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 DIFFERENCES IN PERSONALITY
 AND PARENT/CHILD RELATIONS BETWEEN
 SPOUSE-SIMILAR AND SPOUSE-DISSIMILAR FAMILIES

presented by

Heather E. P. Cattell

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Lucy R. Ferguson
 Major professor

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DIFFERENCES IN PERSONALITY
AND PARENT/CHILD RELATIONS BETWEEN
SPOUSE-SIMILAR AND SPOUSE-DISSIMILAR FAMILIES

By

Heather E. P. Cattell

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AND PARENT/CHILD RELATIONS BETWEEN
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The hypothesis underlying this study was that parental pairs who have opposite personality traits, as compared to spouses with more similar personalities, will have more conflicted, unsatisfying marriages, resulting in cross-generational alliances between parents and opposite-sex children. Differences in personality, parent/child similarity, and parent/child trait interrelations between spouse-similar and spouse-dissimilar families were investigated in a sample of 127 intact families (162 daughters, 231 sons) using the age-appropriate form of the Sixteen Personality Factor Questionnaire (16PF). The second-order 16PF factors were used to divide this sample into thirds: families where fathers scored higher than mothers, families where mothers scored higher than fathers, and the remaining spouse-similar families. This grouping process and the resulting analyses were completed separately for each of the second-order factors of Extraversion, Independence, Anxiety, and Cortertia.

The findings only minimally supported the hypothesis that mothers, fathers, daughters, and sons would show personality differences between the spouse-similar and spouse-

dissimilar groups. However, the spouse-dissimilar groups contained all instances of elevated parental Neuroticism. Children's Neuroticism was linked with parental dissimilarity with adherence to traditional sex-roles, and with Neuroticism in the same-sex parent. Fathers' Neuroticism showed greater effects than mothers' on both children. Traits associated with Neuroticism showed recurring sex differences for both parents and children: Dependent, submissive, withdrawn traits for males; and tough, aggressive, independent traits for females--both sex-role deviant constellations. The Extraversion and Anxiety groupings yielded greater spouse dissimilarities than did the corresponding Cortertia and Independence groupings, suggesting that spousal dissimilarity on Anxiety and Extraversion may be more tolerable than such differences on Cortertia and Independence.

Parent/child trait intercorrelations across all 16PF factors were appraised separately for mother/daughter, mother/son, father/daughter, and father/son dyads within each of the three above groupings. The hypothesis that in spouse-dissimilar groups parent/child personality similarity would be greater for the cross-sex than the same-sex dyads was not supported. Sons showed unexpectedly greater personality similarity and linkages to both parents than did daughters. For sons, Neuroticism and Anxiety showed by far the greatest number of significant linkages, while Dependence, Extraversion, and Cortertia were salient for daughters.

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INTRODUCTION

The underlying hypothesis of this study is that marriages in which the partners are opposite, rather than similar, in personality will be conflicted and unsatisfying; further, such unsatisfied marital partners will tend to develop unhealthy alliances with opposite-sex children, resulting in relatively permanent effects on the children's personalities, including increased similarity to the allied parent.

The review of theoretical and empirical support for this hypothesis will include the following areas: Personality similarity/dissimilarity as it relates to marital selection and marital satisfaction, the development of marital dysfunction from spouse-dissimilarity, and the effects of marital dysfunction upon children and parent/child alliances. The final section of this chapter will discuss methodological problems in the investigation of families, and the measurement method used in the present study.

Personality Similarity and Marital Selection and Satisfaction

There has been a long history of experimental research in the area of trait similarity or dissimilarity

between marital partners. 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 Murray's theory of needs (Murray, 1954)--that mutual attraction would tend to develop between two persons who differed markedly (i.e., were high versus low) on a particular trait. Thus, this theory proposed negative interspouse correlations for specific traits. The opposing similarity theory was early proposed in the work of Fisher (1930) and Terman (1938), who stated that in stable marriages the partners would show statistically significant resemblances in their personalities.

The wide range of studies bears directly on Winch's theory of mate selection. The most frequently used instrument has been the Edwards Personal Preference Schedule (EPPS), designed to tap fifteen of Murray's needs. Table 1 summarizes 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, shows that, in the first seven studies listed, there were 37 statistically significant interspouse same-trait correlations, all but three of which were positive. The two studies listed last gave only summary statistics, but both found significant personality similarity and no evidence of dissimilarity: Schellenberg

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

Study	Couples N	Achievement										
		Aggression	Autonomy	Defiance	Endurance	Exhibition	Heterosexual	Intersexual	Nurturance	Order	Successance	
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										

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, all positive.

Other investigators have found interspouse similarity on measures of neuroticism or mental health. 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. In a study by Murstein (1976), positive interspouse correlations were found on four MMPI scales, while one scale, the masculinity/femininity scale, showed a negative correlation. Other studies using the MMPI also included groups of happily and unhappily married couples, and thus are presented in a separate section below.

Other investigators have studied the similarity versus dissimilarity issue using a variety of trait measures, and have consistently found support for marital similarity. Kerckhoff 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 inter-spouse correlations on four out of the six traits as well as for a combined measure of "total preference for interpersonal contact." Murstein (1972) used trait ratings from extensive interviews, Rorschach, the Marriage TAT, the Marriage Value Inventory, and a background questionnaire. He reported 27 statistically significant positive correlations between spouses' scores on 87 variables versus a single significant negative correlation.

The final set of studies of marital similarity employed the Sixteen Personality Factor Questionnaire (16PF), the instrument used in the present study. Four studies (Barton & Cattell, 1972; Cattell and Nesselroade, 1967; DeYoung & Fleischer, 1976; and Waters, 1975) have investigated spouse intercorrelations on the 16PF. The statistically significant results from these studies are given in Table 2: All 25 statistically significant correlations among the stably married couples were positive; while four of the six statistically significant correlations among the unstable marriages were negative.

Other research has investigated the relationship between spouse similarity and marital satisfaction or

Table 2. Significant Same-Trait Spouse Intercorrelations in Studies Using the 16PF

Study	Couples N	Significant Interspouse Correlations (Sign Indicated)															
		A	B	C	E	F	G	H	I	L	M	N	O	Q ₁	Q ₂	Q ₃	Q ₄
Barton & Cattell 1972	171	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
DeYoung & Fleischer 1976	82	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Waters 1975	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
<u>Dysfunctional Marriages</u>																	
Cattell & Nesselroade 1967	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waters 1975	35																

stability, using a variety of instruments. These studies have consistently found marital satisfaction or stability to be positively related to spouse similarity. Dymond (1954), using 115 MMPI items, found that happily married husbands and wives showed significantly more similarity than unhappily married couples. Murstein (1967b) found that the average same-trait correlation between spouses was positive for the happily married but negative for the unhappily married couples. He also found that staying together longer was related to spouse similarity on five of the scales. Corsini (1956) found similarity of husband and wife overall personalities (correlation of ranks of Q-sorts) to be significantly related to husband, wife, and couple measures of marital happiness. Hansen (1975) used the California Psychological Inventory, and found interspouse differences on seven of the scales to be related to marital dysfunction. Pickford (1966) also compared trait similarity in groups with degrees of marital satisfaction. For "happily" marrieds, all interspouse correlations on the Guilford-Zimmerman Temperament Survey were positive, and four attained statistical significance. For separated couples, eight of the ten traits were negatively correlated, one significantly so. Three 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; and, Pascal (1974) found that he could discriminate adjusted versus maladjusted (seeking counseling) couples with 87% accuracy using a model of trait similarity on the EPPS, while the complementarity model did not distinguish beyond the chance level. Two studies by one group of investigators (Pickford, Signori, & Rempel, 1967; Signori, Rempel, & Pickford, 1968) showed that when married couples were separated into a happily married group, a troubled but intending to stay together group, and a group of couples who were seeking separation, the husband-wife trait dissimilarity increased progressively from the happily married, to the unhappily married, to the separating group.

The last study in this section is particularly important because it is longitudinal and thus overcomes the usual inability to discern whether personality similarity (or dissimilarity) is the cause or the consequence of long-term marital harmony (or disharmony). Bentler and Newcomb (1978) compared newlyweds who were subsequently divorced within four years to couples who were still married at four years, and found that the divorced couples had significantly fewer positive interspouse trait correlations on the Bentler Psychological Inventory when first married.

Thus, a review of the empirical evidence in this area shows that it strongly supports the theory of similarity in marital selection, as well as the theory that stable and satisfactory marriages tend to occur between individuals showing personality similarity, while disharmony tends to result from marriages between opposites. These results, however, do not illuminate the mechanisms at work in the development of satisfying versus dissatisfying relationships from personality similarity versus dissimilarity, respectively. The following section will review several theories in this area of marital relationship development.

