all about the other kids looking at you

4. If you were to wear the wrong kind of clothes to a party, would that bother you . . .

_____ 1. A lot
 _____ 2. A little
 _____ 3. Not at all

5. If you went to a party where you did not know most of the kids, would you wonder what they were thinking about you?

_____ 1. Yes
 _____ 2. No

6. Do you get nervous when someone watches you work?

_____ 1. Yes
 _____ 2. No

7. A young person told me: "When I'm with people I get nervous because I worry about how much they like me."
 Do you feel like this . . .

_____ 1. Often
 _____ 2. Sometimes
 _____ 3. Never

*All items are from Simmons, Rosenberg, and Rosenberg (1973).

Appendix E

PARENTAL ATTRACTIVENESS QUESTIONS

Parental Attractiveness Questions

* 1. Would you like to be the kind of person your father/mother is?

1. Yes, completely
 2. In most ways
 3. In many ways
 4. In just a few ways
 5. Not at all

** 2. How satisfied do you think you father/mother is with his/her current life?

- | | | | | |
|-------------------------|-------|-----------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Not at all
Satisfied | ----- | Satisfied | ----- | Very
Satisfied |

** 3. How happy do you think you father/mother is with his/her current life?

- | | | | | |
|---------------------|-------|-------|-------|---------------|
| 1 | 2 | 3 | 4 | 5 |
| Not at all
Happy | ----- | Happy | ----- | Very
Happy |

** 4. Do you think of your father/mother as a successful person?

- | | | | | |
|--------------------------|-------|------------|-------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Not at all
Successful | ----- | Successful | ----- | Very
Successful |

*This item was derived by Kandel and Lesser (1972).

**These items were devised by the staff of the "Family Relations in Early Adolescence" research project.

Appendix F
EDUCATIONAL ASPIRATIONS QUESTION

Level of Educational Aspiration

*Check the highest level of education you expect to complete:

- 1. I may not complete high school
- 2. High school
- 3. Two-year college or a trade school.
- 4. Four-year college.
- 5. Education beyond college (to be a doctor or lawyer or anything else that requires more than four years).

*This item was devised by Kandel and Lesser (1972).

Appendix G
ARTICLE LENGTH VERSION

Relations between Parental Report of Expressive and
Instrumental
Personality Characteristics and
Early Adolescent Self-Esteem and Self-Consciousness

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Running head: PARENTAL TRAITS AND EARLY ADOLESCENT OUTCOMES

Abstract

The purpose of this study was to determine the degree to which parental instrumental and expressive traits predict early adolescent self-esteem and self-consciousness. The subjects were 174 seventh-grade girls and 103 seventh-grade boys and their mothers and fathers. All members of these triads filled out questionnaires and participated in interaction sessions. Data from the parental responses to the Personal Attributes Questionnaire (PAQ), and child responses to questions concerning their self-esteem and self-consciousness were all employed in this study. The PAQ was viewed as measuring instrumental and expressive traits rather than the global constructs of masculinity and femininity. Analyses were run separately for each parent-child dyad via hierarchical regressions (with forward selection procedures being applied at each step). Also, the median split technique was applied to the PAQ data and differences between the four resulting groups were assessed with ANOVAs. Parental expressive traits were significantly correlated with child self-esteem in three of the four dyads. The results for self-consciousness were parallel to those for self-esteem but were less pronounced. The importance throughout early childhood of parental warmth and acceptance for resulting child outcomes may underlie such

findings. These stable parenting behaviors may be tapped by parental report on the PAQ. The androgyny hypothesis was not supported by these data. The median split and regression analyses yielded similar findings, with regressions being the preferred method. Directions for future research were discussed.

Relations between Parental Report of Expressive and
Instrumental
Personality Characteristics and
Early Adolescent Self-Esteem and Self-Consciousness

The purpose of this study is to examine the relations between parents' report of their own personality characteristics and child self-esteem and self-consciousness. Spence and Helmreich (1978) predicted and found that significant relations exist between child report of parental masculine and feminine traits and child self-esteem. That is, couples where both parents were labelled as androgynous (those scoring above the median on the Masculinity and Femininity scales of the Personal Attributes Questionnaire; PAQ; Spence, Helmreich, & Stapp, 1974) had children with the highest levels of self-esteem. Such parental personality characteristics have been found to be associated with a variety of parental behaviors which are correlated with the child's self-esteem (Coopersmith, 1967; Spence & Helmreich, 1978). As an extension of the Spence and Helmreich (1978) study, it would be interesting to examine these relations when parental report of their own characteristics is employed.

