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PERSONALITY CORRELATIONS AMONG FAMILY MEMBERS

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ABSTRACT

PERSONALITY CORRELATIONS AMONG FAMILY MEMBERS

By

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The intercorrelations of personality traits between husbands and wives, and between parents and children, in 127 intact families (393 children: 162 females, 231 males) were investigated using the age-appropriate form of the Sixteen Personality Factor Questionnaire.

The marital data supported husband-wife similarity rather than complementarity, particularly on traits related to interpersonal interaction such as dominance-submission, extraversion-introversion, and dependence-independence.

The main parent-child linkages were different for each dyad: daughters' non-anxious dependency was linked with mothers' sensitive dependency and with fathers' introverted, inhibited, dependency; sons' introverted neuroticism was linked with fathers' introverted neuroticism and with mothers' introverted, guilt-prone, emotionalism. For adolescent sons, sex-role traits of unemotional toughness and dominance replaced neuroticism in important linkages. Eldest daughters showed unusually strong linkages with fathers. Healthy parent traits were substantially linked with opposite (and sex-role appropriate) traits in girls than in boys.

Warmth-coldness and dominance-submission in both parents were also important.

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INTRODUCTION

This study of relationships among the personality traits of family members evolved from my interest in this crudely charted area, and it was facilitated by unexpected access to a remarkably complete data set for all members of 127 intact families on a well-researched questionnaire, the Sixteen Personality Factor Questionnaire (Cattell, Eber, & Tatsuoka, 1970). One foci of this work concerned interrelationships between husbands' and wives' personality traits, while the second concerned linkages between the personality traits of children and their parents.

Quite different processes are being considered in these two areas of investigation. Interrelationships between spouses' personality traits are the result of the mate selection process, or, possibly, a result of living together for many years. Thus, we are asking such questions as "Do we find a dominant individual married to a similarly dominant person or to a, dissimilarly, submissive person, and, does this dominant individual tend to be married to someone who is also stable, or intelligent, or conforming?" The second area addresses the interactive effects of parents' and children's personalities, which take place through the child-raising process, as well as through heredity. Here we are

asking such questions as "Is warmth or dominance or creativity in a parent consistently related to particular personality traits in the child?" Although these two areas of study are quite divergent, they both emphasize the importance of a multivariate rather than bivariate design, and the use of personality measures which are well-defined and comparable across studies.

Husband-Wife Trait Relationships

With the well-documented increase in the rate of marital separation (Norton & Glick, 1976) has come increased attention to the determinants of marital satisfaction and stability. Many have investigated this question from the point of view of the individual traits of the marital partners, on the assumption that marriage failure is the result of at least one of the individuals being too unstable, hostile, or self-centered to get along successfully with anyone in marriage (Singh, et al., 1976). However, the prevalence of marital distress, as well as mounting evidence from studies such as Waters (1975), which directly measured these pathological personality traits in happily and unhappily married couples, indicates that marriage failure may be more a product of mismatched than of inadequately functioning individual partners.

Many studies of the role of personality variables in mate selection and marriage stability have focused on the question of whether people tend to marry people who are

similar or dissimilar to themselves. The three theories that have been investigated in this area are: (1) Spouse similarity, measured by positive same-trait correlations between spouses; (2) spouse dissimilarity, measured by negative same-trait correlations between spouses; and (3) spouse complementarity, measured by cross-trait correlations between spouses.

Winch (1958) published the first formal theory of marital choice, proposing a principle he called Type I Complementarity. Specifically, he suggested that for both general personality traits and for needs--such as those coming from the Murray type of framework (Murray, 1954)--that mutual attraction would develop between persons high and low on a particular trait. This theory predicts a negative interspouse correlation for any given trait. Explanations of this phenomenon include the individual's tendency to find as desirable those characteristics which s/he does not possess, or, the practical need to have within the marriage unit at least one individual who possess each of various skills necessary to general adjustment (Cattell & Nesselroade, 1967), or the theoretical need for complementarity on certain interpersonal traits such as dominance/submission (Winch, 1958).

The opposing theory is one of spouse similarity, which was early proposed in the work of Fisher (1930) and Terman (1938), who stated that in stable marriages the

partners will show statistically significant resemblances in their personalities. The hypothesis here is that similarity of personality would involve similarity of values, needs, perceptions and attitudes, and hence promote agreement about and sharing of living styles and decision (Murstein, 1976).

Winch (1967) further proposed a Type II Complementarity wherein two different traits may complement each other. For example, there could be a positive husband-wife correlation between such trait pairs as nurturance/succorance, masochism/hostility, or narcissism/achievement. While Winch supported this theory with a sample of correlations among needs and traits in 25 married couples and with a series of case studies, he failed to specify in any organized or comprehensive way which traits are complementary to which others. This Type II Complementarity was seen as an additional factor operating in the attraction process, and thus any trait having Type I Complementarity (same-trait similarity) may also be involved in Type II Complementarity with the spouses other traits.

A wide range of studies bear directly on Winch's theory of mate selection.[1] The most frequently used instrument

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[1]With regard to the measurement of personality traits, Schellenberg and Bee (1960) investigated the question of the comparability and validity of paper and pencil tests to interview and rating types of data in this area and found remarkably high correlations between the two modes. This study will concern itself with paper and pencil measures of personality traits.

has been the Edwards Personal Preference Schedule (EPPS), designed to tap fifteen of Murray's needs. Tables 1 and 2 summarize the statistically significant results of eight pertinent studies, plus one comparable study using the Jackson Personality Research Form, another test designed to measure Murray's needs. Table 1 provides information on the correlations between husbands' and wives' scores on the same traits. In the first seven studies listed, there were 37 statistically significant interspouse correlations, only 3 of which were negative. The two last-listed studies gave only summary statistics, but both found significant personality similarity and no evidence of dissimilarity: Schellenberg and Bee (1960) found that the coefficient of rank correlation of the whole personality profile was significantly positive, while Bowerman and Day (1956) found four statistically significant interspouse correlations, and all were positive. This review yielded rather substantial support for trait similarity within marriage partners, but little evidence for Winch's Type I Complementarity.

Evidence for Winch's Type II Complementarity is given in Table 2. The majority of the findings were reciprocal, that is, a high score on one dimension for <u>either</u> spouse is associated with a high score on another dimension for the other spouse. For example, wives' abasement was linked with husbands' nurturance, and husbands' abasement was also linked with wives' nurturance. Saper (1965) found a negative

Table 1. Significant Same-Trait Spouse Intercorrelations in Studies Using the EPPS

Study	Couples N	Abasement	Achievement	Affiliation	Aggression	Autonomy	Change	Deference	Dominance	Endurance	Exhibition	Heterosexual	Intraception	Nurturance	Order	Succorance
Banta & Hetherington 1963	29	+			+		+		+	+	+	+		+		
Blazer 1963	50	+		+	+					+			+			
Katz, et al. 1960	56	+		+		+							+			
Murstein 1961	20					+			-		+					
	48			+		+		+	-		+					
Murstein 1967a	99				+		+		+		+		+	+		
Saper 1965	24				+	+										
Meyer & Pepper 1977	66	Jackson Personality Research Form														
				+									+		-	
Schellenberg & Bee 1960	100	Coefficient of rank correlation of whole personality profile was significantly positive														
Bowerman & Day 1956		Four of fifteen traits significantly positive and none negative														

Table 2. Significant Cross-Trait Spouse Intercorrelations in Studies Using the EPPS

Study	Couples N	Correlated Traits: Wife	Husband	Sign	Reciprocal
Blazer 1963	50	Abasement	Nurturance	+	yes
		Nurturance	Abasement	+	
		Achievement	Exhibition	+	yes
		Exhibition	Achievement	+	
		Autonomy	Deference	-	yes
		Deference	Autonomy	-	
		Aggression	Deference	-	yes
		Deference	Aggression	-	
		Aggression	Autonomy	+	no
		Deference	Exhibition	-	no
		Dominance	Succorance	-	no
Katz, et al. 1960	56	21 pairs tested:	none as hypothesized		
Saper 1956	24	*Receptiveness	Assertiveness	-	yes
		Assertiveness	Receptiveness	-	
Meyer & Pepper 1977	66	Affiliation	Nurturance	+	yes
		Nurturance	Affiliation	+	
		Succorance	Dominance	+	no

*Receptiveness = Abasement + Affiliation + Deference + Succorance
Assertiveness = Aggression + Dominance + Achievement + Autonomy + Exhibition

reciprocal complementarity involving two newly-defined traits, receptiveness and assertiveness. These are linear combinations of several EPPS needs, and therefore somewhat difficult to interpret. The correlations found generally do not support Winch's theory of Type II Complementarity. They tend to show equality rather than differential power relationships, being either positive relationships between similar traits (such as abasement-nurturance, achievement-exhibition, aggression-autonomy, and nurturance-affiliation), or negative relationships between opposite traits (such as deference-autonomy, deference-aggression, or receptiveness-assertiveness).

Blazer (1963) points out, however, that many of these interspouse correlations are precisely those that are found to correlate within an individual person's scores; i.e., the traits are not orthogonal but correlate substantially, and overlap in meaning to a considerable extent. Thus, the correlation between affiliation in one spouse and nurturance in the other may merely be a result of the interspouse correlations on the individual traits of affiliation and of nurturance plus the correlation of affiliation and nurturance within each individual.

Other investigators have looked at interspouse similarity on measures of neuroticism or mental health variables between spouses. Burgess and Wallin (1954) reported significant similarity on 14 of the 42 items of the Thurstone

Neuroticism Inventory, but no evidence of dissimilarity. Hill (1973) found significant similarity on three scales of the MMPI, as well as twelve significant cross-trait correlations. Murstein used the MMPI in two separate studies with engaged couples. In the first (1967b) he found that the average same-trait correlation between spouses was positive for the happily married but negative for the unhappily married. He also found that staying together longer was related to spouse similarity on five of the scales. In Murstein's (1976) second study, positive interspouse correlations were found on four MMPI scales, while one scale, the masculinity/femininity scale, showed a negative correlation.

Other investigators have studied the similarity versus dissimilarity issue using a variety of trait measures. Kerchhoff and Davis (1962) took a longitudinal perspective on the actual selection process by studying couples at different stages of courtship (dating, going steady, engaged, recently married and married for some time). They found what they termed a series of "filtering factors" operating in marriage: In the first stages, similarity of background and values was more important than psychological compatibility, while in the advanced stages of courtship the opposite priorities held, presumably because most instances of value incompatibility had already been "filtered-out." Burke and Weir (1976) used the Fundamental Interpersonal Relations Orientation Inventory (FIRO-B) and found positive interspouse

correlations on four out of the six traits as well as for a combined measure of "total preference for interpersonal contact." Corsini (1956) found similarity of husband and wife overall personality (correlation of ranks of Q-sorts) to be significantly related to husband, wife, and couple measures of marital happiness. Murstein (1972) used trait ratings from extensive interviews, Rorshach, the Marriage TAT, the Marriage Value Inventory and a background questionnaire. He reported 27 statistically significant positive correlations between spouses' scores on the 87 variables versus a solo negative correlation.

Other investigators have compared couples who were stably married with those who were unsatisfied or divorced. Results from these studies further support the similarity hypothesis and are thus reviewed here, although the present study does not include any measure of marriage satisfaction. Hansen (1975) used the California Psychological Inventory, and found interspouse differences on seven of the scales to be related to marital dysfunction. Bentler and Newcomb (1978) compared the trait correlations of newlyweds who had subsequently divorced within four years to couples who were still married at four years. They found that divorced couples had had significantly fewer positive interspouse correlations on the traits of the Bentler Psychological Inventory when they first married, and that most of the traits that were correlated in the later-divorced couples were

different from the traits that were correlated in the still-married couples (there were no reliable negative trait correlations within either group). Pickford (1966) also compared trait similarity in groups with degrees of marital satisfaction. For the "happily" marrieds, all interspouse correlations on the Guilford-Zimmerman Temperment Survey were positive, and four attained statistical significance. For separated couples, eight of the ten traits were negatively correlated, one significantly so. In addition, two EPPS studies included a measure of marital happiness: Blazer (1963) found that marital happiness was negatively related to overall (summed) negative interspouse trait correlations; Meyer and Pepper (1977) found that the low marital satisfaction group had four significant negative interspouse correlations and no positive ones, compared to two positive and one negative interspouse correlations in the high marital satisfaction group. Thus, it seems that "successful" marriage involves similarity on particular traits, while the "unsuccessful" couples generally show negative correlations, or sometimes positive correlations on different traits.

The final group of studies reviewed here investigated the marriage relationship using the Sixteen Personality Factor Questionnaire (16PF), the instrument used in the present study. Barton (1976) employed a measure of overall personality profile similarity to distinguish among couples that were similar, random, or opposite in personality. The group

with overall similarity of personality traits scored significantly higher than the others on three marriage role factors. Three studies (Barton & Cattell, 1972; DeYoung & Fleischer, 1976; and Waters, 1975) have investigated spouse intercorrelations on the 16PF. The statistically significant results from these studies are given in Table 3 along with data on unstable marriages (couples seeking professional counseling) from Cattell and Nesselroade (1967). All 25 statistically significant correlations were positive among the stably married. Among the unstable marriages, four of the six significant correlations were negative. A test for significant differences in correlations between the stable and unstable marriages revealed five instances with the unstable group's correlation being more negative in all cases.

Two studies reported the matrix of cross-trait correlations (Cattell & Nesselroade, 1967; Waters, 1975), which may be considered examples of Winch's Type II Complementarity. The greatly higher than chance number of significant correlations in these matrices suggest the presence of some powerful laws at work which relate personality traits in the process of mate selection. Additional meaning is given to these results by two studies (Barton & Cattell, 1973; Barton et al., 1972) which related the 16PF traits to actual life data (such as frequency of arguments, doing activities together, or engaging in sexual relations) and to factor analytically derived dimensions of the Marriage Role

Table 3. Significant Same-Trait Spouse Intercorrelations in Studies Using the 16PF

Study	Couples N	Significant Interspouse Correlations (Sign Indicated)															
		A Warm-hearted, affective	B Intelligence	C Emotional stability	E Dominance	F Carefree sociability	G Superego conformity	H Venturesome, socially bold	I Tender-minded, sensitive	L Suspicious, projecting	M Imaginative, absent-minded	N Socially shrewd, ambitious	O Guilt-prone, worrysome	Q_1 Radical, challenging	Q_2 Self-sufficient, seclusive	Q_3 Controlled, compulsive	Q_4 Tense, driven
Barton & Cattell 1972	171	+	+		+	+	+		+	+	+		+	+	+	+	
DeYoung & Fleischer 1976	82	+	+		+	+	+				+			+	+	+	+
Waters 1975	35		+		+								+				
Dysfunctional Marriages																	
Cattell & Nesselroade 1967	37	-				-				-			+	+	-		
Waters 1975	35										+						

Questionnaire (such as Marriage Instability, Togetherness and Role Sharing, and Spouse Independency).

One frequently occurring but only occasionally noted finding in these studies was that the wife's personality traits appeared to be more important to a successful marriage than their husband's (Kind, 1975; Murstein, 1970, Veenstra, 1978). Murstein and Glaudin (1966) concluded that the woman's involvement in marriage typically exceeds that of their spouse. Burgess and Wallin (1953) and Corsini (1956) concluded, in earlier studies, that it is the woman and not the man, who makes a greater adjustment if the marriage is to succeed. This is consistent with contemporary sex roles; with males generally having a vocational life as a separate source of satisfaction in addition to the emotional investment of marriage, while for women marriage is both a vocational role as well as a focus of emotional commitment.

In conclusion, the evidence is strong that personality traits importantly influence mate selection. In particular, it appears that successful marriage is related both to same-trait similarity and cross-trait complementarity on specific traits, often different from those traits associated with unsuccessful marriages. Thus, this study proposes to investigate trait relationships between marital partners in a sample that is larger and more representative than in most previous studies. It will focus on same-trait

similarity/dissimilarity and the particular traits for which this occurs; as well as patterns of cross-trait relationships, and the relative importance of wives' and husbands' traits in these relationships.

Parent-Child Trait Relationships

The second part of this study will explore the relationships between parents' personalities and their children's personalities. Although we often hear or read how a son or daughter is "the very likeness of" her/his father or mother, or, again, "so different from" her/his parents "that one can scarcely believe that they belong to the same family," direct comparisons of parent and child personalities are almost absent in the literature.

At least since G. S. Hall's 1891 pioneer study, psychologists have been interested in systematic investigation of the effects of parent personality on their child's personality. However, most studies have employed single-dimensional measures of child behavior, such as aggression or dependency, and correlated it with a child-raising attitude questionnaire. Parental child-raising attitudes have, for instance, been found to be related to children's aggressiveness (Bottenberg, 1975), adjustment and self-esteem (Qadri & Kaleem, 1971), and leadership, conformity, anxiety, and aggression (Friedman, 1969). Walters and Stinnett (1971) summarized a decade of research in this area.

However, there are a number of problems with the meaning and validity of measures of parental child-rearing attitudes, stemming largely from the finding of substantial parental acquiescent response set in this area, faulty memory in self-evaluation, as well as a strong relationship with parental educational level (Becker & Krug, 1965; Robbins, 1963). In addition, child-rearing dimensions, such as "permissive," "neglecting," or "demanding" convey little interpretable meaning in terms of the basic personality traits of the parent. Nor are they comparable from study to study, since even the same variable may be defined and measured differently in diverse studies. There would seem to be some virtue, then, in looking directly at parents' personality traits, since their validity and reliability make them more meaningful and comparable across studies.

There are also substantial problems with the commonly used measures of childrens' behavior. Behavioral measures of general personality traits such as attachment, dependency, aggression or sociability, have been shown to have very small reliabilities, as well as showing poor correlations between the measures used by different investigators (Maccoby & Masters, 1970). Thus, there would appear to be advantages to using trait measures of the child's personality.

Other investigatiors have used a trait measure of the child's personality while still employing the parental measure of child-raising attitudes. These have concerned parental antecedents of such child traits as internal/external

control (Davis & Phares, 1969), authoritarianism (Ojha, 1977), self-esteem (Sears, 1970), and creativity (Siegelman, 1973). A few investigators have taken a more comprehensive, multivariate approach to the child's personality and studied parental child-raising antecedents of children's MMPI scores (Armentrout, 1975), or High-School Personality Questionnaire (HSPQ) and Early School Personality Questionnaire (ESPQ) personality scores (Barton, Dielman & Cattell, 1977; and Dielman, Cattell & Rhodes, 1972).

Other studies have used trait measures for both parents and children, however, most of these have looked at only solo traits. Towell (1977), for instance, reviewed studies of the relationship between anxiety levels of parents and children. Bayard-de-Volo (1977) found relationships between children's creativity and parents' authoritarianism (California F Scale). Hurley (1967) found that parental malevolence was negatively related to childrens' intelligence. Dien (1974) and Braginsky (1970) found that children's and parents' level of Machiavellianism were related, while Lesser and Steininger (1975) found a similar relationship using the Rokeach Dogmatism Scale. However, Gecas, Calonico, and Thomas (1974) found that children's level of self-concept was not so strongly related to parents' level of self-concept as it was to parents' evaluation of the child. Thus, it was not self-concept, but other parental traits that were related to the child's trait of self-concept. This finding

emphasizes the need for multivariate studies looking at a more complete set of personality traits in parent and child, rather than the usual design of studying only one trait at a time, outside the context of the whole personality.

Such studies are surprisingly rare. A review of the last ten years of literature revealed only two. Troll, Neugarten, and Kraines (1969) measured eleven personality traits in parents and children, using a questionnaire of their own design. Significant parent/child correlations were found on different traits for different parent/child dyads: For instance, both mother/son and father/son dyads were significantly positively correlated on "cognitive complexity" while the mother/daughter and father/daughter dyads were not, implying that parents or society come to emphasize and influence cognitive development in boys but not in girls. "Intraception," on the other hand, was significantly positively correlated in both the mother/daughter and father/daughter dyads, but not in the mother/son or father/son dyads. Looking instead at the differential effects of the two parents, we find that the mother/daughter and mother/son dyads (but neither the father/daughter nor the father/son dyads) were significantly positively correlated on "spontaneity," implying that this is a trait that is fostered by the mother's model. Looking at parent/child cross-sex effects, it was found that only for the mother/son dyad was "passivity/dependency" significantly positively correlated, suggesting

that this particular trait is uniquely important to this dyad. Looking at same-sex dyads, mother/daughter and father/son were the only dyads found significantly positively correlated on "critical of others," and only the father/son dyad was significantly positively correlated on "indecisiveness," perhaps implying sex role models in these areas. These investigators concluded that although no one of the four dyads showed significantly stronger influence overall, different traits were important within each dyad.

The other multivariate study (Grotevant, 1976) investigated family similarities on the Strong-Campbell Interest Inventory dimensions of realistic, investigative, artistic, social, enterprising and conventional. Although these dimensions are often used with reference to vocational interests, they also as more general personality dimensions. Separation of the results into the four parent/child dyads again revealed that different traits were significantly correlated in different dyads. Only same-sex dyads (mother/daughter and father/son) were significantly correlated (positively) on conventional (preferring highly order activities). Only the father/son dyad was significantly correlated (positively) on enterprising (enjoys leading, dominating, selling), and on social (on the latter dimension the mother/son dyad correlated inversely to a substantial but not quite significant degree). Only the mother/daughter and mother/son dyads were significantly correlated (positively) on

realistic (practical, rugged) and investigative (enjoy thinking problems through, have strong scientific orientation). Overall, the same-sex dyads had significantly higher correlations, as might be expected on these more role-related dimensions.

Both of these multivariate studies inexplicably omitted the more valuable off-diagonal (cross-trait) correlations between parent and child while citing only the same-trait correlations.

Another study looked at how parent/son similarities on the MMPI were related to aggression in the son (Butcher, 1966). Results showed that sons who least resembled their parents on overall MMPI profile fell at both extremes on aggression, while sons who were more similar to their parents in personality were in the moderate range on aggression.