Theories of Development of Marital Relationships

One widely-held hypothesis is that similarity of personality would involve similarity of values, needs, perceptions, and attitudes, and thus promote agreement about and sharing of activities, decisions, and life styles (Murstein, 1976). Investigators of small-group processes have found support for this idea (Durkheim, 1947; Festinger, 1957; Heider, 1958; and Simmel, 1950). They found that the sense of enjoyment between two or more people was related to the degree of mutually perceived similarities between them. These perceived similarities, possessing what Heider (1958) called "unit enforcing characteristics," could involve any number of mutually shared attributes and characteristics, such as attitudes, beliefs, affects, needs,

interests, experiences, capacities, or activities. The strength of the bond is hypothesized to be related to the sum of all the attributes perceived to be held in common, divided by the number seen as divergent. These formulations have proved quite accurate in predicting small-group behavior in a laboratory setting (e.g., Caplow, 1956; Mills, 1953, 1954).

It is harder, however, to understand the mechanisms at work at the opposite end of the continuum--of how opposites attract and develop conflict-ridden patterns. Various theorists have thought and written about this phenomenon. However, these have been almost exclusively clinical psychologists, who have based their theories on experience with dysfunctional couples seeking help with marital problems. Thus, the four authors reviewed below present conceptualizations of how a dysfunctional relationship develops between spouses who are opposite in personality, rather than how a functional one develops between similar spouses.

Jung (1968) was one of the first theorists to apply himself to this question. He believed that marital attraction often involved unconscious factors. Impassioned attraction, he felt, invariably entailed projection onto the partner of the unconscious complex termed the "soul-image." His typology, consisting of three bipolar dimensions (extraversion/introversion, thinking/feeling, and intuitive/sensing), was based on the assumption that if one end of the dimension was characteristic or conscious in a person, then

the other, opposite qualities were repressed or unconscious. Jung stated that the individual who is thus separated from these opposite parts of the self experiences an emptiness and longing for these missing and deeply-suppressed parts, and is attracted to these qualities in others in an ill-fated attempt to possess them. Jung's treatment of this subject, while interesting and insightful, does not develop any further than this and remains vague and ill-defined.

Virginia Satir was perhaps the first person to develop this idea into a complete theory of marital dysfunction (Satir, 1967). She postulated that individuals showing incompleteness or immaturity in personal development actively seek out marriage partners who are different or complementary in personality to themselves, and that this pattern is likely to result in marital instability. Thus, she also believed that such mate selection is, to one extent or another, an unconscious process. Individuals often come to marriage incomplete in terms of emotional maturation, not having completed developmental tasks of greater or lesser importance. Each expects that what the self lacks will be supplied by the other person, that they will become a whole, complete person through marriage--hence the deeply-felt attraction. Thus, a relationship is established that must ultimately be unsatisfactory, for each is placing exorbitant emotional demands on the other, although these may initially be masked. Each partner tends to see in the spouse only the

positive aspects, the part that fits the gaps in his own personality; the rest is denied--at least for a time.

Satir vividly described the process by which so many couples move from the original state of enchantment toward progressive disillusionment and marriage agonies. She described how Mary and Joe marry and risk relating to each other, despite all their fears, because each feels that the union will provide a continuing sense of completeness. They have feelings of specialness about each other from the first moment they meet; she is the right or only person for him, and vice versa. This is not a case of perceiving each other as good life mates, but rather there is something vaguely familiar and important about the person--an assessment that often takes place without words. Initially the exhilaration of togetherness, sexual attraction, and the hope of this deep fulfillment blur and obscure each person's needs and unique individuality, as there is a feeling of limitless possibilities of both getting their own needs met. Satir writes, "Each feels privately: 'If I run out of supplies, I will take from you. You will have enough for both of us'" (p. 9). After marriage the unrelenting, practical requirements of carrying on daily life eventually force both partners into revealing and perceiving their needs and differences. They discover that they are different in ways that seem to detract, rather than add, to themselves, and that neither has found the completeness each had sought.

Great struggles ensue as both attempt to get their needs met indirectly and to eliminate their differences. Couples develop various stylized, dysfunctional, covert ways of relating, through surrender, subversion, open warfare, etc. Satir saw this entire process as a result of each partner's having uncompleted developmental tasks and consequent low self-esteem. The theory gains particular importance when viewed from the perspective of theorists such as Charney (1980) who propose that most people go into marriage with one developmental task or another incomplete and with some areas of inadequate self-esteem.

Dicks (1968) further developed these ideas into an analysis of marital relations based on an object-relations concept of personality development. Dicks believed that adults' problems in relating to their spouses are a direct result and elaboration of their early conflicts in their family of origin. Thus, due to their own parents' conflicts, each individual has had certain aspects of his/her personality denied, split-off, and repressed from awareness or expression. According to Dicks, the individual experiences a great ambivalence towards these parts, such that they are both deeply longed for as well as felt as unacceptable and the deserving object of attack or denial. The conflicted individual is then attracted to a partner who represents this important, lost aspect of him/herself. Early in the relationship only the positive side of the ambivalence is active;

union with the lost parts is deeply longed for. The idealized object has all the "badness" removed by splitting or denial. This person becomes the all-giving, non-frustrating, ideal parental figure from whom the person feels s/he can get all the things that were most denied by their own parents and toward whom the person could express idealized expectations of their own behavior, denying their ambivalence.

These idealized expectations eventually break down, however, and the negative, anti-libidinal part of the ambivalence appears. When the trait can no longer be ignored in the daily intimacy of contact, then the partner's possession of this missing-because-repressed part of the self will arouse retaliatory or punitive impulses--the same impulses that the subject experienced from his/her parents in the original repressing of these aspects in him/herself. The subject persecutes/rejects the unassimilated parts of the self seen in the partner; the partner is felt to be part of the self--interpersonal boundaries are blurred. Thus, the subject is persecuting or rejecting the aspects of the spouse that originally caused attraction.

An important and interesting facet of this whole process is its mutuality, as seen in the phrase "opposites attract." The picture is not one of a person who is extreme on certain personality dimensions being attracted to anyone onto whom s/he can project the opposite and missing

characteristics, but rather one of a person who is at one extreme of personality being attracted to a person at the other extreme, who necessarily also has some longed-for, missing aspects of the self--and precisely those that the partner possesses. Thus, we have not one but two people reenacting intrapsychic conflicts in the marital relationship, with the partner becoming the projection screen for unresolved tensions. This Dicks sees as a symbiotic process of mutual projection of unconsciously shared feelings; a situation of superimposed inner object worlds, of similar primitive object needs and anxieties, in which there is such great permeability of ego boundaries that the couple becomes a unit around which some sort of joint ego-boundary is drawn. Laing (1961) denoted this process by the word "collusion," viewing projection as not just using the other as a hook to hang something on, but as striving "to find in the other, or to induce the other to become, the very embodiment of that fantasied other whose cooperation is required as a complement of the particular identity he feels compelled to maintain."

Various authors have delineated some of the different types of non-constructive relationships that can develop between partners who are opposite on different types of personality dimensions. Bergner (1977), for instance, has written about the pattern of marital problems that tend to develop in marriages between emotional, people-oriented,

hysterical-type people and their calm, detached, introverted partners. Bergner's explanation of why this type of relationship develops is very similar to Satir's and Dicks':

Each person appraises himself, with varying degrees of consciousness, as unable to participate in life in certain very important ways. In the process of mate selection each partner engages to a greater extent than is usual in a search for his/her missing parts in another person . . . finding a mate who seems able to function in life in ways in which they personally feel lacking. (p. 96)

Other authors have investigated marital patterns between partners who are opposite on other dimensions (e.g., Barnett, 1971; Napier, 1978; Rubinstein & Timmins, 1978; Schwartz & Zuroff, 1979), indicating that different types of interactions and conflicts develop between partners, depending on which personality dimension it is on which the spouses differ.

Dicks viewed this type of marital choice and subsequent struggle as a necessary and ultimately growth-promoting process; as an opportunity to work through the ambivalent, never-resolved, early emotional issues that are most deeply felt. He did note, however, the negative effects that this process of conflict and projection could have on the children:

At the Oedipal phase especially, but not exclusively, the satisfaction of the parents with one another has a profound effect. The image of the united, loving mother and father, who are cooperating in the same direction to bring up their children, creates a sense of

security, greatly easing the children's conflicts. Infantile hate or omnipotence can not drive them away, nor a wedge between them. The child becomes convinced of, and reconciled to, the futility of its own natural fantasies of stealing one parent from the other. Serious conflicts arise if in reality parental strife or open violence, as well as sexual frustration, make the child's fantasies seem possible of fulfillment. This is not only owing to the internal processes in the child's mind, but substantially because some of the parental hate, as well as erotic libido, becomes diverted toward the child in such situations. In these tense marriages, which the child experiences at close range, it is not only the young who have incest fantasies and death wishes. (Dicks, 1968, p. 38.)