Instrumentality and Expressiveness as Personality Variables

The masculinity and femininity measures which have been developed subsequent to the Constantinople (1973) review have been based on the assumption that a person's scores on the masculinity and femininity subtests are independent (or orthogonal). In his writings, Bakan (1966) has provided a similar conceptualization of the related terms agency and communion. He believes that these constructs "characterize two fundamental modalities in the existence of living forms...Agency manifests itself in self-protection, self-assertion, and self-expansion; communion manifests itself in the sense of being at one with other organisms (p. 14-15)." He goes on to point out that agency is a masculine characteristic which occurs primarily in males and that communion is a feminine characteristic which occurs primarily in females. Consistent with this notion, Bem (1974) and Spence, Helmreich and Stapp (1974) developed measures of masculinity and femininity.

In the past, the PAQ has usually been scored by a median split method (Spence & Helmreich, 1978, 1979a). Persons scoring above the median on the Masculinity (M) scale and below the median on the Femininity (F) scale are classified as Masculine. Persons scoring above the median on the F scale and below the median on the M scale are classified as Feminine. Those below the median on both scales or above

the median on both scales are classified as Undifferentiated and Androgynous, respectively. It has been assumed that males who have been classified as Masculine and females who have been classified as Feminine have rated themselves as being sex-typed or traditional in their sex role orientation. Bem's (1974,1977) Sex Role Inventory (BSRI) is scored in the same manner.

Since the development of the PAQ and the BSRI, several investigators have attempted to determine just what it is that the PAQ and the BSRI measure. Helmreich, Spence, and Wilhelm (1981) point out that these measures only have construct and predictive validity when they "are regarded narrowly as measures of instrumentality and expressiveness...The PAQ and other instruments cannot be regarded...as all-purpose measures of masculinity and femininity (p. 1107)." Thus, although the scales were labelled Masculinity and Femininity, Spence and Helmreich have begun to be more conservative in their statements about what it is the PAQ measures (Spence, 1983).

They point out that attitudes, qualities, and behaviors are multidimensional and in many cases cannot be predicted by scores on the BSRI or the PAQ (Helmreich, Spence, & Holahan, 1979; Spence & Helmreich, 1979b; Spence, Helmreich, & Stapp, 1975). That is, they believe that instrumentality and expressiveness should only be assumed to be predictive

of behaviors which call upon these instrumental and expressive traits.

Instrumentality and Expressiveness as Continuous Variables

Spence and Helmreich (1978) justify the use of the median-split method by saying that that "the categorization method we have developed has turned out to be both easier to communicate conceptually and more parsimonious computationally (p. 36)." Although they admit that there is a substantial loss of information when employing such a technique, they argue that the use of multiple regression techniques provides no substantial increases in the amount of variance accounted for (thus indicating to them that it is not necessary to employ such techniques). Besides the loss of information inherent in the median split method, another obvious problem with this technique is the lack of reliability of categorizing those subjects who are very near the median. In a critique of this scoring technique, Pedhazur and Tetenbaum (1979) also point out that since medians are determined based on the sample being used, an individual may be labelled in one way when they are part of a specific type of group and in another way when they are part of another group.

The best illustration of the use of regression techniques in this type of research was in two recent studies by the same investigators (Lubinski, Tellegen, & Butcher, 1981;

1983). The analyses of the current study will lean rather heavily on their work. In their research, Lubinski et al. (1981,1983) use hierarchical regression techniques to predict personality variables. On the other hand, Lubinski et al. (1981,1983) use the MxF interaction as an operational definition of androgyny. Although such interactions of main effects are important to look at in regression analyses, such a conceptualization of androgyny, from Spence's (1983) point of view, does not have strong theoretical or empirical support in the literature.

In the present study, a conservative approach will be taken in that the measures will be treated as continuous variables and interactions will be tested. On the other hand, because the specifics of just how the two scales (instrumentality and expressiveness) interact (if at all) has not been conclusively determined, it seems inappropriate and premature at this time to view androgyny as a simple multiplicative interaction between the two scales. Also, all analyses will be run by subjecting the PAQ data to the median split technique so as to enable us to compare the results of the different types of analyses and compare the findings of this study with those of previous studies in the literature.