One interesting trend throughout the literature is for parent/child personality relationships to occur differentially, in only the opposite-sex or same-sex parent/child dyads. For instance, Gecas et al. (1974) found that the opposite-sex parent was most important in determining the child's level of self-esteem; Hoffman (1963) found that children's tendencies toward pro-social behaviors was most strongly affected by behavior of the opposite-sex parent, and Siegelman (1970) found that the level of adjustment of daughters was most strongly associated with the personality of the father. Biller and Weiss (1970) have reviewed the

literature showing that fathers' behavior and personality is more effective than mothers' on the personality of the daughter. Some traits have also been found to be more affected by the same-sex parent: Ojha (1977) found that daughters' authoritarianism (California F Scale) was more affected by mother behaviors, while sons' authoritarianism was more influenced by father behaviors; Boshier and Thom (1973) similarly found that only mother/daughter and father/son dyads correlated significantly on the California F Scale.

Feshbach (1978) found not only that daughters' empathy was more affected by mothers' behavior and sons' by fathers' behavior, but that the particular parental antecedents that were related to empathy were different for girls than boys. Similarly, Manley (1977) found that achievement orientation in boys was related to high maternal warmth, while achievement orientation in girls was related to only moderate maternal warmth or even slight hostility. Towell's (1977) review of the literature also noted that maternal anxiety was positively related to anxiety level in first-born sons, but negatively related to all daughters' anxiety levels.

Another consistent trend in the literature is for children's identification, and therefore personality interrelationships, to be strongest with parents who possess the traits of warmth or dominance. Many studies (Bandura & Huston, 1961; Hetherington & Frank, 1967; Mussen & Distler, 1960; Mussen & Rutherford, 1963; and, Sears, 1953) have

found that warmth, particularly in the same-sex parent, is important to identification and personality similarity in both boys and girls. Others (Bandura, Ross & Ross, 1963; Hetherington, 1965; Hetherington & Frank, 1967; and, Mussen & Distler, 1960) have found dominance or power to be important in a child's imitation or similarity of personality to parents or other adults.

Finally, while some studies of similarity in personality between parent and child have focused on the genetic potential for this similarity (Hill & Hill, 1973), the present study does not presume to throw light on the heredity/environment issues. Nevertheless, biological components in parent/child similarities should not be dismissed as unimportant.

The present study further explores interrelationships between parent and child personality traits. More particularly, it will investigate which domains of personality are important in the four separate parent/child dyads, as well as the special effects of parental warmth and dominance in influencing trait relationships.

METHOD

Subjects and Procedure: Subjects included all members of 127 families from the Chicago Metropolitan area. All 393 children (162 females, and 231 males) were natural siblings and at least 5 years of age. Both parents were the natural parents and living in the home.

The subjects were previously used in an extensive study (Ruess & Lis, 1972) of families who had one child with a cleft lip or palate that had been surgically corrected in the first two years of life (80 experimental families and 47 control families). These subjects were selected for the present study because extensive data were available and because all subjects appeared normal as indicated by the finding that the children born with cleft abnormalities did not differ from their siblings nor from the control children on any of the several experimental measures used, including: Wechsler Intelligence Scales (Wechsler, 1949), Gray Oral Reading Test (Gray, 1963), Gates-MacGinitie Reading Comprehension Tests (Gates & MacGinitie, 1965), Witkin Embedded Figures Test (Witkin, et al., 1971), Bender-Gestalt Visual-Motor Test (Bender, 1938), Human Figure Drawings (Harris, 1963), Wide Range Achievement Test-Arithmetic (Jastak &

Jastak, 1965), Raven Progressive Matrices (Raven, 1960), Leary Interpersonal Check List--filled out by every member of the family for each member of the family (Leary, 1956)--and the age-appropriate form of the Sixteen Personality Factor Questionnaire.

The 80 experimental families were from the files of the Northwestern University Cleft Lip and Palate Institute, while the services of the University of Illinois Survey Research Laboratory were utilized to locate a comparable group of control families in the Chicago area. All families were Caucasion. Age of family members, annual income, education and number of children are given for the two groups in Table 4.

Testing took place at the University of Illinois Hospital. All families were reimbursed for out-of-pocket expenses, such as transportation and lunches. Data were obtained by individual administration, and the various examinations were scheduled in a staggered time manner to minimize fatigue, boredom, and other factors that often affect the reliability and validity of the type of data obtained in this study. All subjects who had a reading comprehension grade level score below the lower range of the questionnaire were administered it verbally with a simultaneous visual presentation.

Instruments: The Sixteen Personality Factor Questionnaire (16PF) is a factor-analytically derived, self-report

Table 4. Demographic Characteristics of the Sample Populations

Variable	Fathers				Mothers			
	Experimental		Control		Experimental		Control	
	Mn.	S.D.	Mn.	S.D.	Mn.	S.D.	Mn.	S.D.
1. Annual income[a] (thous. dollars)	12.8	8.8	14.1	4.5	-	-	-	-
2. Age (years)	40.3	6.6	38.6	6.6	37.2	6.3	36.6	5.8
3. Education[b] (yrs. completed)	12.5	3.1	13.7	2.4	12.0	2.2	12.9	1.8
4. Number children	-	-	-	-	4.3	2.1	4.1	2.0

[a]Includes total annual income contributed by both parents where both were employed. Seven families refused to divulge income on the grounds of invasion of privacy.

[b]Includes only formal academic or professional education, e.g., high school, college, graduate-professional school (law, etc.) and not business training in a non-academic institution or trade school training beyond high school, etc.

technique, which measures sixteen primary personality factors. The 16PF was designed to be both an objective and comprehensive measure of personality, being based on thirty years of research directed at locating all the unitary, independent, and pragmatically significant "source traits" present in the personality sphere covered by behavioral ratings and questionnaires. The structure of the source traits in the 16PF has been repeatedly replicated in basic personality research (Cattell, et al., 1970), which exceeds that on any other set of factors in the literature. The traits measured have been demonstrated, recognized, and measured also in parallel tests available at other ages: The Early School Personality Questionnaire (ESPQ) covers the 6 to 8 year old age range; the Children's Personality Questionnaire (CPQ) is for ages 8 to 12 years; the Jr.-Sr. High School Personality Questionnaire (HSPQ) covers the 12 to 18 year old age range; and the 16PF is for persons 18 or more years old. A total of factors are present in these four questionnaires, but due to developmental differences in personality structure at different ages, all of the same factors are not present in each questionnaire (see Appendix A). Ten primary factors are common to all of the questionnaires. Descriptions of all factors are given in Appendix B.

The test also measures the set of broader second-order or second-stratum factors that have been experimentally found. Personality structure can be viewed at different

levels. Just as the primary source traits are a result of a factor analysis to find the functional unities among the vast array of individual behaviors, so the primary traits, being correlated, can be factor analyzed to find a smaller number of second-order factors, which may be viewed as broader influences or organizers among the primaries that account for the primaries being slightly but definitely correlated. The four largest second-order factors, anxiety, extraversion, independence, and cortertia, were computed for each subject from the equations given in the respective questionnaire handbooks. Descriptions of these factors are also given in Appendix B.

In addition to primary and secondary factor scores, other relevant variables were created by the experimenter from previous research findings with the 16PF. These measures are linear combinations of the original factors which had been found to be significantly related to particular variables. The method of derivation for these equations, as well as the studies contributing to each variable, are given in Appendix C. The measures are described briefly below.

Because of the interest in parental factors associated with neuroticism in children, as well as in the effects of parental neuroticism on children's personalities, Neuroticism scores were calculated for each subject from the handbook for that particular age range and from The Meaning and Measurement of Neuroticism and Anxiety (Cattell &

Scheier, 1961), as follows:

Neuroticism:

$$\text{Children} = -A\ -C\ +.5D\ -E\ -F\ -.5G\ -H\ +I\ +J\ +0\ +.5Q_4 + \text{Anxiety}$$

$$\text{Parents} = -C\ -E\ -F\ -.25G\ -.5H\ +I\ +L\ +.5M\ +0\ -.25Q_1\ +.5Q_2\ -.5Q_3\ +Q_4 + \text{Anxiety}$$

Because of the interest in parental factors fostering creativity in children, as well as in the effects of parental creativity on children's personalities, an equation was developed for Creativity in adults and in children, and is given below. Also given is an equation for Self-Actualization, which was developed for adults only since studies with the 16PF tests on this particular variable were lacking with children.

Creativity:

$$\text{Children} = +A\ +C\ -D\ +.5F\ +H\ +I\ -.5J\ -0\ -Q_4$$

$$\text{Parents} = +C\ +E\ +H\ +I\ -.5L\ +.5M\ -.5Q\ +Q_1\ +Q_2\ -.5Q_4$$

Self-Actualization:

$$\text{Parents} = +A\ +C\ +E\ -.5G\ +H\ -L\ +.5M\ -.5N\ -0\ +Q_1\ +.5Q_2\ -Q_4$$

A variable designated Poor Parenting was derived (for parents only) from studies of child-abusing parents as well as parents of children with acting-out, conduct, and adjustment problems. The equation is as follows:

$$\text{Poor Parenting} = -C\ -.5E\ -F\ -.5H\ +L\ +.5M\ +0\ +.5Q_1\ +Q_2\ -Q_3\ -Q_4 + \text{Anxiety}$$

The final variable, Interpersonal Facilitation, was derived for parents only, from studies of interpersonal dimensions such as empathy, unconditional positive regard, trust, accurate interpersonal perception, egalitarian treatment of people, and helping behaviors. The equation is as follows:

$$\text{Interpersonal Facilitation} = +A +C +H -L +.5M -.5N -.50 +5Q_1 +.5Q_2 +.5Q_3$$

Analysis of Results: The statistical procedure for the marital investigation included, first, a Pearson product-moment correlation of each of the wife's personality traits with each of the corresponding husband's personality traits. Then, in order to determine whether the off-diagonal (cross-trait) correlations in this matrix were simply a result of the strong diagonal (same-trait) correlations, partial correlations were computed controlling for the diagonal elements. For instance, the correlation between wife's factor E and husband's factor M was calculated again, controlling for wife's M, and again, controlling for husband's E. Finally, difference scores were calculated on each factor by subtracting the wife's score from the husband's score, and these difference scores were factor analyzed.

Statistical analysis with the parent/child data involved Pearson product-moment correlation of each child trait with each parent trait within the four dyads mother/daughter, mother/son, father/daughter, father/son. These

parent/child trait intercorrelations were then recalculated for each of the four dyads for various subgroups: First, using only the eldest child in each family, and again using only the youngest child in each family. In addition, because of Block's (1971) finding that often substantial change occurs in personality between the childhood years and the adolescent years, the intercorrelations were recalculated for the four dyads using only those children less than 12 years of age (13 years for the boys), and again for those children above 13 years of age (above 14 for the boys). Finally, these parent/child intercorrelations were again calculated for each of the four dyads using only parents who were above the norm on warmth, below the norm on warmth, above the norm on dominance, and below the norm on dominance. These groups were formed by removing the middle 20% of the sample on each factor.

RESULTS AND DISCUSSION

Husband/Wife Data

Table 5 gives the intercorrelations of wives' and husbands' traits. Looking first at the diagonal entries, we see that husbands and wives showed no same-trait correlations that were reliably negative, while five positive same-trait correlations surpassed the .05 level of significance and another was significant at the .10 level. This supports the similarity theory of marital choice and refutes theories of complementarity. The traits on which husband and wife showed similarity included achieved intelligence (B), Independence, dominance (E), imaginatively absorbed in inner abstractions (M), Extraversion, and carefree, impulsive sociability (F). Here and throughout this text, second-order factors of the 16PF are indicated by capitalization and are directly followed by any of the first-order traits which go into their make-up, that have been found to be significant--here, dominance and imaginativeness are listed directly after Independence, to which they are major contributors, just as carefree impulsivity is a major contributor to Extraversion. The reader is referred to Appendix B which gives the composition of the second-order factors, and gives the letter names and further explanation of the

Table 5. Spouse Trait Intercorrelations on the 16PF (N=127)

		WIVES																		
		A	B	C	E	F	G	H	I	L	M	N	O	Q_1	Q_2	Q_3	Q_4	Ind[a]	Exv[b]	Anx[c]	Cor[d]
HUSBANDS	A	.08	-.06	.03	.13	.07	.03	.09	-.04	.13	.11	.09	.00	-.13	.04	-.04	.00	.06	.09	.01	.15*
	B	-.10	.21**	.03	-.08	-.04	.05	.16*	.14	-.04	-.01	.12	-.01	.21**	.11	.06	-.04	.02	-.08	-.05	-.05
	C	-.02	.08	-.00	-.08	.19**	.07	.04	-.11	-.09	-.10	.13	-.00	.12	-.06	.17*	.05	-.10	.09	.02	.04
	E	.01	.17*	.11	.27***	.15*	-.01	.13	-.13	.11	.01	.10	-.02	.16*	.06	-.06	.08	.19**	.11	.00	.22**
	F	.00	-.03	-.01	.19**	.32****	-.10	.17*	-.25***	.11	-.06	.06	.03	.07	-.09	-.20**	.03	.06	.22**	.04	.30***
	G	-.09	.09	.06	-.17*	-.10	-.03	-.14	.07	-.09	-.14	.05	.05	-.10	.15*	.10	.06	-.17*	-.13	.05	-.14
	H	-.05	.01	.05	.09	.12	.05	.14	-.09	.05	.04	.11	.03	.04	-.01	.09	-.02	.04	.10	.00	.15*
	I	-.20**	-.01	.04	-.06	-.18**	.01	.05	.06	-.04	.11	-.06	-.04	-.04	-.06	.01	-.17*	.00	-.11	-.10	-.06
	L	-.05	-.09	.05	.27***	-.03	-.03	.03	.04	.08	.08	-.05	.05	-.08	.10	-.19**	.02	.18**	-.02	.01	.13
	M	-.04	.14	-.01	.12	.05	-.13	.03	.05	.10	.25***	-.01	-.08	.12	-.03	-.06	-.12	.23***	.00	-.09	.02
	N	.20**	.05	-.06	.04	.00	.07	.07	-.03	-.04	-.05	.06	.02	-.03	.02	-.01	.13	-.02	.11	.07	-.00
	O	.06	-.16*	.05	-.09	-.10	-.02	.02	.15*	-.10	.03	-.13	.03	-.19**	-.04	-.05	-.11	-.09	-.04	-.07	-.13
	Q_1	-.03	.19**	-.04	.02	.00	-.07	.02	.01	-.02	.12	.09	-.07	.14	.16*	.02	.01	.12	-.06	-.04	-.05
	Q_2	.00	.07	-.18**	.02	-.15*	-.13	-.14	.05	.00	.07	-.19**	.09	.02	.03	-.14	.15*	.11	-.08	.14	-.11
	Q_3	-.07	-.19**	.04	-.05	.06	.11	-.02	.06	-.08	-.02	.08	.04	.09	.05	.13	.08	-.02	.03	.04	-.05
	Q_4	-.05	-.03	-.09	.01	-.11	-.04	-.11	.03	.06	.00	-.02	.06	-.09	-.03	-.13	.03	-.01	.10	.07	-.02
	Ind[a]	-.05	.18**	.08	.36****	.16*	-.07	.15*	-.10	.18**	.15*	.08	-.04	.22**	.04	-.10	.02	.33****	.10	-.03	.26***
	Exv[b]	-.05	.01	.08	.17*	.23***	-.03	.16*	-.19**	.11	.00	.13	.01	.07	-.02	-.04	-.00	.08	.15*	-.01	.26***
	Anx[c]	-.01	-.09	-.03	.01	-.15*	-.05	-.07	.08	.03	.02	-.11	.05	-.16*	.00	-.16*	-.03	-.01	.10	.01	-.05
	Cor[d]	-.02	.16*	-.06	.04	.19**	-.10	-.04	-.16*	.04	-.11	-.02	.04	.27***	-.06	-.03	.08	.05	.06	.06	.09

[a] Independence
[b] Extraversion
[c] Anxiety
[d] Cortertia

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

primary factors.

Looking at the results in the light of the earlier findings discussed in the introduction, we find some similarities with the EPPS results (Table 1): Factors E and Independence are known (Cattell et al., 1970) to correlate positively with needs of aggression and autonomy and negatively with deference, abasement and nurturance, while factor F correlates positively with needs of affiliation and change. These are the needs which were found to be positively correlated among spouses in two or more studies (Table 1). Turning to previous studies of marital similarity/complementarity using the 16PF (Table 3), we can see that each of the primary traits that showed significant similarity in the present study (B, E, F, and M) had also been found to be significant in at least three previous studies. In the case of factor F (one of the strongest similarities found here), dissimilarity on this factor had been found to be related to marital discord.

In order to be sure that the significant, off-diagonal, correlations were not merely the result of the diagonal correlations (combined with each individual's intra-personality trait correlations), partial correlations were computed for all the off-diagonal correlations controlling for the diagonal correlations. The results showed that only three of the off-diagonal correlations decreased below significance ($p < .05$): Wives' B with husbands' Q_1, wives' E with

husbands' F, and wives' F with husbands' C.

Table 6 provides evidence of which traits were notably involved in the cross-spousal correlations, as it identifies how many significant correlations with spouses' personality occurred for each factor. Here we note that the factors which were significantly positively correlated between spouses (B, E, F, M, Independence, and Extraversion) were also the most generally salient in all of the husband/wife personality intercorrelations. From this we might conclude that husband/wife similarity on these factors was of central importance in their relationship. Additionally, we note that the second-order factor of Cortertia (cognitive versus emotional orientation) was also of great importance among the factors for both spouses, but especially for wives, while Anxiety and its primary factors (C, H, O, and Q_4) were of least importance for both spouses.

These data suggest that peoples' Anxiety or general adjustment level was not very important in marital choice. The factors which did prove to be of importance were those concerned with aspects of interpersonal functioning such as dominance/submission, Dependence/Independence, and Extraversion/Intraversion. In terms of these factors, people consistently chose partners who were similar to themselves rather than complementary.

Close examination of the off-diagonal correlations shows that on all factors of Independence and some factors

Table 6. Number of Significant Intercorrelations Found on Each Trait of Husbands' and Wives'

Number of Significant Intercorrelations Found	Wives	Husbands
6		F, Independence
5	F	
4	B, E, Q_1, Independence, Cortertia	
3		E, L, Extraversion
2	A, I, Q_3	B, I, M, Q_2, Cortertia
1	C, L, M, N, Extraversion	C, N, O, Q_1, Q_3
0	G, H, O, Q_2, Q_4, Anxiety	A, G, H, Q_4, Anxiety

of Extraversion, both spouses chose partners with other traits that were generally similar. The second-order factor Independence is made up of several primary traits that generally correlate or hang together in individuals' personalities: E (dominance, aggression), L (projecting of hostility, dogmative, suspicious, irritable), Q_1 (challenging, critical, radical--intellectualized aggression), and M (imaginative, absorbed in abstract ideas, unconventional, fanciful). These traits, which correlate substantially with the EPPS needs of aggression, autonomy and dominance, portray a very extrapunitive, self-centered type of style.

These results suggest that spouses high on Independence or any of the primary traits may have chosen partners who were high on several other traits of Independence, and sometimes high on the same trait. Husbands and wives who were high on Independence both chose partners who were high on Independence, dominance (E), rigid suspiciousness (L), challenging of conventions (Q_1) and Creativity; while husbands also chose wives who were intelligent (B) and tough-minded (Cortertia). Wives and husbands high on dominance (E) both chose spouses who were high on Independence, dominance (E), and rigid suspiciousness (L), as well as Extraversion and carefree sociability (F). Husband and wives who were high on challenging conventions, radical (Q_1) both tended to have spouses who were intelligent (B), Independent, and showed a (non-significant) trend toward being high on abstractly imaginative (M) and challenging (Q_1); in addition these wives chose husbands who were confident (O), emotionally tough (Cortertia) and who tended toward emotional stability (C) and low Anxiety. Wives and husbands who were high on abstractly imaginative and self-absorbed (M) both chose spouses who were also imaginative and abstract (M), Independent and had a tendency toward being challenging (Q_1) and disregarding of obligations and rules (G-). Finally, husbands and wives who were high on rigid suspiciousness (L) both chose spouses who were Independent and dominant (E). Thus for this group of factors that are directly related to

power and control in interpersonal relations, marital partners consistently chose spouses who were similarly extrapunitive or intropunitive. Presumably then they would not only function similarly in the world, but in relation to each other would have a power balance, rather than having one intropunitive person constantly taking hostility and direction from an extrapunitive partner.

In a similar way, at least some factors of Extraversion (definitely a trait of interpersonal functioning) husbands and wives chose spouses who were similar. Extraversion in both husbands and wives was related to carefree surgency (F) and a trend toward Extraversion, social shrewdness and attunedness (N), and dominance (E), as well as non-Extraversion-related traits of emotional toughness and realism (I-) and non-Neuroticism in spouses. Similarly, both wives and husbands who were impulsively sociable, carefree (F--a strong contributor to Extraversion) tended to have spouses who were similarly sociable (F) and Extraverted, as well as unemotional, tough-minded and realistic (Cortertia and I-). In addition, wives who were high on factor F showed a trend toward choosing husbands who were emotionally stable (C), self-confident and unworried (O), non-Anxious, non-Neurotic, and high on Interpersonal Facilitation and Self-Actualization; while these husbands chose wives who were poorly controlled and undisciplined (Q_3), lax and disregarding of rules and obligations (C-), and suspicious of others' motives (L).

Factor H (socially bold, adventuresome), a strong contributor to Extraversion, showed no significant correlations with other factors for either spouse, but there was a non-significant trend for both partners to choose someone who was similarly bold and adventuresome (H), and carefree and surgent (F), and Extraverted. Husbands and wives high on the final component of Extraversion, factor Q_2- (group dependent, socially oriented), showed no similarities between their choices of partners, but husbands tended to choose wives who were socially bold and surgent (H, F,), socially shrewd and aware (N), as well as emotionally stable (C), conscientious and moralistic (G), self-controlled (Q_3), relaxed (Q_4-), non-Anxious and non-Neurotic. Thus people who were boldly Extraverted tended to choose partners who were also Extraverted, as well as somewhat unemotional and tough-minded (Cortertia), and non-Anxious and non-Neurotic (both traits which correlate somewhat with Extraversion for people in general).