Thus, although Dicks' work focused mainly on the marital relationship, he was also aware that the conflict and dissatisfaction in the marital relationship can have profound effects upon the children, particularly between each parent and the children of the opposite sex. He proposed that the parent's relationship with the child also involves projection of the parent's inner conflicts and the placing of irrational demands and expectations according to the parent's intrapsychic conflicts.

Bowen (1966), following theorists like Fairbairn (1952) and Mahler (1968), was the first person to integrate these ideas about marital relations into a theory of total family functioning, thus bridging the gap between theories of relational dynamics and theories of individual dynamics. Instead of terms like "low self-esteem" or "immaturity" or "personality incompleteness," he used the terms "differentiation" and "individuation," which denote the universal

developmental or existential struggle that he felt was the fundamental principle of human growth. Differentiation or individuation is the process by which the person becomes increasingly differentiated from a crucial relational context, such as the infant from the mother or the child from the parents. This, Bowen believed, involved a multitude of intrapsychic and interpersonal changes and the making of a subtle but crucial phenomenological shift in the individual toward seeing her/himself as separate and distinct within the relational context. People's level of development can thus be seen along a continuum of human functioning without a concept of "normal." Bowen thus proposed that most individual and relational problems derive from lack of individuation, with individuals rigidly moving to an extreme position (either of great interpersonal distance, where the individual totally denies dependency needs in a pseudo-independence that is a dead end from the natural process of individuation; or of fusion where there is loss of the individual self as in the original state of pure fusion between mother and child) instead of working out some resolution of these issues. Bowen described (1966) the interpersonal characteristics of people at the lower end of the scale:

They are dependent on the feelings and emotional harmony or disharmony of those about them. Feelings can soar to heights with approval or praise and be dashed to nothingness by disapproval. So much of life energy goes into maintaining their relational system--into "loving" or

"being loved" or reaction against the failure to get love--that there is no life energy for anything else. . . . They are incapable of using the "differential I" (I am, I believe, I will do, I will not do) in their relations with others. Their use of "I" is confined to the narcissistic (I want, I am hurt, I want my rights). . . . They grew up as dependent appendages of their parental family ego mass, and in their life course they attempt to find other dependent attachments from which they can borrow enough strength to function. . . . The lower they are on the scale, the more they hold the other responsible for themselves and their happiness. . . . This scale has nothing to do with diagnostic categories. All those at this end of the scale have tenuous adjustment; they are easily stressed into emotional disequilibrium, and dysfunction can be long and permanent. (p. 357)

Although Bowen stressed the continuum nature of his fusion/individuation scale, his descriptions and formulations are uniformly about the most extreme form of dysfunction, thus leaving out the more typical, moderate cases that would presumably evolve from incompleteness of less basic developmental tasks. His descriptions are of relationships that involve infantile-type, symbiotic dependencies: They involve a great deal of merging fusion and dependency between partners, as well as a great deal of projection, wherein the individuals cannot tell their own motives, feelings, or needs from each other's. Growth or change is experienced as a threat to the other person's very survival. Since each partner has the illusion of

absolute responsibility for the other, endless cycles of terror, blame, manipulation, and guilt ensue. These relationships center on ambivalence between the fear of separation or being totally alone and the fear of loss of self in being "swallowed up" in fusion with the other. Thus, these couples usually involve one individual who assumes a role of helplessness and dependency and gives over much of her/his self-responsibility and strength to the other partner, who assumes the role of pseudo-independence, projecting all of her/his weaknesses onto the other. This, however, results in the dependent person's experiencing a loss of self and resenting the dependency, and the independent person's resenting the burden of responsibility for both. Thus, here we again find an unsatisfactory union of opposites.

Bowen extended this analysis to include the children in the family. He pointed out that when the tension between the parents mounts sufficiently, one or the other will move toward a third person, the child, thus increasing the psycho-emotional distance between the spouses and diverting the focus off the dyad and onto the third party. Bowen summarized this (1966): "The basic building block of any emotional system is the 'triangle.' When emotional tension in a two-person system exceeds a certain level, it 'triangles' a third person permitting the tension to shift about within the triangle" (p. 368). The child then

becomes equally involved in the parental struggle between fusion and distance or dependence and independence, and becomes deeply embedded in the family system of projection and manipulation.

In summary, Bowen viewed the family as a system in which the "family projection process" transmitted varying degrees of maturity or differentiation over multiple generations. Thus, Bowen was one of the first theorists of marital dysfunction to extend his analysis to include effects on the children. Since the hypothesis of the present study is that marital conflict resulting from spouse dissimilarity leads to unhealthy, cross-sex, parent/child alliances, the following section will investigate theory and research in this area of the effects of marital dysfunction on children.

Effects of Marital Conflict on Children

Most theorists of human development recognize the family as a crucial element in a child's development. Framo (1970) reminds us that while life preservation for other animals depends on the sequential unfolding of instinctive regulators, the human being must depend much longer on parental care, and that essential socio-emotional learning takes place in this early relationship: "If the price for acceptance is to absorb unrealities, accept an irrational identity or role assignment, be persecuted, be

overindulged, be scapegoated, . . . this price will have to be paid; to be alone or pushed out of the family either physically or psychologically is too unthinkable" (p. 163).

Minuchin (1967, 1974) also emphasized the extent to which the child's identity and sense of self is developed from the context of the family. He proposed that the child's identity evolves through his/her involvement in the different family relationships or subgroupings. Minuchin found (1967) that the fundamental problem in dysfunctional families was the spouses' poorly developed sense of identity. Such spouses would "attempt to resolve the primary problem of defining a basic self-identity through the role of parent" (p. 220), by forming and perpetuating certain coalitions with the children in order to define themselves. He was struck by the lack of separation and individuation between these family members; by the extent to which one member's thoughts, feelings, and actions impacted various other members.

Satir (1967) gave the clearest delineation of this process. She described the dysfunctional marital relationship of Mary and Joe, who are low in self-esteem:

". . . because each saw the other as an extension of the self, each failed to give to the other as well as get from the other. So their relationship only increased low feelings of self-esteem. They both became disillusioned and disappointed. The question now remains: How do they

fare as parents?" (p. 28). Satir theorized that these parents would expect the child to enhance their self-esteem, to be an extension of themselves, and to serve crucial pain-relieving functions in the marital relationship: They may see their child as a vehicle to enhance their esteem about themselves and their family in the community; they need to feel that the child likes them, making discipline difficult; they tend to see the child as an extension of the self, expecting her/him to want what they want, think what they think, see what they see, and do what they want; and they may try to make up for their own deprivations by "giving him everything."

Since the spouses are in conflict, parental rules about which activities are permitted, encouraged, or forbidden--or, more importantly, about who a child should be--are contradictory and confusing. Each parent sees the child as a potential ally against the other mate; as a messenger through whom to communicate with the other spouse; and as a pacifier of the other mate. Both parents battle over and through the child, and "be like me" becomes equated with "side with me." In the healthier functional family, each spouse is confident enough to allow the child to have a substantial relationship with the other spouse, and still be clear to the child that s/he can never be a part of their relationship as mates. However, in a dysfunctional family the mates are low in self-esteem, already feel "left out," and operate on the basis that there

is not enough to go around and thus must fight for whatever is available. Both parents look to the child to try to satisfy their unmet needs.

Satir then pointed out, "The question may still be asked, though: Why do we see over-developed father/daughter and mother/son relationships repeatedly showing up in dysfunctional families?" (p. 56). She answered this question:

The trouble is, the child, by virtue of being either a male or a female, already looks like one parent and unlike the other. He is already sexually identified with one parent. . . . The same-sex parent will see the child as potentially 'belonging' more to him. The other-sex parent will see the child as potentially becoming like the mate and will fear the child's turning against him (p. 29). . . . The mother, in her efforts to turn the boy child into an ally and ersatz mate, also woos him seductively, offering him an added inducement. (A father will do the same with his daughter.) The boy, being a sexual person, will respond to his mother's affection in kind. . . . The father reacts to the close mother-son relationship with disapproval, disparagement and withdrawal. The boy receives the message 'Father doesn't like me,' causing the child to drift all the more toward the seductive parent. When the boy notes how mother disparages her mate at the same time that she approves of him, he receives another message: 'Mother likes me better than father.' (p. 59)

Thus, Satir proposed that in dysfunctional families inappropriate inter-generational bonds are usually formed in a cross-sex manner, as the parents try to get unconscious needs met.