Self-Esteem and Self-Consciousness

Most of the work that has been done in this area has involved self-esteem rather than self-consciousness. Some studies have been conducted which have investigated the relationship between children's PAQ scores and their self-esteem. Far fewer studies have looked at the relationship between parents' PAQ scale scores and their children's self-esteem. The issue of parental report versus child report has seen much attention in the literature (Spence & Helmreich, 1978). However, because the child correlates of parental report are virtually unknown, parents' report of their own attributes will be used rather than the children's perceptions of their parents' attributes. In this way, one can get at whether or not what a parent thinks he or she is is predictive of what the child thinks he or she is.

By using a meta-analysis technique (Glass, McGraw & Smith, 1981) on 35 studies which included a total of 6,424 females and 5,692 males, Whitley (1983) tested hypotheses based on three models of the relation between sex role orientation and self-esteem. These models are as follows: the congruence model (congruence between one's sex role orientation and gender is thought to yield a higher self-esteem), the androgyny model (higher self-esteem scores are assumed to occur in those who exhibit high scores on

both the masculinity and femininity scales), and the masculinity model (higher self-esteem scores are assumed to be obtained by those who have high masculinity scores irrespective of their femininity scores). Whitley found that subjects' self-ratings of masculinity (on the BSRI or the PAQ) are more highly correlated with self-esteem than either their femininity scores or MxF interactions, thus showing evidence for the masculinity model. Although this study is not directly related to the present parent-child issues, mention is warranted here because of the extremely large sample size that was employed.

In a study related to the present one, Lamke (1982) looked at the relationship between early adolescents' self-report on the PAQ, BSRI, and a self-esteem measure. By employing multiple regression analyses, she found that in both males and females and with both the PAQ and the BSRI, masculinity significantly predicted self-esteem. Femininity did not account for any variance after masculinity was entered into the equation.

Spence and Helmreich (1978) report that their data indicates that one's level of agentic characteristics (i.e., score on the Masculinity scale of the PAQ) is highly correlated with one's level of self-esteem (between .64 and .72 for males and females from the high school and college samples). Scores on the Femininity scale were also related

but to a lesser degree (.22 to .26). It should be noted that such findings are for students' self-reports on the PAQ and the self-esteem measure. With regard to the children's perception of their parent's sex role orientation and its relation to child self-esteem, very significant trends were found for both male and female children. Children with Androgynous parents (high on the Masculinity and Femininity scales) were found to have the highest self-esteem. (No correlations between parental PAQ scores (child report) and child self-esteem were reported.) Thus, it may be that the presence of parental expressiveness, as well as the presence of parental instrumentality, is an important antecedent of child self-esteem.

Baumrind (1982) presents relevant data from her Family Socialization and Developmental Competence Project. In her study, she assessed whether androgynous parents produce more competent children. A competent child, according to Baumrind, is one who is high in social assertiveness, social responsibility, and cognitive competence. Her findings suggest that sex-typed parents produce the most competent children (males and females). Androgynous and Undifferentiated parents (as determined by scores on the BSRI) were found to produce less competent children. It should be noted that these children were all 9 years old (slightly younger than the group which was used in the present study). Also, her results were based on the use of

median split techniques and ANOVA statistical methods, rather than multiple regression techniques.

It is important to note the implications that Baumrind's data has for the present study. For fathers of sons and daughters, Baumrind would probably predict that masculinity would be positively predictive of child self-esteem and paternal femininity would be negatively predictive. For mothers of sons and daughters, the opposite would be predicted. On the other hand, Spence and Helmreich would probably predict that, for fathers and mothers, both masculinity and femininity would be positively predictive of child self-esteem (similar to the androgyny hypothesis). Given that the present study is similar to that of Spence and Helmreich's (1978) and that there is no parental report literature for us to draw on, it is predicted that our results will be similar to those found by Spence and Helmreich (1978) when they employed child report of parental traits. The results for self-consciousness are predicted to parallel those of self-esteem except that they should be in the opposite direction, given that self-consciousness is a "negative" child outcome. All results will be calculated in terms of dyads (father/son, mother/son, father/daughter, and mother/daughter).