Therefore it seems that for traits of interpersonal functioning such as dominance/submission, Dependence/Independence, and Extraversion/Introversion, spouses tended to be similar; not necessarily high on the same trait, but on traits that would generally correlate with (go with) that trait within any individual's personality. This is similar to the results with the EPPS given in Table 2. Needs of an interpersonal nature that are somewhat similar and generally

positively correlated within the individual personality were positively related between married individuals (aggression/autonomy, achievement/exhibition, affiliation/nurturance); while interpersonal traits that are negatively related within individuals were negatively correlated between spouses (aggression/deference, autonomy/deference, dominance/succorance).

A different situation obtained, however, for the two other major groups of factors. Cortertia is a second-order trait related more to orientation to feelings or to functioning in the world (dry, cognitive, tough-minded versus warm, emotional, feeling) rather than primarily of interpersonal functioning. The two major factors of Cortertia, A and I, both showed unusual, if not opposite, traits in partners. Husbands and wives high on factor A (warmhearted, involved versus detached, objective) tended to have partners who were opposite but on the other trait in Cortertia, factor I: tough-minded, unsentimental, realistic. This suggests complementarity, where persons who approached the world in a more emotional, feeling way chose partners who had a more detached, realistic approach, and vice versa. Somewhat similarly, wives and husbands who were high on factor I (emotionally sensitive, imaginative, indulgent, socially dependent) both tended to have partners who were Introverted, detached, and objective (A-, F-).

One other interesting (but non-significant) trend here was that wives higher on both factors I (emotionally sensitive, artistic) and M (imaginatively self-absorbed) tended to chose partners who were higher on Neuroticism and various of its contributing factors; while husbands high on both I and M tended to have wives who were non-Anxious and Creative. One hypothesis about this was derived from examination of the parent/child data: Both boys and girls high on these traits showed linkages with Neuroticism in the opposite sex parent. For boys, for whom emotional sensitivity is contrary to sex roles, and for whom the opposite sex parent was constantly present and most involved in raising the child, this phenomenon was very marked. Perhaps wives high on factor I and M, who had had a smaller dose of this Neuroticism, tended to choose husbands who were like their fathers in this way (i.e. Neurotic), while husbands high on these factors, who tended to have been raised by very Neurotic mothers, chose wives who were the opposite: non-Anxious and calm.

There was no similarity between Anxious husbands' and wives' partner choices, and, as mentioned earlier, the Anxiety factors were found to be least importantly linked between marital partners. There was some similarity between the marital partners of husbands high on the different Anxiety factors (C-, O+, Q_3-, and Q_4+): these wives tended to be inhibited, insecure, and conforming (F-, Q_1-), as well as

poorly controlled, excitable, immature and attention-seeking (Q_3-, G-, I+). For wives the correlations of the Anxiety factors did not hold together so well. Wives high on emotional instability, guilt-proneness, and tension (C-, O+, Q_4+) tended to have husbands who were withdrawn, seclusive, and socially unaware (Q_2+, N-), as well as emotionally sensitive, anxiously attention-seeking, and insecure (I+, E-). Wives who were high on the fourth factor of Anxiety, Q_3- (poorly-controlled, impulsive, and having a low self-image), tended to have husbands who were themselves anxiously unstable, impulsive, jealous and suspicious (C-, F+, Q_3- and L+). Thus, for the Anxiety factors, which were the least importantly linked traits between married couples, there was little similarity between spouses, except for some general tendency to be withdrawn and jealously attention-seeking.

Finally, both husbands and wives high on achieved intelligence (B) tended to have partners who were also intelligent (B+) as well as intellectually challenging and radical (Q_1+).

Parent/Child Data

The results of the parent/child data are given in Technical Report HC79-1 of the Center for Evaluation and Assessment. The intercorrelations of parent/child traits for each of the four dyads (mother/son, mother/daughter, father/son, father/daughter), respectively, are given for each of the following nine groups: the total sample--Tables

1, 2, 3, and 4; those children in the childhood age-range (boys less than 13 years of age, girls less than 12 years of age)--Tables 5, 6, 7, and 8; those children in the adolescent age-range (boys greater than 14 years of age, girls greater than 13 years of age)--Tables 9, 10, 11, and 12; the eldest child in each family--Tables 13, 14, 15, and 16; the youngest child in each family--Tables 17, 18, 19, and 20; parents who were warmer (sten score greater than 6 on factor A)--Tables 21, 22, 23, and 24; parents who were colder (sten score less than 5 on factor A)--Tables 25, 26, 27, and 28; parents who were more dominant (sten score greater than 6 on factor E)--Tables 29, 30, 31, and 32; parents who were more submissive (sten score less than 5 on factor E)--Tables 33, 34, 35, and 36.

Basic Parent/Child Patterns

Because of the great quantity of results, summary tables were created. Figure 1 identifies those personality factors of daughters that had the greatest number of linkages, first with mothers' traits, then with fathers' traits, for the total sample and for each of the eight subgroups. Figure 2 summarizes the same results for sons.

For daughters, data, factor B (achieved intelligence), had the most linkages to parents' traits of any primary factor. This was highly linked to traits of both parents, particularly in the childhood age range and for dominant or warm parents. Factors E (dominance) in daughters was

Group	N of Subjects	Daughters' Traits: A	B	C	D	E	F	G	H	I	J	N	O	Q_2	Q_3	Q_4	Independence	Extraversion	Anxiety	Cortertia	Neuroticism	Creativity
In Relation to Mothers																						
Total sample	162	(X)	X			X	X								X		(X)			X		
Childhood	114		X				X			(X)								(X)		X		
Adolescent	41		(X)		X	X	X				(X)	X			(X)		X	X	(X)	(X)		
Eldest	41						(X)							(X)			(X)	X				
Youngest	22			(X)						(X)			(X)				(X)					
Warm parent	84			(X)		X									X		(X)					
Cold parent	37																(X)	X		X		
Dominant parent	45	(X)	X					(X)						(X)							(X)	
Submissive parent	85		(X)			(X)	(X)			(X)							X	(X)	X	X		
In Relation to Fathers																						
Total sample	162		X													(X)	(X)	X		(X)		
Childhood	114	(X)	X			(X)											(X)			(X)		
Adolescent	41		(X)															(X)	(X)			
Eldest	41	(X)		X	X	X		(X)	(X)			X	X		X	X	X		(X)		(X)	X
Youngest	22		(X)			(X)		(X)			(X)						(X)					
Warm parent	68	X	X		X		(X)													(X)	(X)	
Cold parent	72					X											X		(X)			
Dominant parent	68		X											(X)			(X)			(X)		
Submissive parent	70	(X)	(X)	(X)				(X)								X				(X)		

Figure 1. Highly-Correlated Daughters' Traits[a]

[a] X = eight or more significant correlations
(X) = four to seven significant correlations

Group	N of Subjects	Sons' Traits: A	B	C	D	E	F	G	H	I	J	N	O	Q_2	Q_3	Q_4	Independence	Extraversion	Anxiety	Cortertia	Neuroticism	Creativity
In Relation to Mothers																						
Total sample	231		X	(X)		X	(X)							(X)				(X)			X	
Childhood	163		X	(X)		X							(X)		(X)			X				
Adolescent	50			(X)		X				X				(X)						(X)	(X)	
Eldest	57	(X)	(X)	(X)		(X)	X					(X)									X	
Youngest	37							(X)					(X)				(X)					
Warm parent	98					X				X		(X)			(X)					X		
Cold parent	70	X	(X)				X				(X)					(X)		(X)			(X)	(X)
Dominant parent	63	X	X			X				X		(X)				(X)				X		X
Submissive parent	134	X	X		X	(X)			(X)					(X)	X			(X)			X	
In Relation to Fathers																						
Total sample	231	X	X			(X)		X	X	(X)	X		X	(X)		(X)	(X)			(X)	X	X
Childhood	163	X	X		(X)	(X)		X	X	(X)	X		X			(X)	X		(X)		X	X
Adolescent	50					X				X			(X)							X		
Eldest	57	X						X	X	X			(X)								X	
Youngest	37										(X)		X				X					
Warm parent	93				X	X		X	X		X	X	X			X	X		X		X	X
Cold parent	106	(X)	X			X										(X)				(X)		
Dominant parent	98	X	(X)					X					X	(X)		(X)	(X)				X	X
Submissive parent	98	(X)	X					(X)			X						(X)					(X)

Figure 2. Highly-Correlated Sons' Traits[a]

[a] X = eight or more significant correlations
(X) = four to seven significant correlations

strongly related to mothers' traits, having the most linkages to mothers in adolescence, but was also fairly strongly linked to fathers' traits, especially in eldest daughters. Factor E is a strong contributor to the second-order factor of Independence (aggressive, impulsive, adventuresome, prefers to work alone, withdrawn, challenging), which for girls was also a strongly linked trait with both parents, and showed a similar pattern of being most strongly linked in adolescence (with mothers' traits) and for eldest daughters (with fathers). Thus, it appears that girls' Independence is importantly linked to their parents' traits (more so than for boys), although, as we shall see later, it was often the low, Dependent, end of this scale that for girls was associated with more healthy parent traits.

The most highly linked second-order trait for girls was Extraversion, which was most strongly linked with mothers' traits, particularly in adolescence and for eldest girls. Factor F (carefree, impulsive, talkative), which strongly contributes to Extraversion, was also one of the most strongly correlated traits for girls in relation to their mothers. This importance of Extraversion for girls only (and especially in relationship to their mothers) is consistent with the cultural sex role for females of interpersonal and sociable realms being important.

The only other strongly linked trait for girls was that of Cortertia (unemotional, dry, alert, tough, cognitive),

which was linked to both parents' traits, but particularly mothers'. As will be shown later, it was consistently the lower, emotional, end of this scale which for girls was consistently linked with more healthy traits in both parents.

Overall, boys had more linkages with parents' traits than did girls, but, more particularly, boys had about twice as many correlations with fathers' traits than they had with mothers' traits or than girls had with fathers or mothers. The father/son relationship appears the most salient of the four parent-child dyads.

Figure 2 identifies the boys' traits that correlated most strongly with those of their parents'. Here again, factor B (achieved intelligence) was strongly linked to both parents' traits, particulary in the childhood age range. Factor E (dominance) is also highly linked with both parents' traits, but, interestingly enough for a factor on which males are consistently higher than females, it had many more linkages with mothers' traits, and, as we shall see later, with generally healthy traits. Other than these two factors there was very little overlap of sons' traits that were linked with mothers' traits and sons' traits that were linked with fathers, and so they will be considered separately.

Looking first at the father/son data, sons' most strongly-linked second-order traits were Neuroticism and Creativity (the near opposite of Neuroticism). Apparently

boys' mental health relates strongly to their fathers' personalities. The second-order factor Independence was also strongly linked to fathers' traits, and, as we shall see, this withdrawn, aggressive trait in boys had very similar father correlates to those of boys' Neuroticism. The strongly-linked traits among the primaries were generally those that contribute to Neuroticism: Factors O (worrisome, insecure, guilt-prone), J (withdrawn, individualistic, guarded), Q_4 (tense, frustrated, driven), and three other factors that contribute negatively to Neuroticism--A (warm-hearted, easy-going, attentive to people), H (socially bold, adventuresome, unthreatened), and G (disciplined, moralistic, strong superego). All of these traits were most strongly linked in the childhood age range and for warm fathers. Apparently the sons' mental health was most strongly affected by the father when the son was young and when the father was interpersonally oriented and close.

Although mother/son linkages were less numerous, Neuroticism remained the most strongly linked second-order trait. Considering the near absence of parent linkages for girls on either Neuroticism or Anxiety, this importance of parents in boys' mental health seems remarkable. Since there was equal variance on these factors for girls and boys, girls' Neuroticism apparently was linked either to varied patterns in parents (which canceled each other out in the overall correlation) or to societal rather than

parental influences. Additionally, boys' Extraversion was strongly linked with mothers' traits, which is consistent with the female sex role emphasis on social orientedness.

Figures 3 and 4 indicate those traits in mothers' and fathers' personalities, respectively, that had the greatest number of correlations with sons' and daughters' personalities, for both the total sample and each subgroup.

For mothers, the most highly linked traits with their daughters were Independence, E, I, L, N, and O. Although these traits do not fall conveniently into the pattern of one or two of the second-order factors, they do show a unique pattern in the mother/daughter matrix. All of these maternal traits (and no others) contribute in the same direction to girls' Extraversion, Independence and Cortertia; also to the particular primary factors E, F, and Q_3. Thus, mothers who were submissive, conforming, trusting, conventional, emotional, dependent, socially aware and polished, and confident and non-guilt-prone--seemingly those who had accepted the female sex role--were linked to daughters who were Dependent, emotional, (low Cortertia), and Introverted, as well as being submissive, conforming, dependent, serious, cautious, self-controlled, and following a socially-approved self-image. This, combined with the prior finding that precisely these factors were the most highly-linked for girls, would seem to indicate that the major personality interaction between mothers and daughters was the passing on or

Group	N of Subjects	Mothers' Traits: A	B	C	E	F	G	H	I	L	M	N	O	Q_1	Q_2	Q_3	Q_4	Independence	Extraversion	Anxiety	Cortertia	Neuroticism	Creativity
In Relation to Daughters																							
Total sample	162				X				X	(X)		X	(X)					X					
Childhood	114				X											(X)		X					(X)
Adolescent	41	X		(X)	X				(X)	(X)		X	X					(X)	X	(X)	(X)		(X)
Eldest	41		(X)		(X)				(X)												(X)		
Youngest	22						(X)				(X)	(X)				(X)							
Warm parent	84				X					(X)								(X)			(X)		(X)
Cold parent	37							(X)		(X)	(X)					X							
Dominant parent	45					X										X							
Submissive parent	85		(X)			(X)				X			(X)							(X)		(X)	(X)
In Relation to Sons																							
Total sample	231					X		X					(X)								X	X	
Childhood	163							X					(X)								(X)	(X)	
Adolescent	50						X	(X)		(X)													(X)
Eldest	57				X			X										(X)	(X)		(X)		
Youngest	37						(X)								X								
Warm parent	98			(X)		(X)		(X)	(X)													(X)	(X)
Cold parent	70					X	(X)	X				(X)	(X)	(X)							X		
Dominant parent	63							X	(X)	(X)						(X)	X			(X)		X	(X)
Submissive parent	134			X		(X)	(X)	X			(X)	(X)	(X)							X	(X)	(X)	(X)

Figure 3. Highly-Correlated Mothers' Traits[a]

[a] X = eight or more significant correlations
(X) = four to seven significant correlations

Group	N of Subjects	Fathers' Traits												Q_1	Q_2	Q_3	Q_4	Independence	Extraversion	Anxiety	Cortertia	Neuroticism	Creativity
		A	B	C	E	F	G	H	I	L	M	N	O										
In Relation to Daughters																							
Total sample	162				X													(X)					
Childhood	114			(X)	X									(X)							(X)		
Adolescent	41	(X)				(X)		(X)															
Eldest	41			X			X			(X)						X	X			X		X	X
Youngest	22	X									(X)				X				(X)				
Warm parent	68			(X)			(X)				(X)		(X)							(X)			
Cold parent	72				(X)							X	(X)								(X)		
Dominant parent	68		X													(X)					(X)		
Submissive parent	70		X		(X)				(X)	(X)			(X)										(X)
In Relation to Sons																							
Total sample	231	X			X	X	X	X			(X)	(X)		(X)	X			X	X			X	
Childhood	163	(X)			X	(X)	(X)	X				X	X		X			X	X	(X)		X	(X)
Adolescent	50				(X)						(X)	(X)			(X)	(X)							
Eldest	57	X				(X)				(X)					X				X		X		
Youngest	37												(X)										
Warm parent	93			X	X	X	(X)	(X)			(X)	X	X		X	(X)	(X)		X	X		X	(X)
Cold parent	106				(X)	(X)	(X)							(X)	(X)			(X)					
Dominant parent	98	X	(X)							X					X				X		X		
Submissive parent	98		(X)								X	X		X				(X)					

Figure 4. Highly-Correlated Fathers' Traits[a]

[a] X = eight or more significant correlations
(X) = four to seven significant correlations

adherence (or lack of adherence) to the socially-approved female sex role (submissiveness, dependency, emotionality, conformity, and cautiousness). These linkages were strongest in the adolescent age range.

The mothers' personality factors that were linked most highly with sons' traits were Neuroticism, Cortertia (emotional versus cognitive orientation), F, H, and O. These were precisely the traits that correlated most highly with the sons' traits of Neuroticism and Extraversion. In particular, mothers' traits of cheerful, talkative, socially bold, uninhibited, carefree, confident, guilt-free, unemotional, task-oriented, and non-Neurotic, were related to Extraversion and low Neuroticism in sons.

Turing now to the fathers, who overall had more linkages with children, but mainly with sons, we see that there was little overlap among the fathers' traits that were strongly linked with sons' versus daughters' traits. For sons, the most strongly linked second-order factor was fathers' Extraversion. This is consistent with several of the most highly linked primary traits: Factor A--warmhearted, sociable; factor F--talkative, enthusiastic, impulsive; factor N--Socially shrewd, anxious, and ambitious; factor H--socially bold, adventuresome, carefree; and inversely with factor Q_2--prefers to work alone, individualistic. Although the other father traits (Independence, Poor Parenting, Neuroticism) that were strongly related to sons' traits may

appear inconsistent, the one thing they have in common is that they each, along with Introversion, contributed most strongly to sons' Neuroticism. They were all most strongly linked for sons in the childhood age range and for fathers who were warm. This again indicates the importance of the father/son relationship to the sons' mental health. In particular, fathers who were Introverted and Dependent (traits of withdrawn, cold, prefers to work alone, shy, cautious, serious, introspective, inhibited, submissive, and conforming) tended to have sons who were high in Neuroticism.

There was only one father trait that was strongly-linked to daughter personalities, factor E--dominance, and this was most often linked to unhealthy daughter traits, such as Anxiety and low Creativity. Other father traits that were moderately correlated with daughters' traits included Interpersonal Facilitation, Creativity, and Anxiety. These second-order traits particularly involved Anxiety factors and, at the low Anxiety end, correlated with daughters' factor B (achieved intelligence) and Extraversion. They were most strongly related for eldest daughters and for warm fathers.

Parent/Child Similarity

Next we consider parent/child same-trait correlations or similarity. Figures 5 and 6 show the factors for

Group	Daughters' Traits																		
	A	B	C	E	F	G	H	I	N	O	Q_2	Q_3	Q_4	Independence	Extraversion	Anxiety	Cortertia	Neuroticism	Creativity
Correlations with Mothers																			
Total sample		+		+											+		+		
Childhood		+	+	+															
Adolescent		+		+											+				
Eldest																	+		
Youngest																			
Warm parent				+											+		+		
Cold parent		+																	
Dominant parent																			
Submissive parent		+														+			+
Correlations with Fathers																			
Total sample	-	+		+		+								+	+				
Childhood		+		+															
Adolescent		+				+								+	+				
Eldest	-		+			+						+	+	+					
Youngest									+					-					
Warm parent		+			+	+												+	
Cold parent	-													+					
Dominant parent		+												+					
Submissive parent		+		+				+											

Figure 5. Significant Same-Trait Correlations Between Daughters and Both Parents

Group	Sons' Traits																	
	A	B	C	E	F	G	H	I	N	O	Q_2	Q_3	Q_4	Independence	Extraversion	Anxiety	Cortertia	Neuroticism	Creativity
Correlations with Mothers																			
Total sample					+										+			+	
Childhood		+								+									
Adolescent	+		+			+									+				
Eldest					+										+				
Youngest		+			+														
Warm parent				+					-						+				
Cold parent					+		+								+				
Dominant parent		+											-			+		-	
Submissive parent		+			+													+	
Correlations with Fathers																			
Total sample	+	+		+			+		-	+	+	+						+	
Childhood	+	+		+			+		-	+								+	
Adolescent				+					+		+	+						+	
Eldest	+		-				+	+			+								
Youngest									-	+									
Warm parent									-	+	+	+	+			+		+	+
Cold parent		+		+															
Dominant parent	+	+		+							+	+							
Submissive parent		+																	-

Figure 6. Significant Same-Trait Correlations Between Sons and Both Parents

daughters and sons, respectively, that were significantly correlated with the same trait in their mothers and fathers. The greatest trait similarity by far occurred between fathers and sons (more than twice the average for the other three dyads), with father/daughter showing the second largest, mother/son the third, and mother/daughter showing the least similarity. This left children, overall, showing almost twice as much similarity to fathers as to mothers, although the greatest part of this difference came from the great disparity between the father/son and mother/daughter dyads. It is unclear why daughters showed so few direct similarities to mothers. However, since the mother/daughter dyad did show the second largest number of overall (cross-trait) personality linkages, the interaction of mothers and daughters may involve more nurturing than direct modeling, compared to the other dyads.

Examining each dyad more closely, the mother/daughter dyad showed the most consistency across the many subgroups, revealing mother/daughter similarity on traits of intelligence, dominance, Extraversion and Cortertia (emotional, sensitive versus cognitive, tough-minded). These were precisely the traits found for daughters to be the most strongly linked with all parental traits in the prior section, so those traits on which daughters did model after mothers appeared the most central ones for daughters in their parental interactions, while daughters modeled after fathers on other

less central traits. These results were also consistent with the previous findings (Grotevant, 1976) that mothers and daughters were similar on the Strong-Cambell traits of Realistic versus Emotionally Sensitive (similar to Cortertia here), Investigative Problem-solving (similar perhaps to intelligence) and Conventionality (the low end of dominance); as well as to findings (Troll et al., 1969) of significant mother/daughter similarity on Intraception (similar to Cortertia), Critical of Others (similar to dominance), and Spontaneity (similar to Extraversion).