Lidz (1957) and Fleck (1966) also developed a conception of structural family relations that divides the family according to generational boundaries. It divides the

family into parents, who perform the tasks of decision-making, controlling, and nurturing; and children, who are immature, dependent, and needful. Thus, a generational division of responsibility, role, and affectional relationships must exist between parent and child. Sexual divisions also occur within the family: the same-sexed parent serves as a role-model for identification, while the opposite-sexed parent provides the basic love object. The effecting and maintaining of these generational and sex boundaries is considered the most important task of the family.

Dysfunction occurs, according to these authors, when there is discord between the spouses and there is a consequent failure to establish the marital bond as the primary relationship in the family. Powerful relationships develop between parent and child that violate the generational division of the family. This, they propose, occurs when the spouses have been unable to loosen their ties appropriately from their families of origin and have been unable to develop a sense of their own individuality and self-worth. Their main theme here is the criticalness of the marital bond as the primary relationship in the family, which attenuates exclusive and dysfunctional cross-generational and cross-sexed ties. This conceptualization has been supported by their research findings (Lidz, Fleck, & Cornelison, 1966) of chronic marital disharmony and cross-generational alliances in families of young schizophrenics. Lidz et al. (1959)

characterized the operation of dysfunctional families:

In these marriages . . . husband and wife do not support each other's needs and the marital interaction increases the emotional problems of both, deprives the spouses of any sense of fulfillment in life, and deteriorates into a hostile encounter in which both are losers. Instead of any reciprocal give and take, there is demand and defiance leading to schism between partners that divides the entire family, leaving the children torn between conflicting attachments and loyalties. (p. 246)

Haley (1967) also viewed an inter-generational "triangle" as the crucial element of dysfunctional families. In this triangle the two people who are most closely allied are not peers, but one of them is a parent and the other one is a child. The person from one generation forms an alliance with the person from the other generation against his/her peer (the spouse). Thus, generational boundaries are broken and each parent becomes more emotionally invested in the child than in the other parent.

Although these phenomena are most easily seen in populations of troubled families seeking counseling, most of these authors stress that every one of us has unresolved needs, and that these conflictual dynamics are present in most families to one degree or another. Bornstein (1964) emphasized that parents tend to act out their unconscious tendencies more readily with their children than with anyone else, and adds that "this is true not only of severely taxed, unstable, overworked parents, but also of the healthy, clear-

thinking parents who are well-intentioned toward their children; it happens not only to the unanalyzed educator, but also to those who have achieved through personal analysis greater familiarity with the processes of the unconscious" (p. 361).

Finally, Richter (1976) came to very similar conclusions about the dynamics of family processes and their role in the development of the child, only from more of an object-relations viewpoint:

Frequently, even before the child is born, parents entertain fairly detailed fantasies concerning the role the child is to take in the family. . . . The more burdened the parents are by their own inner conflicts (the pressure of which they hope to lighten by aid of the child) the more rigidly and compulsively their behavior is governed by these fantasies. . . . In this perspective, the development of the child is seen as his lasting attempt to come to terms with the role that one or both parents have prescribed for him. (p. 387)

Richter delineated three possible roles the child might be given in alleviating her/his parents unconscious needs. The first is as an object of symbiotic clinging or dependency. Here Richter cited Buxbaum's findings (1964) that mothers who in analysis developed an excessively dependent transference with severe separation anxiety, often behaved in a similar way toward their child, wanting the child to always stay with them; thus giving the child the role of substitute mother. The second possible role is that of partner substitute, in which the parent has unconscious wishes and

treats the child as a sexual partner and companion, as a substitute for an unsatisfactory spouse. The third possibility that Richter delineated is that of the parents unconsciously using the child to represent denied or forbidden aspects of their own negative self (repressed impulses, desires, fears, or needs) which they are then not obliged to be aware of in themselves.

Thus, we see that many theorists have come to very similar formulations about families; specifically, that parents who are in conflict turn to a cross-generational alliance with children, and particularly with opposite-sex children. This coincides with the basic hypothesis of the present study.

Empirical Support of the Effects of Marital Conflict on Children

In addition to these theoretical developments, various empirical findings have supported these conceptualizations. Social research on interpersonal dynamics in small groups has confirmed the above-cited family theorists' formulations on the development of alliances within triangles. Simmel (1950) was one of the earliest to point out "an elementary differentiating tendency in the three-some, namely, separation into a pair and an other" (p. 351). Simmel further stated that small differences in "power," "activity," and other characteristics of the members influenced the formation and persistence of such alliances. Mills (1953),

for instance, found that when college students were working on a task, the two most active members formed a "solitary alliance," while the least active member was "relatively isolated." Interestingly, when the two most active members did not form such an alliance but were instead competing for control, both attempted to align with the third member, creating a highly unstable situation of shifting alliances. In a later study, Mills (1954) found that alliances were more rigid when the isolated member was more "insecure." In this situation, the insecure person would become defensive and further isolate him/herself rather than make any enjoining gestures toward the two aligned members. Thus, to the degree that families are "unsafe" we may expect to find alliance patterns. Indeed, a recent review of dysfunctional families (Beckman, Brindley, & Tavormina, 1978) concludes that "power issues appear to prevail."

Caplow (1956), also working in the area of interpersonal dynamics in small groups, described six types of triadic situations based on varying distribution of individual power. In his Type II, where A and B are of equal strength with C being weaker (as in a family with one child), Caplow hypothesized that A and B would compete for a coalition with C to gain power over the other. These formulations were confirmed in the work of Vinacke and Arkoff (1957). Alexander (1973), in specifically studying the applicability of small-group theory to families, found that

such theories in fact were highly predictive of families.

Other researchers have directly investigated the relationship between parental disagreement or conflict and children's mental health. Wyer (1965), hypothesizing that the discrepancy between parents' perception of their child due to marital conflict would create instability in self-perceptions of the child and low self-acceptance, did indeed find that self-acceptance scores of children were significantly higher in families where parents showed less discrepancy in their perceptions of their children. Similarly, Porter (1955) found that marital adjustment and parental acceptance of their child were significantly related. Many studies have investigated poorly-adjusted children and found their parents to show greater differences in child-raising attitudes, greater disparity in traits and behaviors, and greater disagreement and conflict (e.g., Gassner & Murray, 1969; Leton, 1958; Van der Veen, Huebner, Jorgens, & Neja, 1964; Vogel & Lauterbach, 1965; Vogel & Bell, 1968). One recent study (Ferguson & Allen, 1978) pulled several of these measures together, finding that children's adjustment was related to parents' agreement in self-perceptions, congruence in their perceptions of their child, and their level of marital adjustment.

In addition, recent reviews of the literature have directly validated the theory of strong parent-child alliances in troubled families. Doane (1978), in her review of the

literature, concludes:

There is much evidence to support the view that disturbed families are marked by a preponderance of parent-child coalitions and a corresponding weakness of the parental coalition, as well as a conflicted marital relationship. (p. 372)

The present hypothesis of the cross-sexual nature of these alliances has also been supported. Reviews of empirical research in the area of child psychopathology and parent characteristics have concluded (Frank, 1965; Jacob, 1975) that the frequent finding of non-significant or inconsistent relationships between these child and parent variables is due to the failure to divide the sample by gender in their analyses of these relationships. This procedure, at best, increases error variance, and, at worst, confounds the basic results for each of the dyads. They state that studies that have looked at the effects of sex of child have consistently had significant results. For example, Gassner and Murray (1969) found that neurotic children tended to be opposite in sex to the dominant parent. Among families in therapy, Klein, Plutchik, and Conte (1973) similarly found that the child's problems were correlated with personality traits of the opposite-sex parent; and concluded that induction of identification with the opposite-sex parent in a high-conflict marriage isolated the child from the other parent, making the child unusually dependent on the one parent's love and vulnerable to her/his moods. Cameron (1978) also found sex differences in the relationships between children's behavior

problems and parent's attitudes; here again, the biggest parental predictor of childhood behavioral problems was parental conflict in child-rearing attitudes. Studies of family interaction or alliances have repeatedly demonstrated that sex of child is a significant factor (e.g., Ferreira, 1963a, 1963b; Hetherington, Stouwie, & Ridberg, 1971; Hutchinson, 1967). Additionally, studies of familial patterns of vocational styles or temperaments have consistently found differential patterns for the four parent/child dyads (DeWinne, Overton, & Schneider, 1978; Grandy & Stohmann, 1974; Grotevant, Scarr, & Weinberg, 1977; Schneider, DeWinne, & Overton, 1980).