Method

Overall Description of the Research Program

This research program was conducted between 1978 and 1981 by John P. Hill at the Boys Town Center for the Study of Youth Development, Boys Town, Nebraska (Hill, 1980). The program included two streams of data collection: a field stream and a laboratory stream. Those families participating in the field stream were given questionnaires in their homes by "messengers" who were working on the project. Families who participated in the laboratory stream were asked to fill out questionnaires as well as perform various interactional tasks which were videotaped. It is the data collected from those families who participated in the laboratory stream that will be employed in the present study.

Families who participated had to meet the following criteria: the family had to be intact such that the child who was involved in the study was living with his or her natural parents, the child had to be a seventh-grader, and he or she had to be a first-born.

Subjects

Subjects for this study were 174 seventh-grade girls and 103 seventh-grade boys and their families who were recruited for the laboratory stream from eight school districts in

Omaha, Nebraska. Principals of the schools in these districts were asked to provide lists of students who fit the criteria mentioned above. Letters were then sent out, with the principal's signature, to eligible families. Of the school districts which participated, 95-100% of the principals were cooperative. The letters to the families were followed up with phone calls requesting their participation. The staff members who made these calls provided the families with a brief description of the laboratory tasks. Approximately 40% of the families agreed to participate. The most common reason for refusal was that the family did not have enough time. No differences in socioeconomic status were noted between those who agreed to participate and those who declined. Approximately 31% of the sample was Catholic.

Procedure

All families who participated in the laboratory stream of the study came to the Boys Town Center to fill out the questionnaires and participate in the interaction sessions. A supervisor, an administrator and an equipment operator were all present during the interaction sessions for each family. All families signed consent forms for video and audiotaping.

The mother, father, and child all filled out questionnaires during the laboratory session. Since many of

the interaction tasks were dyadic, the third family member could be filling out his or her questionnaire in a separate room while the other two members were participating in a task. Only the data from the parent and child questionnaires are relevant to the present study.

Measures and Tasks

The Personal Attributes Questionnaire (PAQ). This 24-item questionnaire was developed by Spence, Helmreich, and Stapp (1974) and Spence and Helmreich (1978). There are eight Masculinity items, eight Femininity items, and eight Masculinity-Femininity items. Each item consists of two poles which anchor a five point scale (0-4). The participant is to choose which of the five points best applies to him or her. An item was labelled Masculine, for example, if the stereotypically masculine pole was socially desirable to some degree in both sexes, but occurred to a greater degree in males (Spence & Helmreich, 1978). The Masculinity-Femininity items are different in that one pole is socially desirable for one sex and the other is socially desirable for the other sex.

Mother and father raw scores on the Masculinity and Femininity scales were employed and were construed as measuring instrumental and expressive personality characteristics, respectively. For analyses which required

the median split technique, the mean of the medians of the mothers' and fathers' responses on the Masculinity and Femininity scales of the PAQ was employed. In the present sample, the M scale median that was used was 21 and the F scale median was 22.5. In Spence and Helmreich's (1978) high school sample, the medians employed were 20 and 23 for the M and F scales, respectively. (Spence and Helmreich recommend using sample-specific medians).

Self-Esteem and Self-Consciousness. Items which measure adolescent self-esteem and self-consciousness have been taken from the Simmons, Rosenberg, and Rosenberg (1973) Interview Schedule. These items were summed so as to arrive at composite scores for self-esteem and self-consciousness. Some of the items had to be reversed scored (and variations thereof) so that a high score on an item represented a high level of self-esteem or self-consciousness.

Results

Internal Consistency of and Intercorrelations between Variables

Prior to running the analyses which test the hypotheses presented earlier, scales were tested for internal consistency and for independence. Cronbach alphas were .62 and above for all PAQ and child outcome scales, thus indicating that the scales are internally consistent. The

Masculinity and Femininity scales of the PAQ (measures of instrumental and expressive traits) were correlated .13 and .16 for the father/son and father/daughter dyads, respectively. These scales were correlated .31 and .24 for the mother/son and mother/daughter dyads, respectively. Although, for mothers, the scales were moderately correlated, little variance is shared between the scales. As a result, the analyses will be run as dictated. As should have been the case, self-esteem and self-consciousness were moderately correlated (negatively). Given that these correlations were only moderate (-.34 for boys and -.45 for girls), little variance is shared between the scales.

Multiple Regression Analyses

The multiple regression results for fathers' and mothers' personality traits (for boys and girls) are in Table 1.