It is interesting to note that daughters showed no similarities to mothers for the dominant mother subgroup. Perhaps this was because this trait is not sex-role-appropriate for mothers.

Looking next at the father/daughter dyad we see that consistent similarities were found for intelligence, dominance, superego strength and Independence. It is interesting that similarity on the trait of superego strength (moralistic, conscientious, persevering, dominated by a sense of duty) was found only for the cross-sex dyads and only consistently for the father/daughter dyad (mothers and sons showed similarity on this trait only for the adolescent age range boys). Consistent with the overall (cross-trait) data in the previous section, the greatest father/daughter similarities occurred for eldest daughters (but was not seen with fathers and eldest sons), where there was also a unique and

strong father/daughter similarity on ego-strength. Apparently fathers were very importantly involved when their first child was a girl. Fathers and daughters were also more similar for warm than cold fathers, and much more similar to daughters in the adolescent age-range than the childhood age-range (while the opposite held for fathers and sons). The only negative same-trait correlation (parent/child dissimilarity) for girls also occurred between fathers and daughters (especially eldest daughters) on the fundamental trait of warmth. This occurred in no other dyads and seems difficult to understand. This could be either an antagonistic or compensatory type of mechanism.

Finally, it is worth noting that similarity on any traits of Anxiety and Neuroticism were absent for both mother/daughter and father/daughter dyads, while present in both the mother/son and father/son dyads. This absence of Anxiety and Neuroticism was also found for the daughters' cross-trait linkages in the last section and implies that daughters' Neuroticism (which shows a similar mean and variance to sons') was less related to familial variables (or at least consistent ones) and, therefore, presumably was related to general cultural factors.

Father/son dyads showed by far the greatest number of similarities, and by far the largest number of similarities occurred for sons in the childhood age-range and for warm rather than cold fathers. Sons also showed substantially

more similarity to dominant rather than submissive fathers. The traits which consistently showed father/son similarity were intelligence, warmth, social orientedness, apprehensiveness, self-control, and Neuroticism. The one trait that showed negative correlations for sons (and only for sons) in many subgroups was that of socially detached, shrewd and manipulative. This was particularly true for warm fathers and for sons in the childhood age-range (as well as mothers and sons for warm mothers), but changed to a strong positive father/son correlation in the adolescent age-range. One hypothesis here is compensatory: If parents were socially shrewd and took care of social decorum and arrangements, then sons never had to learn to attend to these things until they were older and on their own; while if parents were socially naive and unaware, the sons must develop social sophistication if they were to be accepted in outside social interactions. However, since this negative correlation was not true in adolescence when outside social acceptance becomes most important, a second hypothesis appears more tenable: If parents were warm and socially responsive (as both mothers and fathers were in this case) but also socially naive, then sons would learn that they could manipulate these socially responsive parents; while if parents were shrewd and manipulative themselves (but still warm, so as not to manipulate hostily or cause antagonistic or protective reciprocity in sons), then sons were not able to outsmart these parents and found no rewards

in or need for developing these manipulative skills. These findings may be construed as supporting those of Braginsky (1970) who found an inverse relationship between mothers' and childrens' Machiavellian Scale scores. In addition, support can be seen here for findings (Grotevant, 1976) of father/son similarity on Strong Cambell trait of Social (here, warmth and social orientedness), Enterprising (dominance and/or self-control), as well as for Troll et al. (1969) finding of father/son similarity on Decisiveness (again, dominance and/or self-control).

The final dyad, mother and son, showed consistent similarity on three factors, intelligence, social surgency and Extraversion; they also showed similarity on Neuroticism, but only for the total sample and one subgroup. Here we note that both children showed similarity to mothers on Extraversion (a female sex role), while neither showed similarity to fathers on this trait. This may support Troll et al. (1969) findings that only mother/son and mother/daughter were similar on Spontaneity. The finding of mother/son similarity on intelligence may also support their findings of mother/son similarity on Cognitive Complexity, while their finding of mother/son similarity on Passivity-Dependence may be similar to the present finding for mothers' and sons' Neuroticism.

Looking at the overall sample, only two factors showed consistent similarity across all four dyads: intelligence and dominance (although similarity on dominance was very

faint in the mother/son dyad). The similarity on dominance supports earlier findings (Lesser and Steininger, 1975) of parent/child similarity on the Rokeach Dogmatism Scale. Beyond these two traits, however, both sons and daughters were similar to mother and fathers on different traits.

Looking more closely at the subgroups, we can see that the youngest child showed by far the least similarity to parents for all dyads. Children showed much more similarity to warm than to cold parents (overall, 18 trait similarities for warm parents versus 8 similarities for cold parents); while sons were much more similar to dominant fathers only, and girls were much more similar to submissive mothers only (the other two dyads showed equal similarities to dominant and submissive parents). This suggests that more direct modeling of same-sex parents occurs when they show sex-role-appropriate traits than when they show sex-role inappropriate traits.

Parent/Child Personality Patterns in the Subgroups

The particular personality trait interactions for parents and children in the four pairs of subgroups (child/adolescent, eldest/youngest, warm/cold parent, and dominant/submissive parent) are considered in the context of Table 7, which shows the number of significant intercorrelations (at the $p < .10$) for each of the four dyads, first for the sample as a whole, and then for each of the subgroups.

Table 7. Number of Significant Intercorrelations ($p < .10$) for Each of the Four Parent/Child Dyads in Each Group

Group	Mother/ Daughter	Father/ Daughter	Mother /son	Father /son	Total of all four dyads
Total sample	55	37	41	85	218
Child (< 13 yrs)	29	37	43	84	193
Adolescent (> 13 yrs)	65	28	38	38	169
Eldest child	30	62	39	42	173
Youngest child	37	41	29	16	123
Warm parent	28	46	37	97	208
Cold parent	43	36	54	38	171
Dominant parent	30	35	51	52	168
Submissive parent	42	41	58	49	190
average	Daughters 40.1	Sons 49.5	Mothers 41.6	Fathers 48	

The total sample figures show many more father/son linkages than for any other dyad. Apparently fathers and sons were more effectively related than any other family members. Looking down the father/son column, we notice that this relatedness was strongest for warm fathers and for sons in the childhood age range, and least for sons who were the youngest child (the lowest entry of any in Table 16); and that there was very little differential between fathers who were dominant versus submissive. Thus, these data indicate that fathers' personalities link more closely to their sons' in childhood than adolescence, when fathers are warm rather

than cold, and to the earlier-born children rather than the last. Each of these findings supports a nurturant theory of parent/child influence rather than one of direct modeling. This theory is supported by three points in the data: adolescence is the time when the child's abilities and responsibilities would best lend themselves to modeling, but greater father/son linkages occurred in childhood; warm versus cold father personality allows for more interaction and nurturance, but not necessarily any more modeling; and, youngest children, who had by far the least linkages with fathers, often get less direct attention and nurturance, while the visibility of the father as model is presumably equal for both.

The mother/daughter dyad had the second largest number of linkages (55, versus 85 between fathers and sons), but the pattern of influence was notably different and almost opposite to the father/son picture. Mothers' traits linked more closely to their daughters' in adolescence than in childhood, more to the youngest daughter than the eldest (this was the only dyad of the four for which this was true), more so when the mother was cold than warm, and more so when the mother was submissive than dominant. In many ways this was complementary to the father/daughter linkages. Fathers had more linkages to daughters' personality in the childhood years, while mothers had much more influence in the adolescent years. Mothers were more closely related to daughters who were youngest, while fathers, although equally related

to youngest daughters as mothers were, were most strongly related to eldest daughters (the strongest father/daughter linkage). Warm fathers were more closely linked to daughters, while cold mothers were more closely linked than warm mothers (this may be due to sex role differences for the parents on this factor, and will be discussed later). Both parents were more closely linked to daughters' personalities when the parent was submissive rather than dominant. This, plus the results showing mothers to be most closely linked with their daughters in adolescence, seems to indicate some strong sex role shaping of daughters at this point, as was found in the above section on particular personality factors important in the mother/daughters' relationship.

The overall greater linkages within father/son and mother/daughter dyads, as compared to the father/daughter and mother/son dyads, indicate the greater importance of same-sex linkages, with father/son being outstandingly higher than any of the other dyads. The grand totals for each family member indicate that linkages were much more numerous for sons than for daughters overall, and more for fathers than mothers overall.

Other interesting results arose from further subgroup comparisons. Although noted previously, it is worth emphasizing that linkages were strongest in the childhood age range for all dyads except mother/daughter, where far greater relatedness occurred in adolescence. This suggests

stronger bonds between young children and fathers than between young children and mothers. Closer scrutiny of Technical Report HC79-1 Tables 5, 6, 7 and 8 reveals that the parent/child patterns for each dyad in the childhood age range were basically very similar to the general pattern for each dyad. For father/son there was the same (although greatly increased) emphasis on sons' introverted Neuroticism and Independence, which were linked with fathers' traits of Introversion, Neuroticism and low Creativity, while fathers' N (socially shrewd, ambitious, and calculating) highly correlated with all of sons' low Neuroticism factors. Thus it appears that sons in the childhood age range are very like their fathers (more so than in the adolescent age range), and that fathers who are socially aware and ambitious perhaps influence their sons toward socially valued traits for children (warm, outgoing, socially bold strong sense of right /wrong, conforming, calm, not tense or Anxious, Dependent, Creative). The mother/son linkages tended to emphasize basic character development in sons (ego strength, self-image, Anxiety, but not the more specific Neuroticism factors), as well as Extraversion. However these traits were linked not only with Extraversion in mothers (as with fathers), but also with high Cortertia (unemotional, cognitive orientation, emotionally tough).

For sons in the adolescent age range, there was a great emphasis in both father/son and mother/son dyads on

Cortertia (unemotional, cognitive orientation, emotionally tough, task-oriented), E (dominance, aggression), and I- (emotionally tough, expects little, hard, realistic, practical) as well as a de-emphasis, or sometimes negative emphasis, of B (intelligence). These generally were linked with positive traits (such as factors of low Neuroticism and Anxiety, high Creativity, and Self-Actualization) in both parents. This was in many cases the direct opposite of the childhood situation, where these parental traits were linked with sons' dependency and emotionalism: For instance, fathers' N (socially attuned, ambitious, shrewd) was associated with sons' Dependence, conformity, and low Cortertia emotional, sensitive) in childhood, but with dominance, aggression, tough-mindedness, realism, and social shrewdness in adolescence. Thus, it appears that healthy and socially aware parents may strongly influence their sons toward the typical male sex roles in adolescence of emotional toughness and aggressiveness, while having emphasized the opposite in childhood.

For daughters, the parental patterns were less consistent, and in adolescence were sometimes opposite. For the childhood age range the father/daughter dyad emphasized daughters' negative traits of Anxious, Independence (agressive, seclusive, emotionally unstable, cold, withdrawn, rigid self-control, Anxious), which were linked with fathers' poorly-controlled, aggressive, self-centered Independence;

thus, fathers who were less dominant, aggressive and withdrawn were associated with more healthy traits for young girls (Dependence, low Anxiety, stability, zestful, optimistic). Mother/daughter dyads showed an emphasis on low Cortertia (emotional, warm, dependent, emotionally and esthetically sensitive, imaginative), which was linked with mothers' Extraverted Dependence (warm, happy-go-lucky, trusting, submissive, conforming, consistent self-image). Thus, parents who were healthy or showed appropriate sex-role traits seemed to influence young girls toward emotionality and dependency, while emphasizing non-Neurotic traits in boys.

In adolescent girls, parental traits that correlated with low Anxiety also correlated with Dependency and Introversion--presumably, then, the approved sex role here for girls, in addition to the low Anxiety traits (calm, unworried, following consistent self-image), included submissive, conforming, obedient, retiring, shy, self-effacing, cautious, inhibited, restrained. While these traits in girls were associated with healthy (or at least, socially approved) traits in mothers (low Anxiety, emotionally stable, calm, composed, unworried, submissive, emotionally sensitive, dependent), they were related to many traits of Introversion in fathers (cold, introspective, cautious, shy, easily-threatened, restrained). Conversely, Extraverted fathers were associated with Extraversion, aggressive Independence,

and Anxiety in daughters; perhaps these girls learned Extraverted, Independent strategies from their fathers and then found themselves at odds with the cultural sex role, or perhaps these Extroverted, non-introspective strategies left them unprepared to deal with the emotional complexities of adolescence. Overall, then, there was a great difference between the tough, aggressive traits in boys, and the submissive, inhibited traits in girls, that were associated with healthy or sex-role-appropriate parent traits.

Turning next to a comparison of the eldest/youngest child subgroups, Table 7 shows that the total across the four dyads for youngest child was the lowest one in the study; only the mother/daughter dyad showed more linkages for youngest than for eldest. Female youngest children, however, had more linkages with both parents than did youngest males; youngest boys' linkages with both parents were not only the lowest in respective columns, but the two lowest in the whole table. Apparently, youngest children, but in particular youngest boys, were least closely-linked with their parents' personalities. Perhaps they received much "parenting" from their older siblings. These results would seem to support Jajonc's theory (1976) that the decline in intellectual ability with birth order is attributable to less stimulation by adults (parents) for later-born children, who are more often attended to by their siblings. The present results indicate some particularly strong mechanism for

fathers and sons, since the father/son dyad, which generally had the greatest number of linkages, had the least linkages of any entry in Table 16 for the youngest son subgroup (while fathers showed more than twice as many linkages with youngest girls).

Major differences occurred in the parent/child trait patterns of youngest sons: Neuroticism was no longer an important variable for them. Instead, Independence and one of its major contributors factor J (withdrawn, cautious, obstructively individualistic) were connected with the traits of both parents that were usually linked with Neuroticism (Introverted, intropunitive, Neuroticism), although there was a new linkage with fathers' low Cortertia (emotional, sensitive, depressive). Thus, it seems that the otpimum, non-Neurotic traits for youngest boys involved social Dependency, conformity, shyness, but also confidence and optimism. Similarly, boys' emotional sensitivity (I+) was associated with fathers' social ambitiousness and shrewdness (N+) for this subgroup only. This sort of dependent, sensitive role was the opposite of that found for older boys, and, while present in the child subgroup, was greatly exaggerated here compared to other young boys who were not youngest sons. In addition, positive mother traits such as B (achieved intelligence) and C (ego strength, emotional stability) were linked with youngest sons' trait of G- (disregards rules and obligations, expedient, self-indulgent), and

also with a constellation of traits which showed a picture of a bright, overactive, confident, socially shrewd and internally controlled boy. This adds to our picture of youngest sons of healthy parents as socially dependent, emotionally overprotected and sensitive, and now as somewhat indulged, lax and socially aware and manipulative. Finally, mothers' social responsiveness and closeness (factor Q_2 and, less centrally, A) were here, and here only, linked with the central trait of ego strength (C) in youngest sons, as well as many factors of low Neuroticism and Anxiety and high Creativity. Perhaps by the time the youngest child came along, if the mother were not particularly people-oriented, then the child would get little attention or response.

For girls who were youngest children the parent/child personality linkages again differed notably from the general sample. Results indicated that unless both parents were particularly socially oriented, concerned with social approval, and overcontrolled, youngest daughters' traits were almost opposite of the usual traits associated with positive parent traits--that is, Independent, emotionally tough, but Anxious. The important parental traits here were different than in the general sample: for mothers these included socially attuned and ambitious, socially shrewd, follows strong socially-approved self-image, moralistic, emotionally disciplined and persevering (Factors G, N, and Q_3); for fathers these included softhearted, attentive, to people,

socially group dependent, imaginative and fanciful (factors A+, Q_2- and M+). These particular socially dependent (and often sex-role inappropriate) traits were here linked with girls' typical traits of social Dependency, emotional sensitivity and low Anxiety. The usual parental correlates of these daughters' traits (fathers' social independence and more task-orientedness, and mothers' submissive emotional sensitivity and social dependency), which involve more traditional sex roles, were here linked with daughters who were Independent, emotionally tough, and Anxious (tense, conflicted, over-active, attention-seeking, impulsive, disregarding of rules).

Thus, it seems that both youngest child subgroups differed markedly from the general sample. Out of the 60 mother, father, son, and daughter traits found most salient in the general sample, only 8 were similarly salient in the youngest child subgroup, as compared to 25 similarly salient traits in the eldest child subgroup. Unless parents were particularly socially dependent and concerned with social approval in the case of daughters, or highly Dependent, Introverted, and Neurotic in the case of sons, these youngest children seem less socialized into their appropriate sex roles--boys were more socially dependent, emotionally sensitive, and self-indulgent; while girls were more Independent, emotionally tough, and Anxious.

The eldest child subgroup had a more average number of parent/child linkages than the youngest child subgroup, (see Table 7) and eldest daughters were much more closely linked with fathers than with mothers. The father/daughter dyad in this subgroup had not only the highest number of linkages for eldest children and for the father/daughter dyad, but the fourth-highest in the entire table. Apparently, fathers were much more involved when their first child was a daughter, somewhat contrary to the image of the highly-prized first-born son. This seems peculiar, given the outstandingly high number of linkages for the father/son dyad and particularly in the childhood age range. Perhaps this indicates some father/son rivalry, particularly when the marriage is very young and the family is only a triad. Further support for this hypothesis is revealed by closer examination of the data: Although the usual pattern of fathers' Extraversion factors being linked with sons' low Anxiety and Neuroticism was very strong in this subgroup, it was unique that fathers' and sons' ego-strength or emotional stability (C) linked inversely, while their emotional sensitivity and dependency (I) linked positively. This negative correlation on the central character trait of ego-strength is hard to explain. The broader traits of sons' low Anxiety and Neuroticism were linked to fathers' low ego strength, plus factors of strong social orientation and dependency (A+ and Q_2-) and an emotional, feeling approach to life (low Cortertia).

Thus, it seems that eldest sons were strong and non-anxious when they had fathers who were unstable and emotional but also quite socially responsive and dependent. Since the mothers' traits associated with eldest sons' ego strength and low Anxiety were also fairly divergent from the typical sex-role (Independent, aggressive, dominant, socially bold, Extraverted, adventuresome, emotionally hard, tough-minded), it would appear that ego-strength and low Anxiety in first-born sons may be somewhat rare. Indeed the more typical case of a submissive, conforming, timid, emotional mother plus a more socially reserved, strong father was related to low ego-strength, Anxiety, and Neuroticism in first-born males. This atypical pattern, particularly of the inverse relationship with fathers' traits, indicates that some unusual mechanisms come into play between fathers and eldest sons, perhaps of a rivalrous nature.

For the eldest daughters, the highly unusual number of linkages with fathers' traits was indicative of this dyad's atypical patterns in this subgroup. Firstly, the father/daughter dyad had the highest number of positive same-trait correlations (or father/daughter similarities) for daughters anywhere in the study, and these tended to be very central character structure traits, including ego strength (C), superego strength (G), strongly controlled self-image (Q_3), anxiety or tension from frustration (Q_4), and Independence. Eldest daughters, however, had no significant similarities to their mothers. Additionally, the

father/eldest daughter dyad had a negative same-trait correlation on warmth (A). The father/daughter inversion on this very basic trait of positive versus negative social feeling is difficult to explain. However, it is interesting to note that for the eldest child the negative father/son trait was the somewhat power-related one of ego strength, while with daughters it was the interpersonal one of warmth.

These central traits on which fathers and eldest daughters were similar, were also the ones involved in the basic and unique pattern found for this dyad: Fathers' trait of ego strength or emotional stability, moralistic rule-boundedness (superego strength), controlled self-image, unfrustrated relaxedness, low Anxiety and Neuroticism, high Creativity and Self-Actualization, were all linked with eldest daughters' same traits of ego strength, self-confidence, controlled self-image, unfrustrated composure, and Creativity as well as with daughters' submissive, stoical, inactive, and socially unambitious and unpretentious qualities.

This similarity of basic character structure did not occur in the mother/daughter relationship. Rather, the similarities were on less central traits. The patterns in this dyad for eldest girls were basically similar to those in the general sample, but here there was more emphasis on the linkages of mothers' Cortertia (unemotional, tough, expects little from people, task-oriented rather than feeling-oriented), which was here clearly associated with daughters'

Anxiety (as well as the usual linkages with tough Cortertia; seclusive, hostile, Independence; and impulsive, group-dependent, Extraversion). It seems that this emotional toughness of mothers, which is also inconsistent with sex roles, left first-born daughters conflicted--emotionally tough and withdrawn but still with deeper social dependency and anxiety. Another unusual pattern here, was that mothers' intelligence (B) was associated with eldest daughters' ego strength or emotional stability (C), and also with interpersonal withdrawal or seclusive individualism (Q_2+ and, less so, J+). This self-sufficient, "loner" type quality in eldest girls was associated with a larger pattern in mothers' of being not only intelligent but submissive, emotionally sensitive, and socially attuned and manipulative. These mother traits were generally associated with positive or sex-role appropriate traits in boys or girls in all other subgroups, so presumably these mothers played a role in eldest daughters' becoming self-sufficient and independent, although it is consistently a male sex-role trait, perhaps to help in taking care of the rest of the family in the role of eldest child or "second mother."

Turning next to the warm/cold parent subgroups in Table 7 we see that mothers' linked more closely with sons' and daughters' personalities when they were cold rather than warm, while, conversely, warm fathers had more linkages than cold fathers. This is somewhat difficult to understand.

Since this is a factor with significant sex differences (women being consistently warmer than men), children apparently had more linkages when either parent deviated from their socially-approved sex role. Perhaps these less socially-appropriate parents were either more autonomous and non-conforming, or perhaps they were poorly socialized misfits. Looking more closely at the complete tables for these sub-groups (11A, B, C, and D; and 12A, B, C, and D) does not strongly support either of these hypotheses, but suggests rather that something inherent in the mothering role makes warmth a more equivocal trait than for fathers, whose warmth had more consistently positive effects on their children. Perhaps this trait of social responsiveness and involvedness in the mothers, who do not generally have other life interests or satisfactions in addition to the children, betokens some dependency and inability to let children grow up and away.