In conclusion, a thorough review of the literature has found strong theoretical and empirical support for the following aspects of the present hypothesis: Marriages between opposites tend to be less common and less satisfying than marriages between similar spouses; marriages between opposites tend to be based on inadequately resolved developmental issues, and thus lead to disappointment and conflict; marital dissatisfaction and conflict tend to result in the formation of pathological, cross-sexual, parent/child alliances within the family.

Methodological Approach

The present study was designed to avoid some of the methodological problems that have severely limited the

validity and generalizability of family research in the past. Frank, in his 1965 review of empirical studies of child pathology and family variables, found that most research was based on very small samples, case histories, individual psychiatric interviews, and children's reports of parent behavior or personality. The validity of such unstructured, self-report, or recall procedures is based on the assumption that people are aware of, and willing to report accurately, events and feelings of the past and present, and that such reports are minimally affected by defensive distortion, forgetting, or inaccurate elaboration. This assumption seems manifestly dubious and has often been found to be untrue (e.g., Hess, 1970). As a result of these and other considerations, the last fifteen years have witnessed an increasing number of direct observational studies, in which current patterns of behavior among both parents and one or more children are directly assessed and systematically coded and analyzed.

This second approach, although very useful in many ways, particularly for initial hypothesis building and testing, has its own methodological limitations. Jacob's 1975 review of direct-observation studies of family interactions in disturbed versus normal families points out a number of these: Few studies used "blind" coding procedures so that judges were ignorant of families' diagnostic status; level of interjudge agreement was low in the majority of studies;

experimental and control families were not assessed in the same experimental setting; experimental and control groups were not comparable on potentially influential demographic variables; data were not analyzed separately on the basis of sex of child. In observational studies there is always the additional problem of obtaining a sufficiently representative sample family interaction.

But the most fundamental problem cited by Jacob is that of the validity of the measures themselves. Investigators employ a variety of measures to assess personality or interpersonal constructs, which are often ambiguous and overlap with measures of other dimensions. Jacob divided these into quantitative-process measures (objective, verbal-frequency-type procedures) and qualitative-process measures (rater-judgment procedures). For example, measures of conflict have included the following: Amount of simultaneous speech, speech interruptions, and failure to agree. Measures of dominance have included all of the following: Verbal frequency counts of speaking first, speaking last, successful interruptions, amount of speaking time, raters' subjective judgments of dominance, and revealed-differences techniques. Measures of affect (such as hostility/affection) have relied almost completely on raters' judgments, requiring judges to assess the occurrence as well as the content of expressions of affect.

Almost none of these studies makes an attempt to validate its particular measuring technique, and the empirical research indicates that the various types of measures of the same construct often do not correlate. For example, Bodin (1966) reported a negative correlation between two measures of "dominance" (a coalition game and an unrevealed-differences technique) for the mothers, and no significant correlation between these two measures for fathers or for sons. Alexander (1970) reported a negative relationship between rater-judged dominance (number of dominant statements) and process measures of dominance (unrevealed-differences technique). Hadley and Jacob (1973) reported a significant positive relationship between two process measures of dominance (successful interruptions and talking time), but no significant relationship between the two outcome measures of dominance (coalition games and an unrevealed-differences technique), and no significant relationship between these two process and two outcome measures. Similarly, Kieffer and Cohen (1978) found no relationship among four well-accepted behavioral measures of dominance.

Thus, the fundamental validity of these typical situational measures is questionable. According to Jacob (1975), further doubt is cast by other research findings:

Data clearly indicate that various verbal frequency measures of personality are significantly correlated with, and therefore confounded by, overall amount of verbal activity (e.g., Becker & Iwakami, 1969; Hadley & Jacob, 1973; Jacob, 1974). . . .

In addition, various situational measures of family interaction have also been found to be significantly related to social class (Jacob, 1974; Becker & Iwakami, 1969; Alkire, 1969). (p. 61)

In addition, terms such as alliances, coalitions, alignments, and subsystems have been used indiscriminately and interchangeably in family research with little clarity about their actual meaning. The lack of rigor in delineating these terms is evident in Jacob and Ground's (1978) conclusion that "the meaning of, and referents for, the suggested dimension (term? concept? process?) coalition are vague, to say the least" (p. 379). Past studies of family structure have generally assessed alliances through the use of one or two process-type measures, such as frequency counts of who-speaks-to-whom or who-disagrees/agrees-with-whom (e.g., Bowen, 1960; Cheeck & Anthony, 1970; Haley, 1964; Lidz et al., 1965; Minuchin, 1967; Wynne, 1961).

Personality Measurement in the Present Study

The present study was designed to avoid as many of these difficulties as possible. Instead of using direct self-report or observer-rating measures of often ambiguous, overlapping, and arbitrary dimensions, it employed a well-researched, paper-and-pencil measure of personality which covers a whole range of dimensions--the Sixteen Personality Factor Questionnaire (Cattell, Eber, & Tatsuoka, 1970). This approach not only avoids the difficulties of establishing

"blind" coding procedures, adequate levels of interjudge agreement, and comparability of experimental setting for control and experimental groups; it also permits the assessment of a wide range of personality dimensions by measures with well-established validity and structure. Such a trait-based approach puts theories of family interaction to a stronger test by looking at the long-term effects on stable, well-researched personality traits in children and parents.

The Sixteen Personality Factor Questionnaire (16PF) is a factor-analytically derived, self-report technique that measures sixteen primary personality factors. The 16PF was designed to be both an objective and comprehensive measure of personality, being based on over forty 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 16PF has a long history of use in industrial, educational, and clinical, as well as academic, settings.

The structure of the source traits in the 16PF has been replicated repeatedly in basic personality research (Cattell et al., 1970), which is more extensive than that for any other set of factors in the literature. The traits measured have also been recognized, demonstrated, and measured in parallel tests developed for other age ranges: The Early School Personality Questionnaire (ESPQ) for 6 to 8 year olds; the Children's Personality Questionnaire (CPQ) for ages 8 to

12 years: the Jr.-Sr. High School Personality Questionnaire (HSPQ) for 12 to 18 year olds, and the 16PF for persons 18 years or over. A total of 18 factors are present in these four questionnaires, but because of developmental differences in personality structure across the age ranges, all of the factors are not present in each questionnaire (see Appendix A for a listing of factors in each test form). Ten primary factors are common to all age ranges. Descriptions of all factors are given in Appendix B.

The tests have also been found to measure a set of broader, empirically-derived second-order or second-stratum factors that measure personality structure at a different level. Just as the primary source traits are a result of a factor analysis to find the functional unities among the vast array of human behaviors, so the primary, or "first-order," traits, being slightly but definitely intercorrelated--can be factor analyzed to derive a smaller number of "second-order" factors. These may be viewed as broader influences or organizers among the primaries. Scores on the four major second-order factors of the 16PF, Extraversion, Independence, Anxiety, and Cortertia, were computed for each subject in the present study, using the equations given in the respective questionnaire handbooks.¹ Descriptions of these second-order

¹While Extraversion and Anxiety are rather widely understood concepts, the other second-order factors are not. Indpendence is a generally extrapunitive trait involving first-

factors are also given in Appendix B.

Because of the interest in parental factors associated with children's neuroticism, as well as in the effects of parental neuroticism on children's personalities, scores were also calculated for each subject on neuroticism from the regression equations given in the test handbook, as follows:

Neuroticism:

$$\begin{aligned} \text{Children's} = & -C +.5D -E -F -.5G -H \\ & +I +J +0 +.5Q_4 +\text{Anxiety} \end{aligned}$$

$$\begin{aligned} \text{Parents'} = & -C -E -F -.25G -.5H + I \\ & +L +0 -.25Q_1 -.5Q_3 +Q_4 +\text{Anxiety} \end{aligned}$$

The development of this regression equation from the personality profiles of a large number of individuals diagnosed as neurotic across a variety of cultures, is extensively discussed elsewhere (Cattell & Scheier, 1961). Although the handbook also gives regression equations for specific types of neuroticism such as anxiety reaction, obsessive

order factors of dominant, aggressive, dogmatic, suspicious, stubborn, imaginative, concerned with internal ideas, free-thinking, tradition questioning, guarded, driven unrestrained, and over-active. The lower end of Independence (here called Dependence) indicates opposite, intrapunitive traits of submissive, inhibited, conventional, conforming trusting, adaptable, group-oriented, self-controlled. Cortertia denotes a basically cognitive orientation to life, with strong defenses against emotionality, the name coming from the descriptor "cortically alert." High Cortertia involves first-order traits of detached, cold, aloof, tough-minded, unsentimental, objective, rigid, and confident; while low-Cortertia denotes a feeling orientation to life, with such traits as warm, outgoing, tenderminded, sensitive, overprotected, gentle, submissive, insecure, impractical intuitive.

compulsive, depressive reaction, psychosomatic, etc.