Insert Table 1 about here

Self-esteem predicted by parental personality traits. As can be seen in Table 1, the Multiple R between parental personality characteristics and child self-esteem for the father/son dyad was .22 (R² = .05). Fathers' expressive (E) personality characteristics were positively predictive of the sons' level of self-esteem and significantly increased

the R^2 by .05 ($p < .05$). No other independent variables were significant predictors. For fathers and daughters, the Multiple R was .05 ($R^2 = .00$). For this dyad, none of the independent variables was significantly predictive.

The Multiple R for mothers and sons was .23 ($R^2 = .05$). Instrumental (I) personality characteristics were positively predictive and significantly increased the R^2 by .04 (marginal; $p < .10$). No other predictors were significant. Parental expressive traits were significantly correlated with self-esteem for this dyad but were not predictive above and beyond parental instrumental traits. For mothers and daughters, the Multiple R was .22 ($R^2 = .05$). Expressive personality characteristics were positively predictive and significantly increased the R^2 by .03 ($p < .05$). The IxE interaction was negatively predictive and significantly increased the R^2 by .02 (marginal; $p < .10$). Such a negatively predictive interaction (marginal) by itself would indicate that those mothers with high I and low E personality characteristics and those with high E and low I personality characteristics would tend to have daughters with the highest self-esteem. (Regression lines can be plotted by employing the unstandardized regression weights to demonstrate this; Cohen & Cohen, 1983.) Given that it occurs in conjunction with a positively predictive expressive variable, one can conclude that it seems that it is those mothers who are high in E and low in I traits

("feminine" mothers) who have daughters with the highest levels of self-esteem.

Self-consciousness predicted by parental personality traits. As can be seen in Table 1, the Multiple R_s for the father/son and father/daughter dyads between parental personality traits and child self-consciousness were .08 (R₂ =.01) and .04 (R₂ =.00), respectively. No independent variables were predictive.

The Multiple R_s for the mother/son and mother/daughter dyads were .20 (R₂ =.04) and .27 (R₂ =.07), respectively. No predictors were significant for the mother/son dyad. For the mother/daughter dyad, expressiveness was negatively predictive and significantly increased the R₂ by .02 (marginal; p <.10). Also, the IxE interaction was positively predictive and significantly increased the R₂ by .06 (p <.01) for this dyad. Given the direction of these two findings, it seems that mothers who are low in both E and I personality characteristics ("undifferentiated" mothers) tend to have daughters who are high in self-consciousness.

Median-Split Analyses

The means, standard deviations, and ANOVA results for fathers' and mothers' (of boys and girls) are in Tables 2 and 3, respectively.

Insert Tables 2 and 3 about here

Self-esteem. For all dyads, differences between the PAQ groups (with respect to self-esteem) were assessed with ANOVA procedures. Results indicated that for fathers and sons, there were no significant differences between the groups, $F(3,102)=1.19, p >.10$. For mothers and sons, however, significant differences between the groups were found, $F(3,102)=3.34, p <.05$. A posteriori Duncan tests revealed that the androgynous mothers had sons with higher levels of self-esteem than masculine mothers. For fathers of daughters, no significant differences were found, $F(3,173)=.94, p >.10$. For mothers of daughters, significant differences were found between the PAQ groups, $F(3,173)=3.28, p <.05$. A posteriori tests revealed that feminine mothers had daughters with higher self-esteem than undifferentiated or masculine mothers.

Self-consciousness. With respect to fathers and sons, results revealed that there were no differences between the PAQ groups with respect to child self-consciousness, $F(3,102)=1.66, p >.10$. For mothers and sons, significant differences were found, $F(3,102)=2.89, p <.05$. Although Duncan Multiple Range tests revealed no significant differences (at the .05 significance level) between the

groups, feminine mothers had sons with the highest self-consciousness and androgynous mothers had sons with the lowest self-consciousness.

For fathers and daughters, no significant differences were found between the PAQ groups, $F(3,173)=.58$, $p > .10$. For mothers and daughters, analyses revealed significant differences between the groups, $F(3,173)=3.91$, $p < .01$. A posteriori tests indicated that undifferentiated mothers had daughters with the highest self-consciousness and masculine and feminine mothers had daughters with significantly lower levels of self-consciousness.