In both dyads the warm father tended to influence the child's mental health. For the father/son dyad, warm fathers' had the greatest number of linkages of any dyad in any sub-group in the study. These linkages were very similar to but stronger than the general ones: Fathers who were non-Neurotic, non-Anxious, Creative, emotionally stable, unworried, dominant, Extraverted, uninhibited, socially responsive and involved, and untense, were associated with sons' who were non-Neurotic, non-Anxious, and Creative. There seems to have

been a good deal of modeling here; indeed, A+ in fathers is most highly correlated with G+ (strong, internalized super-ego) in their sons. For daughters, warm fathers who were also non-Neurotic, Creative, and high on Interpersonal facilitation (traits of emotionally stable and mature, unworried, unfrustrated, follows consistent, socially-approved self-image, moralistic, strong super-ego, interpersonally trusting and forgiving, imaginative and concerned with abstract) were associated with daughters who were socially responsive, intelligent, internally controlled, conscientious, rule-bound, non-Neurotic and Creative. Conversely, warm fathers who were Neurotic (unstable, immature, worried, tense, disregards rules and obligations, poorly-controlled, interpersonally suspicious and dogmative) were associated with daughters who were cold, withdrawn, less intelligent, poorly-controlled, self-indulgent, disregarding of rules and obligations, overactive and demanding. Thus, warm fathers apparently had a high potential for being both helpful and harmful to sons and daughters.

Warmth in mothers seemed to be linked more with instilling appropriate or inappropriate sex roles. In sons, warm mothers who non-Neurotic, non-Anxious, and Creative (emotionally stable, mature, self-controlled, conscientious, strong super-ego, unworried, concerned with social standards, socially shrewd, outgoing, adventuresome, and uninhibited) were linked with sons who were unemotional, tough-minded,

aggressive, task-oriented, and hard (all traits that males score higher on); while conversely, warm mothers who were Neurotic, poorly controlled, and socially inhibited tended to have sons who were emotional, sensitive, and submissive. Thus, warm, strong mothers apparently influenced their sons toward socially-approved sex roles.

With daughters there seems to have been more direct modeling. Warm mothers who were emotional, sensitive, feeling oriented, trusting, accepting, unworried and Creative tended to have daughters who were emotionally stable, non-Anxious and more controlled, but also Dependent, submissive and inhibited--consistently female sex-role traits. Additionally, warm mothers who were Dependent, submissive, conforming, and socially ambitious, but non-Anxious and calm, tended to be linked with daughters' traits of quiet, withdrawn, submissive, conforming, and following a strong socially-approved self-image, but Neurotic and Anxious. Thus, when mothers were warm and dependent, they may have bound their daughters too tightly instilling strong, internalized inhibitions and conformity. It seems that the warm mothers also had a great potential for doing either harm or good for her children.

The son and daughter traits linked with cold mothers depended primarily on whether the mothers' traits also contained elements of self-control. Included in the trait description of factor A- (cold) are terms such as critical, aloof, rigid, and hostile. It is therefore not surprising

that when this trait was combined with poor self-control, as well as further social withdrawal and suspicion, it was linked with daughters' traits of unemotional, tough-minded, aggressive, socially shrewd and manipulative, tense, over-active, frustrated, Anxious. These girls may have had to toughen themselves to deal with their mothers' poorly-controlled and projected hostility, and also apparently became angry, tense, and overcontrolled. Conversely, cold mothers who were strongly self-controlled, non-Anxious, and socially trusting were associated with daughters' having the opposite traits, showing more internalized control and being more like their sex-role: emotional, sensitive, socially dependent, conscientious and rule-bound, submissive, inhibited, calm, composed, non-Anxious. Thus, it seems that mothers, although cold, were linked with socially approved, non-Anxious traits in daughters when mothers also were self-controlled and not anxious or suspicious.

Similarly, cold mothers who were high on the other Extraversion factors (socially bold, responsive, cheerful, enthusiastic, talkative) as well as showing a strong, controlling, super-ego and a more cognitive orientation to life (conscientious, persevering, moralistic, unemotional, task-oriented) were linked with boys' Extraversion (warm, enthusiastic, socially bold, attentive to people and group approval) as well as ego strength, low Neuroticism and high Creativity. Conversely, cold mothers who also tended to be low on all of

the other Extraversion factors and who were poorly controlled were linked with sons' Introverison, as well as instability and Neuroticism. Therefore, for both male and female children, cold mothers were linked with non-Neurotic, socially approved patterns if they were also self-controlled, and, especially for sons, Extraverted in other ways. It is also interesting to note that more direct similarity (and perhaps direct modeling) occurred between sons and cold mothers and between daughters and warm mothers; while there was more indirect promoting (perhaps through a nurturing-type paradigm, rather than direct modeling of the same traits) of appropriate sex roles with the sons and warm mothers and with the daughters and cold mothers. This could imply that sons modeled after a cold mother but daughters modeled after a warm mother, while the mothers of opposite temperment influenced sex roles more indirectly, since these mothers were already in the wrong direction (sex-role-wise) on the primarly factor of warmth.

Low warmth in fathers was itself related to negative traits in children, especially in sons, who tended to be cold, withdrawn, obstructive, rigid, anti-social, disregarding of rules and obligations, demanding, changeable, self-indulgent, worried, tense, and guilt-prone. Within this highly Neurotic pattern it appears that the best possible outcome for sons of cold fathers was being tough and aggressive: for cold fathers, a pattern combining high Creativity, low Neuroticism,

aggressiveness, impulsivity, Independence, tough-mindedness, critical, socially bold and thick-skinned was linked with sons' traits of aggressive, tough-minded, unemotional, and task-oriented. Conversely, cold fathers' traits of Neurotic, Introverted, submissive, conforming and emotional were linked with sons' traits of submissive, emotional, conforming and less anti-social. Thus, cold fathers were strongly linked with sons' Neuroticism, either of the internalized/inhibited or acting-out types, depending on whether the father was more inhibited or acting-out. Therefore it appears that a substantial amount of father/son similarity or modeling took place in both the cold and warm father subgroups.

Although some modeling also occurred for the father/daughter dyad in the warm father subgroup, the cold father subgroup showed somewhat complex patterns, and if anything, showed parent/child dissimilarity or opposition on the same trait. Fathers' A-, or coldness, was generally linked with daughters' warmth and social dependency as well as tense frustration (perhaps from frustrated dependency needs). As cold fathers became more Neurotic, Anxious, unstable, and poorly controlled, daughters were more dominating, self-centered, shrewd, aggressive and less Anxious--a very inappropriate sex-role for girls, apparently in response to their fathers' poorly-controlled hostility. However, within this group of cold fathers, traits of greater withdrawal, coldness, social clumsiness, low emotionality, internal toughness,

tended to be linked with daughters' Extraversion, warmth social dependency, intelligence, conscienciousness and internal control, self-confidence and composure. The only way to understand this seems to be as some sort of reciprocal, support mechanism, where the daughter develops skills and strengths in response to the fathers lack of strength and his neediness. Similarly, cold fathers' traits of Introversion, inhibition, submissiveness, Dependency, conformity, social clumsiness, Anxiety, and Neuroticism (but self-control) were linked with daughters' Creativity and low Anxiety and Neuroticism (emotionally stable and mature, confident, unworried, warm, outgoing, socially dependent, submissive). This inverse relationship between fathers' and daughters' sociability and Anxiety was faintly present in the general sample, but was much stronger in the cold father subgroup. In this subgroup fathers' strength and outgoingness may have meant a strengthening and exhibiting of distrust, hostility, and manipulativeness, while lack of strength was accompanied by intropunitive, inhibited and socially conforming self-controls, which seems to have allowed or engendered strength in the daughters.

An interesting point about the warm/cold parent subgroups is that they seem to complement each other in terms of the traits on which parent and child were similar: for each dyad, the traits on which parent/child similarity occurred in the warm parent subgroup were entirely different from

the traits on which there was parent/child similarity in the cold parent subgroup; but together the traits added up to exactly the parent/child similarities present in the total sample. This seems to indicate that this division of the sample may have been particularly important, and separated two basically different types of parent/child dynamics that were present in the whole group, and not some atypical or trivial peculiarity that would disappear in the sample as a whole.

Turning to the last pair of subgroups investigated in this study, the dominant/submissive parents, Table 7 shows that the submissive parents generally had more linkages with their child's personality. The mother/daughter dyad showed the strongest differential between dominant and submissive parents, and the father/son dyad showed the least, with the dominant and submissive fathers almost equally linked with their sons' traits. The particular parent/child linkages in these subgroups were highly dependent on child's sex: Dominance in both mothers and fathers was related to positive traits in boys--low Anxiety, low Neuroticism, emotionally stable, self-confident, outgoing, adventuresome, Independent, dominating, and emotionally tough). For girls, mothers' and fathers' dominance was related to similarly extrapunitive traits (dominating, Independent, cold, emotionally tough), but also to Anxiety, especially for dominant fathers. Conversely, submissiveness in both parents was related to

introverted, inhibited Neuroticism in boys, but to low Anxiety and socially approved sex-role traits of sensitive, emotional, and submissive in girls. Parental dominance related to similar traits in children of both sexes (dominance, toughness, Independence). The conflict (for girls) or resonance (for boys) of these traits with social norms and expectations may have produced the accompanying Anxiety versus non-Neuroticism in female and male children, respectively.

Looking first at the sons (who were low on Neuroticism) of dominant parents, it was mothers' Neuroticism and fathers' warmth and social involvedness that linked strongly to son's traits. Dominant fathers who also tended to be warm, outgoing, socially trusting and somewhat dependent tended to have sons who were less Neurotic and more Creative (emotionally stable, self-confident, calm, strong socially approved self-image, strong superego, warm, outgoing, and intelligent); while dominant fathers who were cold, seclusive, and suspicious tended to have Neurotic, unstable, withdrawn sons. Presumably the fathers' dominance was channeled in a positive or negative way depending upon whether the father had a positive or negative social attitude. This was different for daughters, whose linkages depended more on dominant parents' self-control.

For dominant mothers and their sons, the pattern was also different: Mothers' Neuroticism rather than

Extraversion was the powerful link. Dominant mothers' traits of low Neuroticism and Anxiety and tough Extraversion (emotionally stable, unworried, self-confident, strong socially-approved self-image, conscientious, trusting, socially bold, enthusiastic, internally tough, assertive and challenging) were linked with sons' non-Creative toughness (emotionally stable, hard, tough-minded aggressive, socially detached and shrewd); while, conversely, dominant mothers' Introverted, inhibited Neuroticism was linked with warmth, emotional sensitivity, and relaxed submissiveness in sons. Perhaps, dominant mothers who were emotionally healthy and bold influenced sons toward the approved tough, aggressive, sex role. Thus, sons seemed to do more direct modeling of traits of dominant fathers', but were influenced more indirectly toward strong, appropriate, sex role traits by dominant but non-neutotic mothers.

Sons' linkages with submissive parents were quite different. Although, as mentioned earlier, sons of submissive parents were consistently more worried, inhibited and emotionally unstable, there was more direct modeling by sons of the emotional health of submissive mothers: Mothers' traits of low Neuroticism (emotionally stable, unworried, self-confident, strong sense of moral duty, socially bold, enthusiastic, uninhibited, trusting, and imaginative) were linked with sons' traits of non-Neurotic Extraversion (outgoing, socially involved and responsive, uninhibited, more emotionally stable, unworried, self-controlled, aggressive

and unintelligent). Thus, sons seem to have modeled more after sex-role appropriate (submissive) mothers.

Sons did not seem to model after submissive fathers (beyond the original similarity on submissiveness). For these sons (who were already Neurotically submissive, emotionally sensitive, inhibited and guilt-prone), submissive fathers' traits of Independence (challenging, aggressive, unconventional, critical, absorbed in abstraction and theory, internally absorbed, socially clumsy) were linked with sons' traits of Introverted Neuroticism (withdrawn, seclusive, inhibited, antisocial, immature, demanding, tense, overactive, aggressive, attention-seeking, anxious, conflicted, distractable). This is somewhat different from the general sample, where fathers' Independence linked with sons' tough, aggressive, non-Neurotic traits. Perhaps these submissive fathers who could not show their aggression overtly, subverted it into more intellectual channels of criticism as well as abstract self-absorption, thus leaving the son lacking in attention, support or constructive direction. Similarly, when submissive fathers showed traits of projection and Neuroticism (unstable, Anxious, immature, suspicious, antisocial, dwelling on frustrations, imaginative, self-absorbed, seclusive), this was linked with sons' guarded withdrawal and low intelligence (circumspect, internally restrained, evaluates coldly, holds grudges, obstructive).

It is interesting to note that within this dominant parent subgroup, it was children's central character traits of Anxiety and Neuroticism that were affected in the same-sex dyads (mother/daughter, and father/son), while in the cross-sex dyads (mother/son and father/daughter) appropriate sex-role traits were much more important for both girls and boys.

Daughters of dominant parents displayed a general tendency to be dominant, emotionally hard and tough, as well as Anxious. For girls, but not boys, dominant parents' self-control was important, apparently in the control of this aggressive and power-oriented trait. Dominant fathers' self-control and non-Anxiousness were related to daughters' emotional sensitivity, warmth and calmness (sex role appropriate traits--precisely opposite to those associated with fathers' dominance in the sample as a whole), while dominant mothers' self-control and emotional sensitivity were related to daughters' Creative low-Anxiety (unworried, self-confident, emotionally stable, self-controlled, warm, emotionally sensitive, socially responsive and adventuresome). Thus, self-control seemingly ameliorated the toughening effects of fathers' dominance and the Anxiety and Introversion related to mothers' poorly-controlled dominance. Additionally, dominant mothers who were Anxious, tense, worried, unstable, socially conforming, suspicious and projecting, tended to have daughters who were Anxiously and

moralistically overcontrolled (strong superego conscientious, orderly, responsible, internally restrained, rule-bound, inhibited, low ego strength, less intelligent). Intelligence among both dominant mothers and fathers related to negative traits in daughters: in dominant mothers, intelligence was related to daughters' traits of cold, detached, seclusive, tense and emotionally tough; while intelligence in dominant fathers was related to similar but much stronger traits of anxious withdrawal and Introversion, as well as aggressiveness and emotional toughness. Apparently, while self-control ameliorated the effects of dominance in parents, intelligence perhaps helped to focus and implement this trait of aggressiveness and control.

Among submissive fathers', intelligence was strongly related to positive traits in daughters: intelligence, Creativity, low Anxiety, emotional stability, warmth, social boldness, carefree and emotional sensitivity. Perhaps intelligence served to implement this end of the trait (of modesty, considerateness, and humility) as well as the dominant role, leaving the daughter and/or her role-model the mother in a powerful, respected, unthreatened position. When submissive fathers' intelligence was combined with sex-role-appropriate traits of ego strength, unemotional, and tough-minded, daughters tended to be more socially dependent and emotionally sensitive (sex-role-appropriate traits). Furthermore, when these submissive fathers who were

intelligent and emotionally tough were also more dominant and socially Introverted, daughters tended to be less Anxious, Neurotic and more Creative. Conversely, when submissive fathers were less intelligent, more emotional, socially dependent, insecure and unstable, daughters were instead unemotional, tough, Independent, but unstable and Anxious. Perhaps again some kind of compensatory mechanism operates in this cross-sex dyad, whereby if fathers were less intelligent, emotional, dependent, vulnerable and unstable, daughters would anxiously develop a compensatory type of toughness, while if fathers were more intelligent stronger and emotionally tough themselves, then daughters would develop complementary and sex-role-appropriate traits of emotional sensitivity and social dependency. However, fathers' intelligence was by far the most important factor here.

Among submissive mothers', whose daughters already tended to be very submissive, conforming, introverted and self-controlled, mothers' suspicious, Introverted Neuroticism (emotionally unstable, apprehensive, suspicious, antisocial, socially unaware, silent, introspective, threat-sensitive, tough-minded) was linked with daughters' being less submissive and sensitive, more aggressive, tough, Introverted and Anxious--counteracting the usual linkages with mothers' submissiveness. One hypothesis is that submissive mothers who were anxious about their submissiveness and

somewhat paranoid, communicated to their daughters that people were harmful and that toughness and aggressiveness were necessary for survival. Conversely, submissive mothers who were not Anxious about their submissiveness, and were trusting and outgoing, had daughters who tended to also be submissive, conforming, emotionally sensitive, and more outgoing. Although present in the total sample, this pattern was greatly exaggerated here.

For the submissive subgroup the patterns found for mothers were fairly similar to those of the sample in general (not surprising, perhaps, since maternal submissiveness is as appropriate sex-role trait) and involved positive linkages with their children, as long as mothers were not Anxious in their submissiveness. The patterns found for submissive fathers, however, were either new or opposite of those for the total sample, which is again understandable since this is not a common or socially-supported male role.

Correlates of Child Traits

One fruitful way to view these data is to take each child trait and look at the associates in the parents' personalities. These will be approached from the standpoint of the groupings of the second-order factors.

The second-order factor of Extraversion versus Introversion (social inhibition) had many more correlates for girls than for boys, and was for both children linked substantially more to mothers' than to fathers' traits. For

daughters, Extraversion was related to fathers' high Extraversion but low Anxiety (and low Poor Parenting). In particular, on the primary traits fathers of Extraverted girls tended to be adventuresome, socially bold, not easily threatened, warm, group-oriented; and self-assured, placid, insensitive to social approval/disapproval, traditional, and conventional (H+, A+, O-, Q1-). Daughters' Extraversion was strongly related to mothers' Independence and Cortertia, and slightly to mothers' Extraversion and Anxiety. In particular, on the primary traits mothers of these girls tended to be dominant, opinionated, suspicious, tough, unsentimental, assertive, socially unattuned; and, apprehensive, sensitive, insecure and concerned (E+, L+, I-, O+, N-). This might indicate a situation where the mother is dominant but not very nurturant (being somewhat hostile and anxious), and the daughter, perhaps, turns more to the father's extraverted, non-anxious style. On the other hand, since the mean scores of women on these traits (E, L, and I) are significantly lower for women than men in the general population, it may well be that these women were not domineering and tough, but merely not submissive, conforming, nor emotional. Thus, they may be providing a model of female strength and independence, rather than being so extreme as to be non-nurturant.

Some of the first-order traits that make up Extraversion in the child had a similar configuration of parental correlates. Factor A (warm, soft-hearted) in daughters was

related to low Anxiety and high Interpersonal Facilitation in fathers (primary traits showed them to be self-controlled, organized, consistent, emotionally stable, calm, interpersonally spontaneous and naive, reserved); and to Extraversion and Cortertia in mothers (enthusiastic, uninhibited, expressive, assertive, independent, emotionally sensitive, disciplined, self-controlled). Daughters' factor F (surgent, happy-go-lucky, impulsive) correlated with virtually no trait of fathers' overall. Factor F was correlated with Independence and slightly with Creativity and Self-Actualization in mothers; on primary traits they tended to be assertive, imaginative, independent-minded, adventuresome, socially naive and withdrawn, emotionally stable and relaxed. Factor Q_2 (which shall be considered here in the negative direction since it contributes to Extraversion--socially dependent, a group follower) in daughters is associated with social naivete, unpretentiousness and spontaneity (versus social ambitiousness and shrewdness) in fathers; and with assertiveness, unconventionality, independence, and social naivete in mothers. Thus, we have a picture of girls' Extraversion or social outgoingness as strongly related to mothers' strength, independence, toughness, and outgoingness; and related much more weakly to fathers' stability, calmness and outgoingness.

Boys' Extraversion had far fewer parental correlates, although more with mothers than with fathers. Sons'

Extraversion was related only to fathers' tendency to be practical, self-confident, and resilient; and to mothers' Extraversion, low Anxiety, low Neuroticism, and high Self-Actualization and Creativity (primary traits were adventuresome, socially bold, uninhibited, happy-go-lucky, self-assured, resilient, emotionally mature, insensitive to others approval/disapproval).

Two other traits that contribute to Extraversion showed similar patterns. Boys' factor A (warm, outgoing) was most strongly related to fathers' traits, especially to fathers' traits of Extraversion and low Cortertia (feeling-oriented, emotional): Primary traits were warm, outgoing, adventuresome, group-oriented, socially dependent conventional, emotionally sensitive, socially aware and shrewd. Boys' factor A was related to low Anxiety and slight Extraversion in mothers: Significant primary traits were self-assured, resilient, emotionally stable, rule-bound, and outgoing. Thus, boys' warmth seemed to be related to emotionality and sociability in the father, and to stability and sociability in the mother. Boys' factor F (uninhibited, happy-go-lucky, impulsive) was related to fathers' Independence and low controls (suspicious, prefers to work alone, undisciplined, follows own urges, uncontrolled, anti-social attitudes, immature). This trait was related to Extraversion and low Anxiety and Neuroticism in mothers: the primary traits were impulsive, adventuresome, uninhibited, undisciplined, and

self-assured. Thus, factor F, which is a kind of impulsivity, seemed to be related to some immaturity, undisciplinedness, and impulsivity in both parents, and thus, perhaps, to a lack of consistency or discipline in dealing with their children.

Overall, the parental correlates of boys' Extraversion was different from those of girls': mothers, while still outgoing, were not so tough and Independent, but more uninhibited, fun-loving and confident; while fathers were similarly calm, controlled and confident, but more emotional dependent, and sociable. Thus, both parents were less independent (while still being controlled and stable) for Extroverted boys than girls. Thus supports the conception based upon sex-roles that Extraversion is important and ideal in girls (and hence associated with a strong, independent mother), but less important or esteemed in boys (and thus occurred only when parents, especially fathers, were particularly socially-oriented or dependent).