(p. 266), the general equation contains those elements common to all: emotionally unstable, easily upset, changeable (C-); dependent, conforming, indecisive (E-); sober, introspective, brooding (F-1); self-indulgent, undependable, antisocial (G-); timid, threat-sensitive, inhibited (H-); sensitive, over-protected, insecure (I+); suspicious, jealous, dogmatic (L+); apprehensive, guilt-prone, worrying (O+); conventional, authority-fearing (Q_1 -); poorly controlled, follows own urges, unintegrated self-image (Q_3 -); and tense, frustrated, over-wrought (Q_4 +). Two additional factors appear in the children's equation which are not present in the adult form of the test: Overactive, demanding, distractible (D+); and guarded, internally restrained, obstructive (J+). Thus, this equation defines a general neuroticism factor denoting instability, conflict, introversion, inhibition, insecurity, and anxiety.

While paper-and-pencil personality tests are often not ideal in measuring interpersonal phenomena, the 16PF has consistently shown itself to be sensitive to a variety of interpersonal attitudes and behaviors. Appendix B gives research findings relating the first-order 16PF factors to marriage and family dimensions, interpersonal behaviors and perceptions, intrapsychic dynamics, leisure-time interests, and life-style and career characteristic that would be important to marital compatibility and harmony. Similar

findings for the second-order dimensions of Extraversion, Independence, Anxiety, and Cortertia are given below.

Extraversion, with constituent factors A+, F+, H+, and Q₂-, denotes a general people-oriented dimension. High scores have been found to be related to occupational choices of salesperson, school counselor, and business executive (all vocational results are from The 16PF Handbook, pp. 161-228); to reported number of social contacts and number of job promotions over a five-year period (Barton & Cattell, 1975); to ratings of helpfulness as a residence hall advisor/counselor (Miller, 1965); to low tolerance for social isolation (Francis, 1969); to greater involvement in social groups, clubs, and organizations by married couples (Barton & Cattell, 1972); to getting married within the first 5 years out of high school (Barton & Cattell, 1975); to willingness to participate in interpersonal techniques, such as role-playing, during training (Dixon & Elias, 1978); and to leisure pursuits of going to theatres or museums, acting out dramas, and going out (Cardenal, 1973). Low or Introverted scores have been found to be related to occupational choices of engineer, physicist, artist, writer, and farmer; to restraint or deprivation in individuals' sex life (Barton & Cattell, 1975); to a parenting style characterized as highly inactive, uninvolved, retreating, uncommitted, and restrained (Webster, 1971); and has been found to increase with length of stay in prison (Heskin, Smith, Barrister, & Bolten, 1974).

These findings do, indeed, suggest that spouses who score at opposite ends of this dimension may experience difficulty in resolving their differences, for instance, in their parenting styles, career interests, interpersonal styles, and leisure interests.

The second-order dimension of Independence, comprised of primary factors E+, L+, M+, Q₁+, and Q₂+, denotes an active, aggressive, confident style versus a passive, submissive, conforming, intro-punitive one. High scores on Independence have been found to be related to occupational choices of business executive, scientist, artist, writer, and effective psychologist; to having a larger number of social contacts and job promotions, and attending college rather than taking a job after high school (Barton & Cattell, 1975); to being seen by spouse as dominating the family structure (Brawngalkowska, 1972); to marriage role dimensions of high sexual activity, high power/dominance, and low wife's home devotion (Barton & Cattell, 1972); to women's desire to have a career outside the home and to have fewer children (Bledsoe, 1978); to women's adherence to feminist beliefs (McClain, 1978); to "masculine" vocational choices and interests (Harford et al., 1967); to extrapunitive, rather than intro-punitive reactions to frustration (Schalock & MacDonal, 1966); to being a campus political action leader (Winborn & Jansen, 1967); to direct rather than indirect student control by teachers (Raiche, 1965); and to clinical ratings of

"hostile" and "high internal tension" (Karson & O'Dell, 1976). Low, or Dependent, scores have been found to be related to occupational choices of clerical worker, kitchen employee, and nurse; to high occupational ratings of "ingratiating," "subordinates self to others' needs," "over-socialized," and "feels strong pressure toward social acceptability" (Sweney & Fiechtner, 1974); to high conformity in three experimental situations (Vaughan, 1965); to peer ratings of "shy and timid" (Aberman, 1969); to high church attendance among college students (McClain, 1970); to a life philosophy of moderation, restraint, and value of established achievements (Butt & Signori, 1965); to getting married within the first five years out of high school (Barton & Cattell, 1975); to an MMPI scale called Overcontrolled Hostility, validated as a measure of strong suppressed or repressed feelings of hostility (White, McAdoo, & Megargee, 1973); and to clinical ratings of "denial of hostility" and "hostility turned inward" (Karson & O'Dell, 1976). Thus, spouses scoring at opposite ends of Independence would tend to have strong differences in such areas as career interests and goals, interpersonal style, marital roles, values, and life philosophy.

The third second-order dimension, Anxiety, is composed of the primary factors C-, O+, Q₃-, and Q₄+. High scores on Anxiety have been found to be related to high conformity in three experimental situations (Vaughan, 1964);

to being a "sensitizer" rather than a "repressor" (Edwards, 1971); to sleep problems, frustration about sex life, and having few social contacts (Barton & Cattell, 1975); to having psychosomatic concerns (Kawash, Woolcott, & Sobry, 1979); to inconsistency of self-perception across different situations (Campus, 1970); to poor adjustment after divorce (Heritage, 1971); to external locus-of-control (Archer, 1979; Jacobs, 1976); to high physical and verbal aggression in problem adolescents (Madge, 1975); to parents' having children with behavior problems (Barkus, 1975); to "irrational" parenting style characterized by "depressed, oversensitive patterns of conflicted emotionality, little cooperation, stubbornness, inconsistency, intolerance, and disagreement" (Webster, 1971); and to marital reports of high frequency of disagreements, low frequency of sexual activity, low equality, and "not spending as much time as would like with spouse" (Barton & Cattell, 1972). Low scores on Anxiety have been found to be associated with occupations involving a great deal of stress, such as business executive, airline pilot, professional athlete, police officer, and social worker; with defensiveness and denial (Naditch, Gargan, & Michael, 1975); with high consistency of self-perceptions across situations (Campus, 1970); with defensiveness on the MMPI (Lebowits & Ostfeld, 1970); with a "repressor," rather than "sensitizer," style (Edwards, 1971); with high social desirability scores (Bendig, 1959); with ability to

withstand and perform well under stress (Brown & Shaw, 1975); with number of social contacts and job promotions, and with getting married within the first five years out of high school (Barton & Cattell, 1975); with high marital agreement and sexual gratification (Barton & Cattell, 1972); with a parenting style characterized by "consistency, tolerance, stability, rationality, cooperation, low conflict, and high commitment" (Webster, 1971); and with leisure pursuits of outdoor sports such as tennis, swimming, and cycling (Cardenal, 1973). These results would seem to indicate that spouses who score at opposite poles of the Anxiety dimension would have highly discrepant interpersonal and emotional styles, occupational interests and goals, marital role expectations, parenting styles, and leisure interests.

The final second-order dimension, Cortertia, is composed of first-order factors A-, E+, I-, L+, and M-, and denotes an aggressive, tough-minded, detached, aloof style, versus a warm, emotionally-sensitive, insecure, soft-hearted one. Low scores on Cortertia have been found to be associated with occupational choices of social worker, employment counselor, Roman Catholic priest and nun, and university professor; with several measures of interpersonal trust (Corazzini, 1974); with ratings of interpersonal warmth and empathy (Price, 1973); with peer ratings of "artistically sensitive to surroundings," "has vivid imagination," "intuitive," and "more interested in emotional than

material or practical" (Goldberg, Norman, & Schwartz, 1972); and with conformity in three experimental situations (Vaughan, 1964). High scores on Cortertia have been found to be related to occupational choices of scientist, mechanic, airline pilot, military personnel, and athlete; to masculinity on the Strong Vocational Interest Blank (Harford et al., 1967); to direct rather than indirect methods of control in teachers (Raiche, 1965); to child-battering by parents (Hyman & Mitchell, 1975); and to high scores on marital dimensions of domination/control and instability (Barton & Cattell, 1972).