Discussion

Child Outcome Interpretations

Expressive parental traits were significantly and positively correlated with child self-esteem in three of the four dyads. Instrumental traits were only positively correlated with this child outcome in the mother/son dyad. Such results run counter to most of the current findings already mentioned which suggest that instrumentality is typically more predictive of self-esteem (Lamke, 1982; Spence & Helmreich, 1978; and Whitley, 1983).

Previous studies have either employed child report of parental traits or involve respondents' reports of their own personality traits and self-esteem. Actually, most studies

include the latter (i.e. intraindividual relations between traits and self-esteem). Whitley (1983), for example, reviewed 35 such studies. It may be that when we are concerned with relations between parent and child variables, the relations are qualitatively different than those found intraindividually. That is, it seems that expressiveness takes on a whole new importance when we speak of parent traits predicting child self-esteem.

The association of parental "warmth" and "acceptance" with a variety of "positive" child outcomes is ubiquitous in the literature of child development (Martin, 1975). This construct (warmth, acceptance/rejection, or love/hostility) regularly appears in factor analyses of parental behavior, as well (Schaefer, 1959). Parents whose self-reports rate them as high on expressiveness are, given the item content of the Femininity scale from the PAQ, likely to be seen as "warm" in the parental role. As Spence and Helmreich (1978) point out, "it seems quite conceivable that these parental characteristics are themselves correlated with the socialization techniques the parent employs (p. 142)."

Those that are expressive (warm and accepting) may be more involved in parenting and may have children who are more attached to them. It has been found by Sears (1970) that low maternal warmth (for 5 year olds) predicts low self-esteem at age 12. Thus, insofar as parental

expressiveness is related to parental warmth and acceptance, it makes sense that it is predictive of child attachment and self-esteem.

Those parents who report being more instrumental are probably more independent, active, and self-confident. Such a parent probably appears very satisfied, but may not be as involved in parenting as the type described above. As a result, their children may be less attached to these parents and this may have a negative effect on the child's self-esteem.

Another important point is that parental report of their own traits was employed. In such a case, parents are commenting on their own, probably long-standing, traits. Thus, if they report being expressive now, they may have been "warm" parents when the child was five years old. Child-report of parental traits would not get at the parent's long-standing traits to the same degree because children probably comment more on the parent's current behavior.

Because other studies either examine the relations intraindividually or with child report of parental traits (a perspective which, as mentioned above, is very limited), the predictive utility of parental warmth may never be revealed. It may be that after attachment has occurred, later fluctuations in self-esteem may be more a function of

fluctuations in parental instrumentality or one's own level of instrumentality. Parental warmth may be a basic necessary condition for high levels of child self-esteem and shifts in parental instrumentality may cause shifts in self-esteem later in the child's life. Schaefer and Bayley (1960), for example, found that parental warmth is more stable across childhood and adolescence than is parental control. (The assumption here is that parental expressive traits are correlated with parental warmth and that parental instrumental traits are correlated with parental control.) The hypothesis being presented here may explain why experimenters who examine the relations between traits and self-esteem intraindividually find that instrumentality is more predictive of self-esteem than is expressiveness.

The Spence and Helmreich (1978) study was one of the few studies that examined the relations between parental instrumental and expressive traits and child self-esteem. Although they found that androgynous couples had children with the highest self-esteem, their analyses differed significantly from those of the present study. They employed the median-split technique, they combined parents into couple types, they used child report of parental traits, and their subjects were older. Thus, their differing findings may be a function of a different experimental design.

Given the findings of the present study, it seems that we should not be too quick to conclude that high levels of self-esteem always occur in the presence of (or are caused by) high levels of instrumental traits. Such may be the case within the individual but when we are speaking of relations between parental traits and child self-esteem, it seems that parental expressiveness should be added to the list of positive predictors of child self-esteem (for the reasons already cited). Also, because of the relative dearth of literature on relations between parental traits (parental report) and child self-esteem and because the findings of the present study are consistent and indicate that such relations may be significantly different than those found intraindividually, further study is recommended.