We now turn to the second-order traits of Anxiety and Neuroticism. Although boys' Anxiety had relatively few parental correlates, Neuroticism was one of the most important overall traits for boys, particularly in relation to their fathers' personalities. Boys' Anxiety was related to fathers' Anxious and Neurotic Introversion (primary traits included withdrawn, inhibited, easily-threatened, retiring, socially clumsy/unattuned, worried, tense, frustrated), and

to mothers' timid low Cortertia (shy, feeling-oriented, withdrawn, emotional). In this case, both parents were withdrawn and intropunitive, with fathers being anxious and mothers emotional. This pattern was even stronger in boys' Neuroticism, which was very strongly associated with fathers' Introverted, Dependent, Neuroticism: Significant primary traits included cold, withdrawn, preferring to work alone, inhibited, self-deprecating, cautious, serious, brooding, submissive, conforming, dependent, insecure, worried, in turmoil. These fathers were very introverted, inhibited, intropunitive, conforming and neurotic, and appear to be particularly conflicted in their relations with people, since they were extremely withdrawn yet conforming and submissive. Although there were far fewer correlates of boys' Neuroticism with mothers' personalities, the pattern there showed a similar Introverted, emotional, Neuroticism: Mothers' tended to be inhibited, withdrawn, serious, retiring, apprehensive, insecure, submissive, emotional, depressive, immature, and poorly controlled.

Thus, in the case of Neurotic sons both parents were very socially withdrawn, inhibited, intropunitive and conflicted. Apparently these sons lacked good parental models for how to deal with people or with his own feelings. The consistent message was that people are dangerous and should never get very close, that feelings are dangerous and should be inhibited, and that the world is a terribly frightening,

threatening place. Another way to look at this situation is that both parent personalities showed great strain and emotional neediness, and could hardly have resouces available to meet the child's needs very well. However, the fact that these parent traits were not those found to correlate with Anxiety and Neuroticism in girls, indicates an important difference in the mechanisms at work. That the correlations with fathers' traits were so much stronger than with mothers' traits, may indicate sex-role modeling; and this model of an introverted, intropunitive, neurotic male would certainly conflict with the culturally dominant expectations and values. Another possible explanation is that intropunitive, introverted people may treat girls differently than boys. Although hostility is not expressed directly in such people, it is often expressed more subtly and indirectly, such as in the image of the man who is cowed by his boss but comes home and kicks the dog. Perhaps this sort of person transfers his/her inhibited hostility to boys, but not to girls, who may be seen as helpless and harmless. In any case, the finding that Neuroticism was one of the two most highly correlated traits in boys, and that the same pattern occurred across many of the different subgroupings (eldest, youngest, child, adolescent, etc.), indicates that some strong influences are at work here.

These results are supported by two studies (Karson and Markenson, 1973; and Moffitt, 1968) of the personalities

of parents of boys being seen for "personality problems" (classified as "anxiety reactions," "adjustment reactions," "passive-aggressive," and "passive-dependent," rather than "conduct problems"). Although results were given only for mothers and fathers combined, they involved a configuration of traits very similar to those found here: withdrawn, silent, prefers to work alone, suspicious of others (F-, H-, Q_2-, L+); inhibited, easily-threatened, cautious, serious, submissive, conforming (H-, F-, E-); apprehensive, insecure, distressed, frustrated, unstable, poorly controlled (O+, Q_4+, C-, Q_3-, G-). Since Neuroticism was behaviorally defined in these studies, this adds considerable validity to the trait definition of boys' Neuroticism and its parental correlates.

This conclusion is also supported by the results for the second-order factors of Independence and Creativity in boys. Creativity was associated with precisely the opposite pattern of traits than that associated with Anxiety and Neuroticism. Fathers showed Extroverted, non-Neurotic traits, including sociable, socially bold, likes being around people, good group follower, attuned to social approval, socially aware and shrewd, relaxed, unworried, disciplined. These boys' mothers' personalities showed fewer but similar correlating traits: socially shrewd and polished, outgoing, controlled, disciplined, unemotional. Since for the Creative boys both parents were controlled and fathers were warm and sociable, these results would seem to be supported by the

earlier-cited results of Bayard de Volo and Fiebert (1977) that found creativity to be negatively related to both parents' authoritarianism (California F Scale).

Similarly, boys' second-order fact Independence (which actually involves a withdrawn, loner-type, extrapunitive style) was associated with Introverted, apprehensive fathers (primary traits included cold, withdrawn, prefers to work alone, socially unattuned and clumsy, timid, worrisome, suspicious, unstable, inhibited, depressive, and immature), and with very little in mothers (socially unaware and clumsy, controlled, creative). This indicates the influence of the mothers' personality; it seems that having just one of the parents be a less neurotic, more healthy person, was associated with a significantly less intropunitive (in fact, extrapunitive), less anxious, and slightly less introverted style in the son. Thus, regardless of the fathers' model, the son apparently learned from his mother some ways of interacting with people, of dealing with his own feelings and needs, and of asserting himself in the world.

Similar patterns are evident in many of the primary traits that contribute to Anxiety and Neuroticism in boys. Factor H (adventuresome, socially bold, not easily threatened), which contributes negatively to Anxiety and Neuroticism, was associated with fathers' low Anxiety and Neuroticism and, less strongly, with fathers' Extraversion (calm, relaxed, confident, stable, disciplined, assertive, adventuresome,

socially shrewd, calculating, and concerned with approval); and less strongly, with mothers' unemotional Independence (tough-minded, socially shrewd and polished, assertive and criticizing). It seems that both parents conveyed a feeling of lack of fearfulness or threat in the world which engendered the same in their sons, perhaps through modeling, through applying fewer inhibitions, and by not surrounding the child's daily behaviors with anxiety, which many theorists believe develops through something akin to social contagion.

Similar patterns were found with factors O and J. Factor O (apprehensive, guilt-prone, insecure, worrisome), a very strong contributor to Anxiety, was related to Introverted, Dependent, Neuroticism in fathers (withdrawn, prefers to work alone, serious, brooding, socially fearful and clumsy, submissive, conforming, easily upset, apprehensive, insecure, worrisome, self-depreciating), and to Introverted emotionalism in mothers (feeling-oriented, worrisome, guilt-prone, timid, reserved, submissive, conforming). Factor J (guarded, withdrawn, obstructive, internally restrained), which contributes more to Independence than Anxiety, showed a similar pattern. Fathers revealed a strongly Introverted, conflictedly Dependent, Neuroticism: primary factors showed them to be socially withdrawn, aloof, suspicious, inhibited, feels easily threatened, submissive, emotional, worrisome, emotionally immature and unstable, rejecting social norms and obligations. Very few mothers' traits

were associated with boys' J; there was a slight correlation with low Anxiety factors of disciplined, moralistic, controlled, submissive. This pattern is quite similar to that of Independence given above.

Boys' factors Q_2, Q_4, and D (which also go into the make-up of Neuroticism) showed a basically similar pattern of parental correlates. Factor Q_2 (prefers to work alone, self-sufficient, seclusive) was associated with Introverted Neuroticism in fathers (the primary traits included silent, serious, introspective, cautious, prefers to work alone, seclusive, submissive). Mothers' Introverted emotionalism also linked to this trait: primary traits included withdrawn, serious, silent, brooding, inhibited, conforming, controlled, depressive, worrying. Here again, these parents were both distant, inhibited, intropunitive, and anxious. Factor Q_4 (tense, frustrated, driven, in turmoil), a strong contributor to Anxiety, was correlated with Introversion and acting-out in fathers (seclusive, distrustful, task-oriented, socially unaware and clumsy, naive, disregards standards and obligations, impulsive), and with only one factor in mothers (socially unattuned and clumsy, lacking social insight, naive). Here there were generally very different factor patterns for mothers in the several subgroups (such as Warm Parent, Cold Parent, Dominant Parent), but the basic pattern for fathers, of being distant, introverted and poorly controlled was still present, and both parents were strongly socially

unattuned and naive, perhaps indicating little understanding of children or their motives or needs. This could create a fairly frustrating situation for a child, especially with poorly controlled, acting-out fathers. Factor D (overactive, impatient, demanding, impulsive) in boys was associated with a similar pattern of a strongly Introverted, inhibited father (primary factors included withdrawn, prefers to work alone, socially unattuned and clumsy, absorbed in inner ideas, cautious, conscientious, serious, easily-threatened, distrustful, task-oriented), and a distant and anxiously emotional mother (emotionally sensitive, insecure, attention-seeking, emotionally labile, worried, apprehensive, socially unaware and clumsy, withdrawn). Here both parents were distant and anxiously self-absored, perhaps leaving the child with little direction or attention.

Three final primary factors which contribute strongly to low Anxiety, Factors C, G, and Q_3, deserve special attention since they are often considered to be central to character structure (being called ego strength, superego strength, and self-image respectively), and because they show somewhat different patterns of parental correlates. Factor C (emotionally stable, mature, controlled--ego strength) in boys showed a pattern fairly similar (but, of course, inverted) to the general one for Anxiety and Neuroticism. Although there were relatively fewer correlates with fathers' than with mothers' traits, both parents of ego-strong boys showed an extrapunitive, slightly extroverted and uninhibited

pattern: Fathers' primary factors included domineering, assertive, willful, suspicious, confident, forceful, impulsive, independent-minded; while mothers' traits included dominant, assertive, willful, suspicious, forceful, socially bold, uninhibited, adventuresome, tough-minded, independent, unemotional. Certainly these traits are opposite of those for Neuroticism and Anxiety, and the implicit communication of these parents to their children about the dangerousness of the world, other people and their feelings, also appears to be opposite.

Factor G (conscientious, moralistic, disciplined--superego strength) showed a somewhat different pattern, involving fathers' traits almost exclusively. These fathers were highly Extroverted, non-Neurotic, and socially shrewd: primary traits included warm, outgoing, kind, generous, likes to be around people, socially bold, adventuresome, gregarious, carefree, unworried, high-spirited, socially attuned, ambitious, and calculating. The extrapunitive elements were absent. These results support the idea that the boy identifies with and internalizes the fathers' values and ideals when the father is warm, close, and confident. The important additional element of social awareness and ambitiousness might contribute both to the father's understanding of the boy's needs and motives and to the father's concern with instilling socially approved behavior in his son. The mechanism here appears to be different from the

modeling of attitudes, inhibitions, or interpersonal behavior that was hypothesized with many of the previous traits, for the fathers of these moralistic, disciplined sons were not themselves moralistic and disciplined (G+), but were interpersonally close and responsive, uninhibited and impulsive, and confident--hence the hypothesis of identification and internalization. This pattern was also found only in the childhood age range.

The next and final trait considered in connection with Anxiety, Factor Q_3 (controlled, persistent, follows clear, consistent, socially-approved self-image--in extremes, compulsive), showed a more imitative pattern and these linkages occurred mainly in the adolescent age range. The associated traits in fathers were controlled, persistent, follows clear self-image, socially aware and ambitious, concerned with practical, physical realities, realistic, unemotional; while traits in mothers included emotionally stable, controlled, persistent, moralistic, driven. Thus, both parents showed similar qualities of control, perseverence, organizedness and concern with socially-appropriate goals, although the parallel was much stronger between fathers and sons. In addition, in the childhood age range, where such control is perhaps unnatural, this trait was independent of fathers' traits but was associated with emotional (low Cortertia) Introversion in mothers: Primary traits included submissive, conforming, absorbed in inner ideas, depressive,

serious, silent, introspective, inhibited, threat sensitive, withdrawn. This pattern is similar to the maternal one associated with Anxiety and Neuroticism in boys.

Thus, it appears that the present results support the earlier-cited findings (Gecas et al., 1974) that self-concept, at least in the pre-adolescent years, is more mirror than model--is more a result of the parents perception and treatment of the child than a direct modeling of the parents self-image. For factors C (ego strength), G (super-ego strength), and Q_3 (controlled self-image), at least in the childhood age ranges, these child traits were entirely uncorrelated with the same trait in the parents; their linkages were to other parental traits. In the adolescent age range, some direct modeling was seen in sons' positive correlation with fathers only on Q_3, and with mothers only on G.

If we now turn to the parental correlates of Anxiety and Neuroticism in girls, we find an entirely different pattern entailing far fewer linkages. Anxiety in daughters was related to certain extrapunitive and low self-control factors of Independence and Extraversion in fathers: Primary traits included domineering, unconventional, critical, aggressive, self-centered, socially bold, unrestrained, impulsive, emotionally unstable. Mothers of Anxious daughters conveyed a very different and somewhat inconsistent pattern: Warm, insecure, guilt-prone, conflicted, combined with tough, cynical, expects little from people, denies needs, concerned

with practical realities, shows little feeling, task-oriented. It appears that these girls had role models who were anxious, insecure and needy, but who denied her own needs and feelings, made few demands, and accepted an emotionally abusive and poorly-controlled husband. Thus, Anxiety in girls was related to a situation where not only were the parents probably unable to meet many of the child's emotional needs, or to model competent ways to deal with needs, but where the mother modeled the following sorts of messages: feelings and needs are scary and dangerous and you should not have them; other people will never be able to meet your needs, so its hopeless to ask; the world is a very dangerous, threatening place; the best lot a woman can expect in life is to merely survive and accept abuse from men, who are bold, powerful, and poorly controlled.

Neuroticism in girls showed fairly similar maternal correlates, except that there mothers were inhibited, intropunitive, and socially dependent, in addition to being anxious and tough-minded: Primary traits included warm, submissive, easily-threatened, conforming, unsentimental, emotionally tough, concerned with practical realities, unstable, impulsive. Fathers' related traits were quite different across subgroups (such as Eldest Child, Youngest Child, Warm Parent, Cold Parent) except for a few traits: socially shrewd, ambitious, and manipulative, emotional, unstable, impulsive. Again then, both parents appeared unstable,

immature and needy, with the mother again modeling a female role of self-effacement and inadequacy, of needs as dangerous and never to be met, and of submission and dependency on men, who are immature and manipulative.

Overall there were far fewer parental traits related to girls' Anxiety and Neuroticism than to boys'. This would imply either that parents were not as importantly related to the development of Anxiety in girls (and that other, more general, cultural influences were), or that there were a great variety of parental patterns associated with girls' Anxiety and Neuroticism.

This pattern was again supported by the finding that the constructed second-order factor of Creativity in girls had just the opposite parental correlates of Anxiety. Fathers of Creative girls were not extrapunitive but rather slightly intropunitive for males: non-dominating, accepting, quiet, retiring, conscientious, introspective. In some of the other subgroups (Eldest Daughters, Warm Fathers, Submissive Fathers) daughters' Creativity was also related to fathers' low Anxiety: Emotionally mature, principled, self-controlled, accepting, relaxed, strong ethical standards. Mothers' traits associated with Creative daughters showed emotionality (instead of toughness) coupled with controls: emotionally and esthetically sensitive, feeling-oriented, self-controlled, disciplined, conscientious, and consistent. Thus, daughters' Creativity was associated with an opposite

configuration of emotional and sensitive mothers, non-extrapunitive fathers, and maturity and self-control in both. As with the boys, this would seem to support the earlier-cited results of Bayard de Volo and Fiebert (1977) that found creativity to be negatively related to both parents' authoritarianism (California F Scale).

Before turning to some of the first-order factors that make up Anxiety and Neuroticism, it is worthwhile to examine the second-order factor of Independence, which bears some resemblance to Anxiety in terms of parental correlates. For girls, this was one of the three factors most highly linked to parents' personalities. As mentioned before, Independence involves qualities of withdrawal, self-centeredness, and disregard, if not hostility, for others, in addition to self-sufficiency, boldness, and creative individualism. Thus, it is not surprising that the correlates of Independence in girls were the same extrapunitive ones in fathers. Fathers were domineering, critical, dogmatic, independent-minded, bold, uninhibited, and emotionally immature and unstable. In terms of age, it is interesting to note that as the child became older and independence was perhaps more appropriate, the correlates in fathers' personalities shifted to an emphasis on Extraversion (socially bold, uninhibited, outgoing, imaginative) with less emphasis on the extrapunitive factors that predominated in the correlations with Independence in childhood. The mothers of Independent girls

were similarly emotionally tough and poorly controlled like the mothers of Anxious and Neurotic girls, but more extrapunitive; they were unemotional, tough-minded, dominating, suspicious, and critical, but uncontrolled, undisciplined, anxious, and disregarding of obligations.

In adolescent girls Independence had the added mother correlate of Anxiety (worried, insecure, apprehensive, guilt-prone) in addition to this tough dominance. This suggests a theory of reverse causation: Mothers of Independent daughters might have been made anxious by their daughters' challenging, uncontrollable, or adventuresome spirit at this age of near-adult capabilities and sexuality.

Thus, it seems that girls with this quality of Independence had two extrapunitive parents (instead of just one as in the case of Anxiety) who were also poorly controlled, and perhaps these girls found it necessary to develop self-sufficiency and distance from this environment. The associated traits in fathers were almost identical to those of Anxious girls'. However, when mothers were assertive and powerful (extrapunitive) in addition to the poor self-control and tough, need-denying qualities seen in mothers of Anxious girls (or intropunitive qualities seen in mothers of Neurotic girls), it appears that girls, instead of becoming anxious or intropunitive themselves, learned extrapunitive attitudes and ways of dealing with the world, although still lacking strategies for dealing with more intimate areas of

living or their own needs. It is again noted that this trait of Independence was one of the most strongly linked to parent personalities for girls, being much more strongly linked for girls than it was for boys, and also linked to almost opposite traits in the fathers and quite different traits in the mothers.

Many of the first-order factors that contribute to these second-order factors of mental health or ill-health show somewhat similar parental patterns. Girls' factor C (ego strength, emotional stability) was correlated with fathers' lack of extrapunitiveness and with some factors of low Anxiety: non-dominating, accepting, egalitarian, generous, relaxed, stable, non-irritable. Mothers of ego-strong daughters were emotional and sensitive, but also emotionally stable, mature, unworried, and trusting (this combination of emotionality plus strength gave mothers a significantly high score on Creativity also). Thus, factor C, the strongest contributor to low Anxiety, showed a similar pattern of low extrapunitiveness in the father, emotionality in the mother, and stability and relaxedness in both. Factor H (adventurous, socially bold, uninhibited), which contributes both to low Anxiety and to Extraversion, correlated with very little in either parent: fathers were serious, introspective, cautious (non-impulsive) and socially naive, trusting, and unpretentious; while mothers were emotionally stable and self-controlled as well as imaginative and absorbed in ideas.

Again, we note some elements of emotionality and non-manipulativeness along with stability.

Most of the remaining factors that contribute to Anxiety and Neuroticism in girls have fairly few parental correlates but show a similar pattern. Factor D (overactive, impulsive, demanding) was correlated with fathers' qualities of instability, anxiety, tension, suspicious insecurity, and detachedness (a slightly paranoid picture); and with mothers' qualities (mainly for adolescent girls) of anxious worry, social clumsiness, and cynical hardness. Here both parents, in addition to the usual factors linked with girls' Anxiety, were somewhat socially anxious, detached and inept, perhaps resulting in the girls' feeling a lack of direction, contact or trust from the parents.

Factor J (withdrawn, socially intimidated, obstructive) in girls was correlated with some degree of conflicted dependency in fathers: attention demanding, insecure, indulgent, unstable, guilt-prone, impulsive, critical, preferring to work alone, rejects norms. Mothers were warm and emotional, but uncontrolled, impulsive, rejecting of obligations and responsibility, and complacent. In this constellation both parents were self-centered, emotional and poorly controlled, the father anxiously dependent and the mother unreliable and tending to act out--a situation in which a child might well turn to angry withdrawal.

Factor O (worried, apprehensive, insecure, guilt-prone), a major contributor to Anxiety, was associated with fathers who were emotionally unstable, immature, anxious and withdrawn; and with mothers who again showed conflict about needs, feelings, and closeness: they tended to be warm, socially naive and impulsive, but also to be emotionally tough, unsentimental and task-oriented, while showing signs of instability, low self-control, and some anti-social acting out. It is interesting that this trait and the previous one, J, both of which involve an intropunitive, guilt-prone, internally restrained quality (opposite to say, Factor D, which is more extrapunitive), were associated with warmth or emotionality in the parents (especially the mother of these girls), which perhaps leads to the child's identifying with and internalizing the parental inhibitions and conflicts, and being particularly affected by the parents' inconsistencies, in contrast to the child who never was close to the parents in the first place.

Factor Q_3 (self-controlled, conscientious, disciplined --in the extreme, compulsive) contributes negatively to Anxiety. Self-control in girls, especially in the early age ranges, was associated with low Anxiety in parents, as well as moralistic over-control and social dependency, especially in mothers. Fathers of these girls tended to be socially trusting and dependent, as well as stable, mature, self-controlled and disciplined; while mothers were cold, withdrawn,

submissive, conforming, moralistic, and socially shrewd as well as self-secure and confident. These parents seemed to feel strong, socially-appropriate norms and great confidence and consistency in them. However, as with the boys, these results seem to support earlier research (Gecas et al., 1974) showing that self-concept was more closely related to parents' perception and treatment of the child than a direct modeling of parents' self-concept. Here both factors Q_3 (controlled self-image) and C (ego strength), although showing some correlation with the same trait in one parent, were more strongly related to other parental traits.

The last factor in this group, Q_4 (tense, driven, distressed, frustrated), is a strong contributor to Anxiety, and showed somewhat different parental correlates in childhood and adolescence. In childhood, girls' Q_4 was associated with tough-minded fathers (domineering, cold, suspicious, worried) and with tough independence in mothers (cold, suspicious, dominating, critical, undiscriplined)--both extrapunitive and non-nurturant. In adolescent girls, Q_4 was associated with Anxious fathers (worried, insecure, socially shrewd and manipulative) and somewhat Dependent mothers (warm, submissive, conforming)--again both parents are similar, but this time insecure and more conforming.

These results certainly indicate that traits central to mental health, such as Anxiety, Neuroticism and Creativity, link with different parental traits for girls than for

boys. Furthermore, these traits are much more closely linked to parental traits, or to one particular pattern of parental traits, for boys than for girls, (even though boys and girls show just about equal mean level and variance on these traits), and they are much more strongly linked to fathers' traits than mothers' traits for these boys.