These research results, plus those given in Appendix B, indicate that the 16PF traits are sensitive to many areas that are important to marital functioning and harmony. These have included career interests and goals, emotional and interpersonal style, life philosophy, values, leisure interests, marital dimensions, and parenting style. Thus, in the present study the four second-order dimensions of Extraversion, Independence, Anxiety, and Cortertia will be used to differentiate couples who are similar versus dissimilar, by choosing spouses who have similar versus discrepant scores on these dimensions.

Design of the Present Study

The underlying hypothesis of this study is that to the degree that marital partners are opposite, rather than

similar, in personality, their marriage will tend to be conflicted and unsatisfying; further, such unsatisfied marital partners will tend to develop unhealthy alliances with opposite-sex children, resulting in relatively permanent effects on the children's personalities, including increased similarity to the allied parent. This investigation will use a non-clinical population to test whether these family dynamics are present in most, rather than just a few unusual families. It will directly study sex differences by analyzing the data separately for each of the four parent/child dyads (mother/daughter, mother/son, father/daughter, father/son).

The present study will measure the full range of traits in each member of a large sample of intact, middle-class, families in order to test the following hypotheses:

(1) In families where the parents are highly dissimilar on personality dimensions, mothers, fathers, daughters, and sons will differ from the rest of the sample on Neuroticism, Anxiety, and other personality factors.

(2) In families where the parents are highly dissimilar in personality, the two cross-sex parent/child dyads (mother/son and father/daughter) will show more personality similarity than the two same-sex dyads (mother/daughter, father/son). Furthermore, in these families the overall patterns of significant parent/child trait interrelationships for each of the four parent/child dyads will differ from those in the rest of the population.

METHOD

The Sample

Subjects included all members of 127 middle-class, Caucasian 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 had previously participated 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 18 months 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 results that the children born with cleft palate abnormalities did not differ from either their siblings or from the control children on any of the many psychological measures used, including: the Wechsler Intelligence Scales, Gray Oral Reading Test, Gates-MacGinite Reading Comprehension Tests, Witkin Embedded Figures Test, Bender-Gestalt Visual-Motor Test, Human Figure Drawings, Wide Range Achievement Test in Arithmetic, Raven Progressive

Matrices, 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. The control families were selected for comparability with the experimental sample on the following demographic characteristics: Parental education, father's occupation, annual family income, age of the parents, and total number of living children. Average ages of family members, annual income, education, and number of children are given for the two groups in Table 3.

The mean 16PF scores of the total sample of mothers, fathers, daughters, and sons were examined to identify any distinguishing characteristics. Table 4 presents the mean deviations of each family member's score from the national norm of 5.5 for each of the first- and second-order 16PF traits. Those deviations that reached statistical significance ($p < .05$) are indicated. With around 20 tests per family member (20 for parents, 19 for children because of trait differences between test forms), one significant difference could be expected by chance. The number of significant deviations was greater than chance: five for mothers, eight for fathers, and three each for sons and daughters.

Table 3. Demographic Characteristics of the Sample Populations

Variable	Fathers				Mothers			
	Experimental Mn.	S.D.	Control Mn.	S.D.	Experimental Mn.	S.D.	Control 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

^aIncludes total annual income contributed by both parents where both were employed. Seven families refused to divulge income on the grounds of invasion of privacy.

^bIncludes 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.

Table 4. Deviations of Mean 16PF Scores of Sample from National Norms¹

	Family Members			
	Mothers (N=127)	Fathers (N=127)	Daughters (N=162)	Sons (N=231)
A	-0.4	0.0	-0.4*	-0.1
B	1.7*	1.6*	0.2	0.5*
C	-0.4*	0.2	-0.1	0.2
D	-	-	0.0	-0.2
E	-0.4	-0.1	0.2	0.3
F	-0.1	0.1	0.1	-0.2
G	0.2	0.5*	0.0	0.0
H	-0.2	0.0	-0.4*	0.0
I	0.0	-0.9*	-0.3	-0.4*
J	-	-	0.1	0.1
L	-0.4	-0.6*	-	-
M	0.1	-0.2	-	-
N	0.0	-0.4	0.2	0.3
O	0.3	0.0	-0.1	-0.1
Q ₁	0.1	-0.3	-	-
Q ₂	0.8*	0.6	0.0	1.1*
Q ₃	0.1	0.7	-0.4*	-0.1
Q ₄	-0.1	0.1	-0.1	-0.1
Extraversion	-0.3	0.0	0.0	-0.2
Independence	-0.1	-2.1*	0.0	0.0
Anxiety	0.7*	0.3	0.0	-0.2
Cortertia	-1.2*	0.9*	0.0	0.0

¹ Factors D and J are absent in the adult form of the 16PF, and Factors L, M, and Q₁ are absent from the children's forms of the 16PF.

*p < .05.

Mothers' significant differences included B+, C-, Q₂+, Anxiety+, and Cortertia-, while fathers differed significantly on B+, G+, I-, L-, Q₂+, Q₃+, Independence-, and Cortertia+. Thus, compared to national norms, these mothers tended to be more intelligent, emotionally unstable, anxious, emotionally sensitive, and self-sufficient. Fathers tended to be more intelligent, conscientious, self-disciplined, unemotional, tough-minded, self-sufficient, trusting and dependent. All of the primary factors that were significant for these parents, with the exception of fathers' I-, are among those found to be associated with higher educational achievement (The Handbook for the 16PF, p. 229), which is consistent with the higher educational and socioeconomic level of this sample (see Table 3). Additionally, both parents were above-average on intelligence and self-sufficiency (B+, Q₂+), and this, together with the configuration of an anxious, emotional mother and a tough, disciplined father, may have resulted in the couples' being motivated to seek out and carry through on the special, extended medical attention for their cleft-palate child; alternatively these findings may reflect characteristics of families willing to participate in a demanding assessment project.

Daughters tended to be timid, withdrawn, and undisciplined (A-, H-, and Q₃-), while sons were more intelligent, tough-minded, and self-sufficient (B+, I-, and Q₂+), suggesting some overall similarity to same-sex parents (timid,

anxious mothers and tough, defended fathers).

Thus, while this sample does show some differences from the test norms, many of these are typical of people with a higher educational level.

Instrument: This study employed the sixteen first-order and four second-order dimensions of the Sixteen Personality Factor Questionnaire (16PF), which is described in the Introduction and in Appendix B.

Procedure: Testing took place at the University of Illinois Hospital. All families were reimbursed for out-of-pocket expenses, such as transportation and lunches. All measures were individually administered, 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 whose reading comprehension grade level score fell below the lower range of the questionnaire were administered it verbally with a simultaneous visual presentation.

Analysis of Results: In order to select the families in which parents were most dissimilar in personality, a difference score was calculated by subtracting the father's score on a given dimension from that of the mother, and the resulting distribution of difference scores divided into thirds (upper, middle, and lower). Thus, there were two parent-dissimilar groups for each dimension used--Group F

contained those families in which fathers scored most above their wives, and Group M contained families whose mothers scored most above their husbands--as well as the intermediate Group S, which contained the middle third of families in which the parents scored most equally.

The theorists cited here delineated several different conflict patterns or styles among families with dissimilar parents, and research with the 16PF has suggested that a different pattern of interpersonal style is associated with each of the second-order factors. Therefore, summing results on dissimilar spouses across the four second-order dimensions would necessarily conceal and confound possibly significant differences. Accordingly, spouse difference scores were calculated separately for each of the four second-order factors of Independence, Extraversion, Anxiety, and Cortertia, and the extreme groups selected on each. Thus, each of the analyses described below was carried out separately on twelve groups: For each of the four second-order dimensions there were three groups, one with mothers scoring lower than fathers, and one with mothers scoring most equal to fathers, and one with mothers scoring higher than fathers. Table 5 shows the sample sizes of mothers, fathers, daughters, and sons in these groups on each of the four dimensions.

In order to determine if there was any significant overlap among the four second-order dimensions on these groupings, chi square tests were performed between the

Table 5. Numbers of Mothers, Fathers, Daughters, and Sons in Groups F, S and M for Extraversion, Independence, Anxiety, and Cortertia¹

	Extraversion Groups			Independence Groups			Anxiety Groups			Cortertia Groups		
	F	S	M	F	S	M	F	S	M	F	S	M
Mothers	41	44	42	43	42	42	42	44	41	41	45	41
Fathers	41	44	42	43	42	42	42	44	41	41	45	41
Daughters	42	60	60	50	58	54	52	63	47	54	51	57
Sons	82	72	77	76	82	73	78	87	66	71	82	78

¹Group F: fathers > mothers on dimension.
 Group S: fathers similar to mothers on dimension.
 Group M: mothers > fathers on dimension.

groupings of each pair of second-order dimensions. None of these six tests reached significance (although Extraversion x Independence showed a positive trend), and so it was concluded that the four sets of groupings were relatively independent of each other.