Regardless of the results, it is clear that significant findings do occur when parental report of their own traits is employed. One obvious problem with employing child report of parental traits is that it is difficult to determine the degree to which the correlations between child perceptions of adult traits and the child outcomes affect the findings. As Spence and Helmreich (1978) point out:

There are multiple slippages between parents' perceptions of themselves and students' perceptions of their parents. Both fathers and mothers may behave somewhat differently at home than in other settings; their actions toward a particular child may be shaped by their attitudes toward that child and by that child's behavior toward them; children's interpretation of their parents' behavior and hence their inferences about their parents' attributes are filtered through

their own needs and tempermental characteristics.
(p. 217)

Put another way, children's reports of parental "traits" are shaped by their interactions with parents as parents. Parental reports of "traits" presumably tap a broader range of adult's roles. Thus, it seems that more significant relations with child self-esteem would be expected if child report of parental characteristics was employed. Given that significant relations were still found between parental report of parental traits and child self-esteem (although probably lower in magnitude than if child report of these traits had been used), such findings lend credence to the notion that there is a relation between parents' personality characteristics and their children's level of self-esteem and it may occur for the reasons already cited.

Another result which is clear upon inspection of Tables 1-3 is that most of the significant results occurred for the mother dyads and, more specifically, for the mother/daughter. If we are correct in our hypothesis that long-standing parental warmth is tapped by parental report on the PAQ, it may be that the mothers' level of warmth is more important for subsequent levels of child outcomes. One explanation for this finding may be that mothers are typically more involved in child rearing and thus child outcomes are more a function of the mother's attributes. Also, it seems that daughters may be more sensitive to these

attributes. In general, the other Holmbeck (1984) findings indicate that same-sex parents may be more influential.

For child self-consciousness, personality traits were only predictive for the mother/daughter dyad. These findings, however, did parallel those of self-esteem for the same dyad in that expressive traits were found to be negatively predictive. (The relation was negative because self-consciousness is a "negative" child outcome.) Although the findings for self-consciousness were less pronounced than were those for self-esteem, the results were similar. Given the similarity in the findings and the moderate correlations between the variables, it appears that self-esteem and self-consciousness may be tapping the same latent constructs. On the other hand, fewer relations may have been found for self-consciousness because it may not be as stable over time as self-esteem.

The Androgyny Hypothesis

A consistent finding in this study is that expressiveness and instrumentality were rarely positive predictors of the same child variable. Such findings run counter to the literature. In general, these results indicate that the androgyny hypothesis (Bem, 1975; Spence, Helmreich, & Stapp, 1975) is not supported in the present study. Perhaps more importantly, it may not have been supported for early adolescents. Proponents of such a hypothesis would have

expected that the highest levels on the child outcomes (in the desirable direction) would have been predicted by high levels of parental instrumentality and expressiveness. Such was rarely the case. Baumrind's (1982) theory that sex-typed parents have the most competent children also did not receive universal support. In addition, the interactional conception of androgyny as a viable predictor (Lubinski, Tellegen, & Butcher, 1981, 1983) was not supported. That is, the IxE interactions were significantly predictive in a positive direction on only one occasion.

It may be that, in early adolescence, androgynous parenting may be less effectual for the child than at other periods in the life cycle. Given the changes in peer expectations and peer conformity (Coleman, 1980) and the new cognitive capacities for interpreting peer and media messages, the influence of parents may be drastically reduced. In addition, the traits of androgynous parents (at higher levels than with other parents) may conflict with those of other people in the child's life.

Multiple Regression Analyses Versus Median-Split Techniques

As would have been expected, the results of the PAQ median split analyses were similar to the results which emerged from the regression analyses. Even though they were similar, however, it seemed that some of the more marginal regression results were "washed out" in the median split

analyses. Such results were expected since the median split technique produces a loss of information and a loss of variance. Thus, it seems that Lamke's (1982) argument that important and unique information emerges from both types of analyses is not supported by the present study. Even Lamke's example, which presumably supports her view that two types of analyses are needed, is more supportive of the argument being presented here. She found that "while masculinity significantly predicted self-esteem for males, there were no self-esteem differences between the four sex-role categories (p. 1534)." If one examines the simple correlations from her study, one would predict that for females, for example, androgynous respondents would have the highest self-esteem (since both M and F are highly correlated with self-esteem). In fact, this is what she found. Thus, it seems that when the relations are very significant, the regression analyses and median split analyses yield roughly the same results. When the correlations are only moderate, the regression analyses are more sensitive (presumably because all of the information is available) and therefore yield more significant results than the median split analyses.