The final second-order trait, Cortertia, denotes an internally-tough, unemotional, dry, alert, cognitive orientation to life, the negative end being a more emotional, feeling orientation to life. Thus, it is not surprising, given our cultural sex role models, that Cortertia was one of the most highly linked traits for girls, and particularly that, as noted earlier, it was generally the negative end (feeling, emotional) that related to healthy traits in girls' parents. Furthermore, in both boys and girls this trait was much more strongly linked to mothers' personalities than to fathers'.

For girls, high Cortertia was related to traits of poor control and extrapunitiveness in fathers, and to anxious, suspicious extrapunitiveness in mothers. Fathers' related traits included domineering, self-centered, independent-minded, aggressive, uncontrolled, impulsive, driven in turmoil. These correlates are similar to those of Anxiety and Independence in girls. Mothers' traits associated with girls' high Cortertia included withdrawn, detached, introspective, depressive, obsessional, cautious, suspicious,

seclusive, socially unaware, insecure, brooding, fearful, uncontrolled, immature, dogmatic, domineering, tough, aggressive, haughty, independent. These mother correlates are somewhat similar to those for girls' Independence or even Extraversion. Thus, both parents were aggressive, conflicted, and poorly controlled, with the mothers being withdrawn, suspicious and worried. That these girls were then aggressive, unemotional, reserved and tough could be explained both in terms of parents modeling strategies and attitudes toward the world, and in terms of a defensive response to a controlling, hostile, unnurturing environemnt. However, how these girls could be controlled and unworried, in association with parents who were both conflicted, worried and poorly controlled, can only be explained in terms of defensive, overcompensating, rigid, over-control, in response to a very inconsistent, poorly-controlled, and abusive environment.

Similar parental correlates were found for girls on three primary traits, factors E, I, and G, which contribute to Cortertia. Factor E (dominating, self-centered, forceful, rebellious) was the most strongly-linked primary factor overall for girls, and was most strongly linked to mothers' traits. Fathers' related traits included aggressive, dominating, unemotional, task-oriented, tense, distressed. Mothers' associated traits included Independent, dominant, dogmatic, self-centered, suspicious, socially unattuned, aggressive, irritable, Anxious, insecure, apprehensive,

unstable. This constellation was very similar to the general one for Cortertia. That the second-order traits of Anxiety, Neuroticism, and Poor Parenting in both parents were associated with this factor in daughters, supports the idea that dominance in girls is not something that is presenting encouraged by healthy parents.

Factor I (tender-minded, emotionally sensitive, dependent, indulgent to self and others), which contributes negatively to Cortertia, showed a similar (but, of course, opposite) pattern of parental correlates. These fathers were generally intropunitive (submissive, accommodating, insecure, socially dependent, accepting, apprehensive, overcontrolled, slightly obsessive)--although, since male norms are so high on these factors, it is likely that these fathers were merely non-extrapunitive, rather than markedly intropunitive. Mothers were also slightly intropunitive and Dependent: warm, socially responsive, conventional, submissive, accepting, trusting, concerned with practical realities, somewhat obsessive and overcontrolled. This pattern was the same, but opposite, of the one above: both parents were non-extrapunitive, controlled, socially affiliative, and emotionally insecure and sensitive. Here, presumably the daughters did not learn extrapunitive strategies (but perhaps some intropunitive ones), were surrounded by models of interpersonal closeness if not dependency (and perhaps by parents who felt the need to keep the child close and dependent),

and by a world that was understanding and sensitive and did not require defensive toughness. This factor also contributes to the second-order factors of Creativity and Neuroticism; this type of parental configuration may allow for the development of sensitivity and creativity, but also fosters closeness, identification, and some intropunitive dependency.

The final factor considered here, factor G (moralistic, perservering, disciplined, dominated by a sense of duty --superego), was not related to any second-order factors. It had very few parental correlates for girls, especially compared with boys, where it was strongly linked with fathers' warmth, social responsivity, and confidence. This trait is consistently higher in females, but is perhaps shaped more by general cultural forces. This hypothesis is supported by the fact that both parent's correlates included only factors that emphasize adherence to social standards. Fathers' traits included insecure, guilt-prone, conforming, worried, moralistic, conscientious, disciplined, dominated by a sense of duty. Correlates with mothers' traits were very few: Socially ambitious and shrewd, self-controlled, strong socially-acceptable self-image. It is also interesting that there was a positive parent/child correlation on factor G only for the cross-sex dyads, mother/son and father/daughter, perhaps supporting a Freudian theory of this trait of superego strength.

Boys' Cortertia (emotionally-tough, dry, alert, cognitive) was associated with more healthy but fewer parental

traits (at least, after the childhood age range). Since norms show boys to be consistently higher on this trait, these results may indicate that emotionally healthy parents influence their sons toward appropriate sex roles in this area, but, since there were so few parental correlates, that this tough, unemotional sex role may also be promoted by other socializing agents than the family. In the childhood age range, where such a highly-controlled, unemotional style is perhaps unnatural, boys' Cortertia was associated with socially-withdrawn, extrapunitive traits in fathers, including socially unattuned, clumsy, and naive, seclusive, preferring to work alone, independent-minded, domineering, aggressive. For the rest of the age range, and for the sample as a whole, boys' Cortertia was linked with fathers' traits of dominant, aggressive, critical, rebellious, socially involved/responsive, socially shrewd/ambitious, non-Neurotic, self-confident, self-controlled. Related mothers' traits were far fewer (and absent for the childhood age range); however in the later age range and the sample as a whole boys' Cortertia was linked to mothers' non-Neurotic toughness and outgoingness. Traits included non-Anxious, emotionally-tough and unsentimental, disciplined, stable, gregarious, adventuresome, socially bold. At least in the older age range then these boys seemingly had models who found the world safe, non-threatening, and uninhibiting; a male model who was non-Neurotic, extrapunitive and socially attuned; and a mother

who also modeled emotional toughness and denial of more delicate feelings and needs. Thus, the sons seem to model (and/or acquire defensively) the fathers' extrapunitive style, and both parents' resilience, confidence, and avoidance of more tender, intimate needs. That this seems to be a more socially approved role for males, is indicated by the association of this trait in the boys with low Neuroticism, low Anxiety, low Poor Parenting, high Self-Actualization, and high Creativity in parents; while for girls it was correlated with the opposite traits, especially in mothers.

The two traits which contribute most strongly to Cortertia, factors E and I, showed similar patterns of parental correlates for boys. Factor E (dominant, aggressive, independent-minded, self-centered) again showed a somewhat different pattern in childhood, when this dominating, confident quality is perhaps less healthy, than in the rest of the sample. In childhood, boys' dominance was associated with dominant, aggressive, impulsive, socially unattuned fathers, and with stable, mature, outgoing, bold, uninhibited mothers. Here the mother was the most stable person, while the father was poorly controlled and extrapunitive--suggesting sons' sex role modeling, as well as perhaps some defensive aggression. In the older age range, boys' dominance was linked to fathers' Extraversion and low Anxiety, as well as extrapunitiveness; Fathers' primary traits included outgoing, socially bold and impulsive, uninhibited, happy-go-

lucky, calm, confident, emotionally stable, dominating, critical, independent-minded. Mothers were similarly Extraverted, but emotionally-tough: outgoing, socially bold and impulsive, uninhibited, unemotional, unsentimental, dominated by a sense of duty, puritanical. This was a very similar pattern to that of boys' Cortertia, except that fathers were more Extraverted and stable. It is worth noting that this is the trait which had the greatest number of correlations for boys. Apparently boys' dominance is highly related to parental traits, and again to healthy ones such as low Anxiety and Neuroticism, and high Creativity and Self-Actualization.

Factor I (emotionally sensitive, tender-minded, dependent, indulgent to self and others) which contributes negatively to Cortertia, was associated with a generally similar (but, of course, opposite) parental configuration; and again showed differences between childhood (when this sensitive, dependent quality is more socially acceptable in boys) and the rest of the age range. The childhood correlates for fathers included Dependent, non-dominating, considerate, conventional, conforming and emotional; while for mothers the related traits included shy, inhibited, threat-sensitive, quiet, conservative, introspective. Both parents were somewhat intropunitive and inhibited, and fathers were socially dependent. In particular, while fathers were somewhat self-abasing they were also giving, but mothers tended

to be self-abasing and needy, perhaps leading to their encouraging dependency in their sons or conveying a very frightening image of the world. For the older age range, these fathers tended to be emotional and Introverted (traits included emotionally sensitive, conventional, socially conforming, withdrawn, prefers to work alone, detached, socially unattuned); while mothers were Anxious, Neurotic, and poorly controlled (worried, suspicious, jealous, socially unaware, uncontrolled, impulsive, self-indulgent, disregards obligations and standards). Thus, once again high factor I (low Cortertia) in boys was associated with less healthy parent traits, especially in mothers, who appeared to convey an attitude of resentful suspicion toward a hostile world.

The only remaining children's traits are two which do not contribute substantially to any of these second-order factors, intelligence (B) and social shrewdness (N). Factor B (fast-learning, abstract thinking, resourceful--achieved intelligence) in both boys and girls was very strongly-linked to parental traits; for girls it had the greatest number of linkages of any of the primary traits, and for boys the second greatest. Clearly, then, this factor was strongly related to environmental (social) factors. For boys almost all of the linkages occurred in the childhood age range: Fathers of intelligent boys tended to be bright and aggressively Independent (intelligent, disciplined, moralistic, absorbed in inner ideas, imaginative, challenging conventions,

critical, bohemian, independent-minded, assertive); while mothers tended to be bright, Creative loners (intelligent, independent, prefers to work alone, seclusive, socially unattuned, challenging conventions, emotionally sensitive, tender-minded). Here, both parents were aggressively intellectual and creatively withdrawn and self-absorbed (Independence and Creativity were linked in both parents), and perhaps this more intellectual, emotionally-dry, atmosphere influenced the child to develop in this direction (instead of, for instance, developing in more social directions).

For girls this achieved intelligence was also linked more strongly with parental traits during childhood, especially the mothers' traits. Mothers tended to be bright, aggressive, emotionally sensitive, and somewhat controlled; while fathers were bright and somewhat emotionally tough (reserved, independent, absorbed in inner ideas, socially unaware, challenging conventions, moralistic). This trait correlated with Creativity and Self-Actualization in both parents, but fathers were more tough and unemotional, while mothers were emotionally sensitive but assertive.

Finally, factor N (socially aware, socially insecure, socially ambitious, socially shrewd and calculating), had very few parental correlates, and these tended to be very different in the adolescent age range than the rest of the sample. For boys this social shrewdness was associated with some Introversion and Anxiety in fathers (shy, threat-

sensitive, inhibited, apprehensive, worried, insecure, socially unaware and unpoised), but with Creativity in mothers (emotionally and artistically sensitive, gentle, indulgent, trusting, controlled, disciplined, strong socially-approved self-image, socially unattuned). On a whole, these fathers were less stable, confident or socially competent than the mothers. Perhaps this kind of parental differential left the son feeling socially insecure like his sex role model, but motivated to learn to do better by the maternal example and support. This trait was the only one which showed consistent negative parent/child correlations for sons, and they occurred most strongly for the father/son dyad. This seems to indicate some type of compensation mechanism, where, if the parent is socially unaware and clumsy, the child learns (the difficult way) to be competent in these situations; whereas, if the parent takes care of social propriety for the child, then the child at least at this age does not have to learn to. This hypothesis supported by the results for the adolescent age range where the socially shrewd sons then had parents who were similar, not opposite on this trait; as sons approached adulthood and had important, independent relationships, parents' social skills could not compensate for their sons'. Both parents of socially shrewd boys were Extraverted, but fathers in particular were outgoing, socially bold, adventuresome, dominant, socially attuned, shrewd, and ambitious. This appeared to be more

of a case of direct modeling.

For girls, this trait had very few parental correlates--none for either parent in the childhood age range. Overall it was associated only with some elements of Anxiety in fathers: undisciplined, inconsistent, tense, frustrated, driven. This picture of poor control and some hostility could be easily understood to cause social detachment and development of social shrewdness and manipulativeness. For socially shrewd adolescent girls, fathers continued to be tense, frustrated, poorly controlled, social conforming and timid. Mothers showed more Extraversion and control, but were also socially conforming: impulsive, enthusiastic, adventuresome (within a context of social conformity) self-controlled, moralistic, confident, following a strong socially approved self-image. Thus, although apparently very different patterns were associated with girls' social shrewdness in different sub-groups, there were some consistent indications of a sex role model who showed over-controlled concern with social approval, and need for skills to deal with a poorly controlled spouse.

Correlates of Healthy Parents

Another interesting way to look at these data is to discover what children's traits were associated with healthy parent traits. The healthy parent traits used in examining this question were low Anxiety, low Neuroticism, low Poor Parenting, high Creativity, high Self-Actualization, and

high Interpersonal Facilitation. The child traits linked with these parent traits were sometimes the same for both girls and boys, but also showed important differences. For both sons and daughters, mothers' healthy traits were linked with child traits of carefree enthusiasm (F+) and emotional stability or ego strength (C+). Seemingly, the female parent was the source of the female sex role trait of Extraversion (F+), while, in the case of the second trait, mothers spend much more time around the child in the early years when presumably the central trait of ego strength develops. Both boys' and girls' warmth (A+) and adherence to a socially-approved self-image or self-control (Q_3+) were linked with healthy traits of the opposite sex parent. Presumably then the opposite sex parent for both children was important in the development of these two central traits of positive/negative social response and positive/negative self-image.

Both sons' and daughters' low Neuroticism, high Creativity, and unworried self-confidence (O-) were related to healthy traits of fathers; and somewhat different traits were linked here for daughters (Q_4-: relaxed, non-irritable, unfrustrated; and D-: patient, undemanding, not distractable or overactive) than those linked for sons (G+: strong superego, conscientious, persevering, concerned with rules and standards; and J-: outgoing, vigorous, not withdrawn or guarded). It would seem then that health and stability in

fathers may have been related to sons' internalization of their standards and ideals, rather than becoming guarded, resentful and anti-social. However, for girls the important element from fathers here may have been a lack of frustration of needs for attention and involvement. It is interesting though that both children's guilt-prone Neuroticism was most heavily linked with unhealthy traits of fathers' rather than mothers'. Achieved intelligence (B+) was linked with healthy traits of both parents for both sons and daughters.

Where there were differences between the girls' and the boys' traits that were associated with healthy parent traits, these showed strong sex role influences. Strong linkages to healthy parental traits were found for high Cortertia (unemotional, cognitive, internally tough, unsentimental) for boys, but for low Cortertia (emotional, artistic, dependent) for girls; and these were both most strongly linked with healthy traits of mothers'. Apparently mothers were most important in both children's development of the opposite sex role traits in the area of emotionality. Similarly consistent with sex role, healthy traits in both parents were associated with submissiveness, conformity, social dependency and shyness (E-, low Independence) in daughters, especially in adolescence; while for boys, the mothers' healthy traits were linked with dominance, aggressiveness, and bold Independence (E+, high Independence), although healthy traits in fathers were linked with sons' Dependence

in the childhood age range and for warm fathers. Finally, only for boys was Extraversion consistently linked with healthy traits in mothers; while for girls these were often linked with shy Introversion. Thus we may conclude that although healthy parents' traits were consistently linked with low Neuroticism, intelligence, and some Extraversion factors in both children, there were large sex-role-appropriate differences between boys' and girls' traits in areas of dominance/submission, independence/dependence, and emotional/unsentimental. Apparently healthy parents were substantially involved in the development of sex roles in their children.

CONCLUSIONS

Marital Data

The marital data strongly support a theory of husband/wife similarity (rather than complementarity or dissimilarity), particularly on traits that are directly related to interpersonal functioning such as dominance, submission, Extraversion/Introversion, and Dependence/Independence. These same traits had the largest number of overall husband/wife intercorrelations, implying that similarity on them was most important to marital partner choice. The Anxiety factors, however, showed few, if any, husband/wife intercorrelations, implying that they played little role in marital choice.

Only the second-order factor Cortertia showed some indications of husband/wife complementarity. This trait of emotionality versus dry, cognitive, tough-mindedness, seems primarily a way of relating to the world rather than a trait of interpersonal functioning. Thus, it seems logical that two people who were at different poles on this trait, both of which are useful in different aspects of life, might complement each other as marital partners.

Parent/Child Data

One central finding here was that the parent/child personality linkages were different for each of the four parent/child dyads; for example, girls' Neuroticism was linked to different traits in fathers than in mothers, and boys' Neuroticism was linked to a different set of parental patterns. In addition, the traits that were most important in parent/child linkages for girls were different from those that were important for boys. Consequently, the results for each dyad will be discussed separately.

Although these conclusions are based on correlational data from which causation cannot be determined, the hypotheses made here are most often in the direction of parent to child, because of the author's bias.

The father/son dyad showed about twice as many linkages as the other dyads, and these occurred particularly in the childhood age range and for warm fathers. The pattern here strongly emphasized sons' Introverted Neuroticism and, its near opposite, Creativity; including the primary traits of A- (cold, withdrawn), H- (shy, easily-threatened), E- (submissive, conforming), G- (disregarding of rules and standards, antisocial), J+ (withdrawn, obstructively individualistic), O+ (insecure, worrisome, guilt-prone), and Q_4+ (tense, driven, overwrought). These traits of Neuroticism in sons were linked with somewhat similar traits of Introverted, inhibited, Neuroticism in fathers: A- (cold,

withdrawn), F- (quiet, introspective, inhibited), H- (shy, easily-threatened), Q_2+ (seclusive, prefers to work alone, independent), E- (submissive, conforming), and O+ (guilt-prone, insecure, worrisome). This pattern, plus the fact that this dyad showed the greatest number of positive, same-trait correlations (similarities), which were largely on these same traits of Neuroticism, strongly suggest a modeling effect.

The mother/son dyad also emphasized sons' Introverted Neuroticism, however the results here suggest less direct modeling and more of a nurturing effect. Although associated maternal traits included Introversion and Neuroticism, more strongly linked to boys' Neuroticism were low Cortertia (emotional, sensitive) and the primary traits of F- (quiet, inhibited, introspective), H- (shy, easily-threatened), and O+ (worried, insecure, guilt-prone). The main same-trait similarities here were on Extraversion and one of its major components F, although Neuroticism was also marginally significant (two-tailed $p < .10$).

In the adolescent age range there was a clear shift in sons' importantly-linked traits from Neuroticism to Cortertia. Sons' traits of Cortertia and two of its components, I- and E+ (unemotional, tough-minded, objective, realistic; aggressive, competitive, domineering), linked strongly with fathers' low Neuroticism and Extraversion and mothers' low Neuroticism, low Anxiety and Extraversion.

Since these same parental traits were linked with sons' low Neuroticism in the total sample and in childhood, this suggests that here in the adolescent age range the healthy parents became involved in influencing their sons toward sex role traits of unemotional tough-mindedness and aggressiveness.

The great emphasis on Neuroticism and Creativity occurred only for boys. Since boys and girls showed almost equal means and variances on this trait, it appears that, while boys' Neuroticism was strongly linked to parental factors, girls' Neuroticism was seemingly related to more general cultural factors.

For girls, the traits most importantly linked to parental traits included Independence and Cortertia, and it was their lower poles (Dependent and emotional, feeling) that were related most often to healthy traits of parents'.

Daughters had more correlations with mothers than with fathers, and by far the greatest number of mother/daughter linkages occurred in adolescence. Here Introverted and non-Anxious Cortertia (emotional, sensitive feeling; E-: submissive, conforming; L-: trusting; N+: socially aware and polished; O-: unworried, self-confident, non-conflicted) in mothers was linked with Introverted but non-Anxious Dependency in daughters (A-: withdrawn, aloof; F-: quiet, inhibited, introspective; E-: submissive, conforming, dependent; Q_3+: follows consistent socially approved self-

image, controlled; D-: stable, stoical, phlegmatic). This suggests a picture of mothers who had accepted the submissive, sensitive, emotional, female sex role influencing daughters toward internalizing a somewhat similar sex role which, however, emphasized Dependency and inhibition rather than emotionalism. This was also the strongest mother/daughter pattern in the total sample, but was outstanding at adolescence. Although the mother/daughter dyad did not show as great a number of same trait positive correlations as some other dyads, the similarities that were found were on these same traits: emotional/cognitive (Cortertia), Extraversion/Introversion, and dominance/submission.

Daughters' non-Anxious Dependency was also central in their linkages with fathers. However these daughter traits were linked with similar but inappropriate sex role traits in fathers of Introverted, inhibited Dependency: submissive, conforming (E-); cold, withdrawn (A-); quiet, introspective, inhibited (F-); and shy, retiring, easily threatened (H-). Thus, if both parents followed their sex roles, daughters were apparently influenced in opposite directions by the two parents--semingly a conflict-inducing situation.

For eldest daughters the father/daughter dyad had by far the greatest number of linkages. Apparently if the first born was a girl, the father was very importantly involved (compared with first-born sons or later-born daughters). The above pattern of daughters' non-Anxious Dependency linked

with fathers' Introverted Dependency was also strong for eldest daughters, but there was an additional pattern of positive linkages between fathers' and daughters' central character traits: There were strong positive same-trait correlations (similarity) between fathers' and eldest daughters' ego strength (C), superego strength (G), self-control or self-image (Q_3), and free-floating anxiety or tension (Q_4); as well as cross-trait intercorrelations between fathers and daughters on these traits. Thus, fathers appeared to be very central to their eldest daughters' development of character strength, and this seemed to involve largely direct modeling or similarity.

One interesting finding was that when the eldest child was male, these sons' low Anxiety and low Neuroticism linked with inappropriate sex role traits in both parents. Eldest sons' low Anxiety and low Neuroticism were linked with fathers' warmth, soft-heartedness and accessability of emotions (A+); social dependency, liking to be around people, and following group approval (Q_2-); and sensitive, emotional, feeling orientation to life (low Cortertia). With regard to mothers, eldest sons' low Anxiety and low Neuroticism were linked with Extraversion; dominance and aggressiveness (E+); social boldness, adventuresomeness, and fearlessness (H+); and dry, unsentimental, cognitive orientation to life. Although some aspects of these patterns were present in the general sample, they were the only linkages in this subgroup.