It seems that the relations between parent and child variables are more complex than was once thought, in that changes in any number of variables can alter the predictability. It is clear that different results emerged

for different dyads and that parental report yielded different findings than child report of parental personality characteristics. In future research, many of the relations in this study should be studied longitudinally. The parental antecedents of child outcomes (such as self-esteem) are better studied longitudinally. Also, causation could be inferred with such data where it cannot be inferred in the present study. In addition, interactions between mother and father variables should be assessed as to their predictive utility for child outcomes. Such interactions were predictive in a recent study (Baucom & Aiken, 1984). The importance of combining mother and father variables has been stressed by Spence and Helmreich (1978).

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Table 1

Summary of Regression Analyses of Effects of Fathers' and Mothers' Instrumental and Expressive Personality Characteristics on the Early Adolescent Outcomes

Father									
Boys					Girls				
Step	Var	Par-r	R	R2-Change	Step	Var	Par-r	R	R2-Change
Self-Esteem									
1	E	.22	.22	.05**	1	E	-.04	.04	.00
2	I	-.02	.22	.00	2	I	.02	.04	.00
3	IxE	.00	.22	.00	3	IxE	-.01	.05	.00
Self-Consciousness									
1	E	-.06	.06	.00	1	I	-.02	.02	.00
2	I	.03	.07	.00	2	E	-.01	.03	.00
3	IxE	.04	.08	.00	3	IxE	-.03	.04	.00
Mother									
Boys					Girls				
Step	Var	Par-r	R	R2-Change	Step	Var	Par-r	R	R2-Change
Self-Esteem									
1	I	.19	.19	.04*	1	E	.17	.17	.03**
2	E	.13	.23	.02	2	I	-.02	.17	.00
3	IxE	.01	.23	.00	3	IxE	-.14	.22	.02*
Self-Consciousness									
1	E	-.12	.12	.01	1	E	-.13	.13	.02*
2	I	-.04	.13	.00	2	I	.01	.13	.00
3	IxE	-.15	.20	.02	3	IxE	.24	.27	.06***

Note. I=PAQ M-scale, E=PAQ F-scale, IxE=MxF interaction.
 Variables entered at step 1= I and E; at step 2= IxE.
 n (boys)= 103, n (girls)= 174.
 † p <.10. ** p <.05. *** p <.01.

Table 2

Child Outcome Means, Standard Deviations, and ANOVA Results
for PAQ Undifferentiated, Masculine, Feminine,
and Androgynous Fathers of Sons and Daughters
PAQ Category

Child Outcome	Undiff	Masc	Fem	Androg	F-value	Duncan Results
Sons						
Self-Esteem						
M	22.54	22.94	24.47	23.72	1.19	-----
SD	3.35	2.80	2.40	2.43		
Self-Con.						
M	14.06	13.51	11.94	14.05	1.66	-----
SD	1.80	2.35	3.25	2.34		
Daughters						
Self-Esteem						
M	21.45	22.43	21.44	22.05	.94	-----
SD	3.49	2.74	3.39	3.60		
Self-Con.						
M	14.59	14.50	15.08	14.21	.58	-----
SD	2.38	2.13	1.50	2.24		

Note. I-Expect.= instrumental expectations, E-Expect.=
expressive expectations.

n (father-undiff)=24, n (father-masc)=50, n (father-fem)=6,
n (father-androg)=23,

* p <.10. ** p <.05. *** p <.01.

Table 3

Child Outcome Means, Standard Deviations, and ANOVA Results
for PAQ Undifferentiated, Masculine, Feminine,
and Androgynous Mothers of Sons and Daughters

Child Outcome	PAQ Category				F-value	Duncan Results
	Undiff	Masc	Fem	Androg		
Sons						
Self-Esteem						
M	22.84	21.88	22.50	24.30	3.34**	A>M
SD	2.89	3.56	3.03	2.06		
Self-Con.						
M	13.58	14.11	14.34	12.83	2.89**	-----
SD	1.86	2.41	2.40	2.24		
Daughters						
Self-Esteem						
M	21.30	21.09	22.99	21.81	3.28**	F>U,M
SD	3.18	3.48	2.73	3.43		
Self-Con.						
M	15.26	13.90	13.92	14.66	3.91***	U>M,F
SD	2.16	2.73	1.93	2.13		

Note. I-Expect.= instrumental expectations, E-Expect.= expressive expectations.

n (mother-undiff)=21, n (mother-masc)=8, n (mother-fem)=40,
n (mother-androg)=34,

* p <.10. ** p <.05. *** p <.01.

VITA