Thus, it seems that eldest sons' emotional health was associated with both parents' being contrary to their respective sex roles, which suggests a poor outlook for the mental health of eldest sons, if most adults follow their sex roles.

The youngest child subgroup displayed basically different patterns from those of the general sample. For youngest daughters, fathers' Dependency was related to daughters' Independence (instead of to Dependency, as in the general sample), and mothers' low Cortertia or emotionalism was related to daughters' Independence (again, opposite of the general sample). Seemingly the usual patterns of parent/child interaction were either missing or opposite for youngest girls. They also bore the least same-trait similarity to either parent of any daughter subgroup. Thus when the youngest child was a girl, they seemed to be less socialized to their sex role (perhaps opposite of their sex role) than other daughters.

Youngest sons showed the least parent/child correlations of any dyad in any of the subgroups. This suggests that parents were not so involved with the youngest child unless it was a girl, and perhaps that youngest male children may have been "parented" more by their older siblings. The parent/child linkages that did exist differed from those in the total sample. Fathers' healthy traits or sex role appropriate traits (intelligence, Extraversion, carefree enthusiasm, social boldness and adventuresomeness, social

reliance, low Neuroticism, high Self-Actualization, unworried self-confidence, and dominance) were linked with youngest sons' Dependency, unworried self-confidence, and unrestrained zestfullness. This seems to fit with the image of the "spoiled youngest" child. Another interesting and unusual pattern occurred between mothers and youngest sons: unless mothers were high on intelligence or showed greater social involvedness and dependency, youngest sons tended to be Anxious, Neurotic and Independent (low ego strength, overactive and attention-seeking, disregarding of rules, and socially shrewd and manipulative). This seems consistent with the image of the neglected child, which may have been the case for these youngest boys unless mothers were particularly thoughtful or socially oriented.

Turning to the warm/cold parent subgroups, it was found that while children generally showed greater trait similarity (positive same-trait correlations) to warm parents, both sons and daughters had displayed more overall cross-trait linkages with warm fathers but with cold mothers. The main patterns for warm fathers linked their emotional health with that of both sex children, but especially boys' (these father/son linkages were the highest for any dyad in any subgroup in the study). For warm mothers, emotional health and Extraversion were linked with sons' sex role traits: unemotional, cognitive orientation (Cortertia); unsentimental, tough-minded (I-); dominating, aggressive, independent (E+).

Generally similar to the total sample, warm mothers' Introverted emotionalism or low Cortertia (submissive, conforming, emotional, sensitive, trusting, unworried, self-confident, socially aware) was related to daughters' Introverted and non-Anxious Dependency (emotionally stable, mature, stoical, self-controlled, following consistent socially-approved self-image, submissive, conforming, quiet, introspective).

Fathers' coldness was itself related to withdrawn, obstructive Neuroticism in sons, but within this context, cold fathers' tough-minded, Extraverted, Independence (hard, unsentimental, dominant, aggressive, prefers to work alone, socially unattuned, respecting traditional ways, carefree, impulsive) was linked with sons' aggressive tough-mindedness or Cortertia (dominant, aggressive, withdrawn, cold, inaccessible, tense, driven, irritable). Thus it seems that the extrapunitiveness versus intropunitiveness of these cold fathers' may have influenced the extrapunitive versus intropunitive style of their sons' Neuroticism.

Cold fathers tended to show inverse relationships with their daughters' personalities. Fathers' coldness (A-) was linked with daughters' warmth (A+) and social dependency (Q_2-). Cold fathers' Anxiety and Neuroticism (C-: low ego strength and emotional stability; Q_3-: low self-control, discipline and self-image; Q_4+: driven tension and irritability) were related to daughters' dominance and assertiveness (E+), and social shrewdness/manipulativeness (N+) were

related to daughters' shy, withdrawn Anxiety and Neuroticism. From these results it is impossible to tell if these inverse relationships were antagonistic or compensatory in nature.

Cold mothers and their sons, on the other hand showed a basic pattern of similarity on the other Extraversion traits, and, to a lesser degree, on Neuroticism and Anxiety: Cold mothers who were high on F (talkative, enthusiastic, impulsive), H (socially bold, adventuresome), or Cortertia (unemotional, tough-minded), tended to have sons who were Extraverted and non-Neurotic (A+: warm, soft-hearted; F+: talkative, enthusiastic, carefree; H+: socially bold, adventuresome; C+: emotionally stable; and Q_4-: calm, relaxed). However, since these material traits of social boldness and tough-mindedness are contrary to sex norms, it was generally more likely for cold mothers to have Introverted and somewhat Neurotic sons. Another pattern that was unique to this subgroup, was that of cold mothers' Neuroticism and Anxiety being associated with coldness (A-) and Introversion in sons. Apparently sons of cold mothers were cold or warm contingent upon whether their mothers were Anxious or adjusted in their social withdrawal.

The linkages between cold mothers and their daughters showed two differences from the patterns in the total sample. Cold mothers' self-control or adherence to a socially-approved self image (Q_3+) was very strongly linked with daughters' Creative and non-Anxious emotionality (I+:

sensitive, emotional, imaginative; E-: submissive, conforming; G+: moralistic, rule-bound, strong superego; Q_4-: calm, unfrustrated, composed). This suggests that for cold mothers lack of control of their cold, aloof hostility resulted in their daughters' developing a tough-minded, unsentimental, thick-skinnedness, instead of the sex role appropriate sensitive emotionality, which occurred only if these cold mothers were strongly controlled. In addition, cold mothers' traits did not link with daughters' Dependence/Independence, which was the primary linkage in the general sample. Apparently cold mothers did not socialize their daughters in the area of submissiveness and Dependency (perhaps having trouble with these issues themselves) but instead were related to their daughters' emotionality.

Unusual patterns also were found for the dominant/submissive parent subgroups. To start with, dominance in either parent was linked with dominance and tough-mindedness (rather than complementary submissiveness) in sons and daughters. Apparently both sexes of children learned (or inherited) similar extrapunitive styles from their parents, as well as developing a thick-skinned toughness, perhaps in defensive response to these extrapunitive parents. However, in addition, fathers' dominance was related to uninhibited low Neuroticism in sons, but tense Anxiety in daughters. This suggests three possible mechanisms: dominant fathers may for some reason be supportive toward sons while

inhibiting or frightening daughters; the role model here of fathers dominating may have implied a powerful status for the son but a powerless and frightening status for the female child; or, this could be explained in terms of society's support of boys' dominance but disproval and conflict with dominance in girls.

Within this subgroup of dominant parents (and children) then, the child's emotional health or character linked with traits of the same-sex parent, while the child's sex role traits were linked with the opposite-sex parent. Dominant fathers' warmth and social orientedness/dependency (A+, Q_2-, L+) were linked with sons' low Neuroticism (C+: ego strength and stability; G+: sugerego strength; O-: unworried self-confidence, Q_3+: consistent socially-approved self-image; Q_4-; unfrustrated composure; and A+: warmth). Dominant mothers' low Neuroticism and low Anxiety were linked with the sex role appropriate traits of low Creative, high Cortertia in sons (A-: withdrawn, detached; I-: tough-minded, unemotional, hard; E+: dominant, aggressive, independent; N-: socially unattuned/naive; and Q_4+: tense, driven).

For daughters, dominant fathers' poorly-controlled Anxiety was linked with the sex-role inappropriate traits of unsentimental toughness (I-); cold, withdrawn, detached (A-); and overwrought tension (Q_4+). These daughter traits were largely the same as those linked with fathers' dominance alone, suggesting that if dominant fathers were instead

controlled and non-conflicted, the linkages of fathers' dominance with sex-role inappropriate traits in daughters would be decreased (presumably through the fathers' control of his aggressive dominance). Dominant mothers' self-control (Q_3+) and low impulsivity (F-) were also important to daughters; they were linked with daughters' Creative low Anxiety and low Neuroticism. Just as self-controlledness seemed to ameliorate the effects of both parents' dominance on daughters, achieved intelligence (B+) in both dominant parents seemed to exaggerate these effects. Dominant mothers' intelligence was linked with cold, detached, seclusiveness (A-, Q_2+) in daughters. Dominant fathers' intelligence was linked with daughters' cold, aggressive, obstructive, Independence; tough-minded Cortertia; tense, unstable, inhibited, Anxiety; and cold inhibited, introspective seclusive Introversion.

Submissive parents generally had more linkages with their children than did dominant parents, although this was most true for the mother/daughter dyad and least true for the father/son dyad (the latter linkages were more or less equal for dominant and submissive fathers). Another interesting finding was that linkages for both submissive mother dyads resembled those in the total sample, while patterns for both of the submissive father dyads were discrepant, and sometimes opposite from the general sample. Submissive mothers' low Anxiety and Neuroticism were linked with

daughters' sex role appropriate traits of low Cortertia, Dependence, and low Anxiety. This suggests that mothers who had accepted and were confident and uninhibited in their submissive role influenced their daughters toward acceptance of a similar role. In the mother/son dyad, mothers' low Anxiety and Neuroticism were linked with sons' Extraverted low Neuroticism (particularly warmth and a strong socially-appropriate self-image). Apparently mothers' being secure and confident in their appropriately submissive sex role increased her usual effects on children.

Parent/child linkages for submissive fathers were different if not opposite of the patterns in the general sample. In the father/son dyad, fathers' assertive, self-absorbed, Independence was linked with sons' tough-minded (Cortertia), conflicted (D+, Q_3-, Q_4+), Neuroticism. This is opposite of the total sample, where fathers' Independence was linked most strongly with sons' low Neuroticism, and this is difficult to understand. Since dominance (E) is a very strong part of the general factor of Independence, perhaps these fathers who were low on dominance (submissive) but high on all the other traits of Independence evidenced a conflict in this area with which the sons identified.

Submissive fathers also had unusual linkages with daughters. A unique finding for submissive fathers was the importance of achieved intelligence, which was linked with daughters' Creative, non-Anxious, Dependency and low

Cortertia (emotionality). Thus, intelligence appeared to further implement daughters' traits that were linked with fathers' submissiveness (just as it did with fathers' dominance): Daughters' non-Anxious, unconflicted internalization of sex role traits of Dependence and emotionality. In addition, in this subgroup of submissive fathers and their non-Anxious, Dependent, and emotional daughters, daughters' Dependence showed totally new and somewhat opposite linkages from the general sample. Daughters' Dependence was linked with submissive fathers' intelligence (B+), ego strength (C+), and hard, unemotional toughness (Cortertia). In the total sample, daughters' Dependence was linked with fathers' shy, submissive, Dependence, and some kind of direct modeling seemed implied. Here where fathers and daughters were already significantly submissive and Dependent, strength and toughness were instead related to further Dependency. Thus, it seems that the inappropriate sex role trait of submissiveness in fathers showed unusual, if not opposite patterns from the general sample.

The final section examined the correlates in childrens' personalities of healthy parent traits (low Anxiety, low Neuroticism, low Poor Parenting, high Creativity, high Self-Actualization and high Interpersonal Facilitation). In some ways the correlates of male and female children were similar: healthy traits in mothers were linked with ego strength (C+) and uninhibited, carefree, sociability

(F+) in both sex children; healthy traits in fathers were linked with low Neuroticism and high Creativity in both sex children; and, for both sex children, warmth (A+) and adherence to a controlled socially-appropriate self-image (Q_3+) were linked with healthy traits in the opposite-sex parent.

Healthy parental traits were linked with opposite qualities in daughters than in sons for other traits: Healthy traits in mothers were linked with sensitive emotionality (low Cortertia) in daughters, but with unemotional toughness (high Cortertia) in sons; healthy traits in mothers were linked with Extraversion in sons, but Introversion in daughters; and healthy traits of both parents were linked with submissiveness and Dependency in daughters, but with dominance and Independence in sons. This suggests that healthy parents were substantially involved in developing sex roles in their children.

These findings strongly suggest that important patterns have been and will be overlooked when research with parents and children does not separately consider all four parent/child dyads. These findings also enunciate the importance of sex role traits in the parent/child interaction.

APPENDIX A

Primary Factors Present in the Different Age-Range Forms of the 16 PF

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Primary Factors Present in the Different Age-Range Forms of the 16 PF

Factor	ESPQ	CPQ	HSPQ	16PF	Common to all
A	X	X	X	X	X
B	X	X	X	X	X
C	X	X	X	X	X
D	X	X	X		
E	X	X	X	X	X
F	X	X	X	X	X
G	X	X	X	X	X
H	X	X	X	X	X
I	X	X	X	X	X
J	X	X	X		
L				X	
M				X	
N	X	X		X	
O	X	X	X	X	X
Q_1				X	
Q_2			X	X	
Q_3		X	X	X	
Q_4	X	X	X	X	X

Of the 18 personality factors present in these four questionnaires, 10 are common for all age levels. These are: A, B, C, E, F, G, H, I, O, Q_4.

APPENDIX B

Descriptions of Personality Factors on 16 PF Tests

APPENDIX B

Descriptions of Personality Factors on 16 PF Tests

Low Score Description	TRAIT	High Score Description
Cold, reserved, withdrawn, detached, critical, aloof, stiff, objective, distrusting	A	Warmhearted, participating, expressive, generous
Low mental capacity, less able to handle abstract problems	B	High general mental capacity, fast-learning
Ego weakness, emotionally unstable, easily frustrated, changeable, feels easily annoyed and unable to cope	C	High ego strength, emotionally stable, mature, calm, does not let emotions obscure realities of situation
Phlegmatic temperment, stoical, complacent, inactive, deliberate, self-effacing	D	Excitable, overactive, demanding, impulsive, impatient, attention-seeking, jealous, distractable
Submissive, conforming, obedient, accommodating, dependent, easily upset by authority, inhibited, intropunitive	E	Dominant, aggressive, competitive, confident, stubborn, self-centered, unconventional, critical, extrapunitive
Silent, sober, serious, introspective, inhibited, full of cares, cautious, worrying, depressed, intropunitive	F	Surgent, happy-go-lucky, talkative, quick, enthusiastic, energetic, impulsive, trusting, heedless
Weaker superego, disregards rules/standards, self-indulgent, thrives on disorder, undependable	G	Strong superego, conforming, conscientious, staid, moralistic, persevering, disciplined, conventional, ordered, dominated by a sense of duty, rigid
Shy, timid, threat-sensitive, retiring, emotionally cautious, quick to see dangers, rule-bound, inhibited	H	Adventuresome, socially bold, "thick-skinned," uninhibited, responsive, risk-taking
Tough-minded, cynical, self-reliant, hard, expects little, less artistic, keeps to the point	I	Tender-minded, sensitive, over-protected, clinging, kindly, artistically fastidious, intuitive, flighty, dislikes crude

APPENDIX B (cont'd.)

Low Score Description	TRAIT	High Score Description
Zestful, liking group action, vigorous, likes attention, accepts common standards	J	Guarded, individualistic, fastidiously obstructive, internally restrained, holds grudges
Trusting, accepting conditions and personal unimportance, tolerant, easy-going, relaxed	L	Suspicious, projecting, dogmatic, jealous, project inner tension, anxious insecurity, scrupulously correct, resentful
Practical, down-to-earth, conventional, prosaic, avoids farfetched, dependable in practical or immediate issues	M	Imaginative, absorbed in inner ideas, unconventional, interested in art, theory, philosophy
Forthright, genuine, socially clumsy, gregarious, warmly emotionally involved, spontaneous, matural, lacking insight	N	Shrewd, polished, socially aware, has exact, calculating mind, emotionally detached, ambitious, manipulative
Complacent, self-assured, resilient, impenitent, insensitive to approval of others, rudely vigorous, acts	O	Apprehensive, insecure, worrying, guilt-prone, sensitive to approval of others, easily upset, hypochrondriac
Conservative, respect established ideas, sticks to traditional, inhibited	Q_1	Radicalism, experimenting, free-thinking, poor interactions with authority, intellectualized hostility
Group dependent, a joiner, conventional, socially responsive and involved	Q_2	Self-sufficient, prefers working alone, seclusive, resourceful, introverted
Poor self integration, undisciplined, follows impulses, lax, careless of social rules, uncontrolled	Q_3	Controlled, compulsive, following socially-appropriate self-image, exacting will power, concern with image
Low tension, relaxed, tranquile, composed, unfrustrated	Q_4	High ergic tension, driven, overwrought, frustrated, irritable, in turmoil

APPENDIX B (cont'd.)

SECOND-ORDER FACTORS

Introversion, social inhibition	1	Extraversion
Low anxiety	2	Anxiety
Emotional, warm, sensitive, prone to feeling reaction, moody	3	Cortertia, high cortical alertness or activation level, handles problems at dry, cognitive, objective level, cheerful
Dependent, submissive, inhibited, trusting, sociable, accepting	4	Independent, dominant, self-centered, a "loner," suspicious, critical, precise, and exacting, "a law unto himself"

The major contributing first-order factors for each of the second-order factors is given below.

Extraversion: A+ (warmth), F+ (surgency), H+ (adventuresome), Q_2- (group dependent, and E+ (dominance). For children only, J- (zestful).

Anxiety: C- (low ego strength), O+ (guilt-prone), Q_4+ (ergic tension), L+ (suspicious insecurity), H- (threat-sensitive), and Q_3 (impulsive). Present in children only, D+ (excitable).

Cortertia: I- (tough-minded), A- (detached), E+ (dominant), L+ (suspicious insecurity), M- (practical, unimaginative).

Independence: E+ (dominant), L+ (suspicious insecurity), M+ (imaginative inner-directedness), Q_1+ (radicalism), and Q_2 (self-sufficient). J+ (guarded individualism) present in children only.

APPENDIX C

Construction of Additional Variables from Previous Studies of the 16 PF Factors

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Construction of Additional Variables from Previous Studies of the 16 PF Factors

Equations were created by averaging results of all studies in a given area, and are therefore fairly rough. Factors found to be significantly related in the relevant studies were weighted 1.0 or .5 (or 0.0--absent) according to the percentage of studies in which the factor was found to be significant. Because of the approximate nature of the overall procedure, it was deemed misleading to weight factors more precisely than either 1.0 or 0.5 (or (0.0), and thus all weightings were rounded. For instance, if there were ten studies on a given topic, a factor appearing in 5 or fewer studies would be weighted .5 in the equation; a factor appearing in five to ten of the studies would be weighted 1.0 in the equation (factors found in only one or two studies were weighted 0.0 and so omitted from the equation).

The equation for Creativity in parents was derived from the following studies: Drevdahl's studies (1956, 1961) of creative artists, writers, and scientists; White's (1968) study of divergent thinking tasks; Jones' (1964) and Sprecher's (1968) studies of industrial scientists rated by colleagues and supervisors for creativity and production of novel ideas; Abdel-Salam's (1963) study of the correlates

of the Guilford Test of Creativity; Maddi's (1965) study of the motivational aspects of creativity; Kurtzman's (1965) study of the correlates of seven different tests of creativity; and, Payne, Halpin, Ellett, and Dale's (1975) study of artistically gifted students.

The equation for Creativity in children was derived from the following studies: Birkin's (1969) study of six components of creativity in children; Casha's (1971) and Watson's (1965) personality correlates of the eight Torrance Tests of Creative Thinking (both verbal and figures tests of fluency, flexibility, originality, and elaboration); Maw's (1967) study of curiosity and openness to new experience; Curry's (1970) regression equation of personality changes of pupils involved in a project fostering creativity in learning; Pearce's (1968) study of creative science students; Cross, Cattell, and Butcher's (1967) investigation of the personality characteristics of children who were artistically gifted; Payne et al.'s (1975) study of academically and artistically gifted youths; and Siegelman's (1965, 1966) and Roe's (1967) studies of children's personality correlates of loving and (negatively) rejecting and neglecting parents (which they found to be related to creativity).

The variable Self-Actualization was developed for parents from the following studies: Grossack et al.'s (1966), Lavoie's (1972), and Meredith's (1967) studies of

self-actualization as measured by the Personal Orientation Inventory; Hasler's (1967) and Oliver's (1970) correlates of positive self-concept and personal adjustment; Vincent's (1968) and Zediker's (1966) studies of the correlates of Maslow's measure of self-actualization, the Secure-Insecure Inventory; Rentz' (1967) correlates of self-acceptance as measured by the Tennessee Self Concept Scale and the Osgood Semantic Differential; McClain's (1969) investigation of self-actualizers and peak-experiencers (as defined by Maslow); Febinger's (1966), Howard and Diesenhaus' (1965) and Maw's (1967) studies of curiosity, exploratory behavior, and open versus closed belief systems; Jacob's (1976) investigation of the correlates of internal locus of control; Gendlin et al.'s (1966) study of deep experiential focusing in therapy; and, since they were shown to be consistently negatively correlated with the criterion in the above studies, negative inclusion of Vaughn's (1964), Vacchiano, Strauss, and Schiffman's (1968), and Sweeney, Fiechtner, and Samores' (1975) studies of conformity, dogmatism and fascism.

The variable Poor Parenting was derived for parents from the following studies: Cardillo and Sahd's (1977) regression equation for child-abusing parents; Hyman's (1977) study of child-battering parents; and Karson's (1967), Karson and Markenson's (1973), Moffitt's (1968), and Singh, Srivastava, and Nigam's (1976) studies of parents of children

with conduct, acting out, and adjustment problems.

The variable Interpersonal Facilitation was derived for parents from the following studies: Donnan, Harlan and Thompson's (1969), McClain's (1969), and Myrick, Kelley, and Wittmer's (1972) studies of dimensions of counselor effectiveness, including empathy, unconditional positive regard, congruence, and trust; Corazzini's (1974) study of the correlates of interpersonal trust; Sweeney and Fiechtner's (1974) study of egalitarianism and people-orientation in supervisors; Libby's (1964) study of accurate interpersonal perception; Grande's (1965) study of ability to establish rapport; Birkin's (1969) results of teachers who fostered creative behavior in students; and Tilker's (1967) study of socially responsible behavior in a Milgram-type situation.

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