On each of the four second-order dimensions, mothers', fathers', daughters', and sons' traits were tested for differences between the three groups by means of a t-test.

Next, parent/child personality similarity was determined for each parent/child dyad (mother/daughter, mother/son, father/daughter, and father/son) in the two parent-dissimilar groups (Group F: fathers > mothers; Group M: mothers > fathers) for each of the second-order dimensions. For each dyad the same-trait intercorrelations were calculated

for all factors, transformed to z-scores, and averaged to get one overall correlation indicating the degree of personality similarity between the members of that dyad. Then, in order to determine if cross-sex dyads showed greater similarity than same-sex dyads, these average same-trait intercorrelations for the mother/son and for the father/daughter dyads were each compared with those of each of the same-sex dyads in a test for significance of differences.

Finally, the patterns of significant cross-trait or off-diagonal parent/child trait intercorrelations were investigated. The Pearson product-moment correlation of each child trait with each parent trait was calculated separately for each of the four parent/child dyads in each of the three groups (Group F--mother < father; Group S--father \approx mother; Group M--mother > father) for each of the four second-order dimensions.

Thus, the hypotheses can be operationalized as follows:

Hypothesis 1: On each of the four second-order dimensions of Extraversion, Independence, Anxiety, and Cortertia; there will be significant differences (t-test) between Group F (fathers > mothers), Group S (fathers \approx mothers), and Group M (mothers > fathers) for

- (a) mothers' 20 first- and second-order 16PF factors
- (b) fathers' 20 first- and second-order 16PF factors
- (c) daughters' 20 first- and second-order 16PF factors
- (d) sons' 20 first- and second-order 16PF factors

Hypothesis 2: On each of the four second-order dimensions of Extraversion, Independence, Anxiety, and Cortertia,

- (a) in both of the spouse-dissimilar groups (Group F--fathers > mothers, Group M--mother > fathers), the average parent/child same-trait intercorrelations (personality similarity) will be significantly higher for the two cross-sex dyads (mother/son, father/daughter) than for the same-sex dyads (mother/daughter, father/son).
- (b) for each of the four dyads (mother/daughter, mother/son, father/daughter, father/son) in each of the three groups (Group F--fathers > mothers, Group S--mothers \cong fathers, Group M--Mothers > fathers) there will be statistically significant patterns of intercorrelations between parent and child personality factors.

RESULTS

In the following discussion, second-order 16PF dimensions will be capitalized (Extraversion/Introversion, Independence/Dependence, Anxiety/Adjustment, Cortertia, and Neureticism). Uncapitalized traits refer to commonly understood concepts.

Data relevant to Hypothesis 1, that there will be significant trait differences between Groups F, S, and M for mothers, fathers, daughters, and sons, are presented in Tables 6, 7, 8, and 9, for the four second-order dimensions. Statistically significant ($p < .05$), two-tailed test) between-group differences denoted for direction are indicated after the appropriate factor for mothers, fathers, daughters, and sons. In addition, Appendix C gives the mean scores of each type of family member for Groups F, S, and M on each trait that showed significant inter-group differences.

Excluding the second-order dimension used to select that particular set of groups and the primary factors that contribute to it, about 40 tests of statistical significance were made per family member type (approximately 14 personality factors times 3 comparison tests on each--Groups F versus Group S, Group F versus Group M, and, Group S versus

Table 6. Statistically Significant 16 PF Differences Between Extraversion-Selected Groups \bar{E} , \bar{S} , and $\bar{M}^{1,2,3}$

	Mothers		Fathers		Daughters		Sons	
B	$S < M^d$		$S > M^d$					
C								
D								
E			$P > S^a$	$P > M^a$			$S < M^d$	
G				$P > M^d$				$P > M^d$
I					$P < S^b$	$P < M^c$		$P < M^d$
J								
L								
M								
N	$S < M^a$	$P < M^c$						$P < M^c$
O			$P < S^c$	$P < M^c$				
O_1								
O_3					$P > S^d$	$P > M^c$		
O_4	$S < M^d$						$S < M^d$	
Indp			$P > S^a$	$P > M^a$			$S < M^d$	$P < M^c$
Aux				$P < M^d$				
Cort			$P > S^d$	$S < M^d$	$P > S^b$	$P > M^c$		
Neur			$P > S^a$	$P < M^a$				
Extra	$P < S^c$	$S < M^a$	$P > S^a$	$S > M^a$				
+A*	$P < S^c$	$S < M^a$	$S > M^c$	$P > M^a$				
+P*	$S < M$	$P < M$	$P > S^a$	$S > M^c$	$P < S^c$	$P < M^d$	$P > S^c$	
+H*	$P < S^c$	$P < M^b$	$P > S^a$	$S > M^a$				
-O ₂ *	$S < M^a$	$P < M^a$	$P < S^d$	$S < M^a$				

¹ Group \bar{P} = Fathers > Mothers
 Group \bar{S} = Fathers = Mothers
 Group \bar{M} = Mothers > Fathers

² a = $p < .001$
 b = $p < .01$
 c = $p < .05$
 d = $p < .10$

³ Extra = Extraversion
 Indp = Independence
 Aux = Anxiety
 Cort = Corticilia
 Neur = Neuroticism

* Denotes primary factor that is a component of second-order Extraversion.

Table 7. Statistically Significant 16 PF Differences Between Independence-Selected Groups \bar{F} , \bar{S} , and $\bar{M}^{1,2,3}$

	Mothers	Fathers	Daughters	Sons
A				$F < M^d$
B				
C		$S > M^d$		
D				
E		$F > M^c$	$F < M^d$	
G	$S < M^c$ $F < M^a$	$F < S^b$ $S > M^d$		
H		$F > M^b$		
I	$F < S^b$	$F < M^a$	$F > S^c$	
J				
N	$S < M^b$ $F < M^b$		$S > M^d$	$F < S^c$
O				
Q ₃	$S > M^c$			
Q ₄				
Extra		$F > S^c$ $S > M^d$ $F > M^a$	$S < M^d$	
Anx			$F > M^d$	
Cort				$F > M^c$
Neur	$F < M^d$	$S < M^c$ $F < M^d$	$F > M^c$	
Indp	$F < S^a$ $S < M^a$ $F < M^a$	$F > S^b$ $S > M^c$ $F > M^a$	$F > S^d$	
+E*	$S < M^b$ $F < M^a$	$F > S^d$ $S > M^a$ $F > M^a$		$S > M^c$ $F > M^c$
+I*		$F > S^c$		
+M*	$F < S^a$ $S < M^c$ $F < M^a$			
+Q ₁ *	$F < S^b$ $S < M^d$ $F < M^a$			
+Q ₂ *		$F < S^d$	$F < M^b$	

¹Group \bar{F} = Fathers > Mothers
 Group \bar{S} = Mothers > Fathers
 Group \bar{M} = Mothers > Fathers

²a = $p < .001$
 b = $p < .01$
 c = $p < .05$
 d = $p < .10$

³Extra = Extraversion
 Indp = Independence
 Anx = Anxiety
 Cort = Cortaila
 Neur = Neuroticism

*Primary factor that is a component of second-order Independence.

Table 8. Statistically Significant 16 PF Differences Between Anxiety-Selected Groups \bar{F} , \bar{S} , and $\bar{M}^{1,2,3}$

	Mothers			Fathers		Daughters		Sons	
	A	P > S ^a	S > M ^b	P > M ^a	F < S ^c	S < M ^d	F < M ^c		
B					S < M ^c				
D									
E						P < M ^d			
F			S < M ^c	P < M ^d		P < M ^b			F > M ^d
G				P > M ^d	P < S ^a	P < M ^a		F < S ^d	F < M ^d
I					P > S ^c	P > M ^c			
J								F > S ^d	F > M ^c
M						P > M ^d			
N					F < S ^b	P < M ^c			
Q ₁			S < M ^c		F < S ^b	P < M ^d			
Q ₂									
Extra					P < S ^c	F < M ^b	P < S ^d	P < M ^c	
Indp			S < M ^d				F < S ^d		
Cort			S < M ^d			S < M ^d			
Anx		F < S ^d	S < M ^a	F < M ^a	P > S ^a	S > M ^a	P > M ^a		
**Neur		P < S ^a	S < M ^b	F < M ^a	P > S ^a	S > M ^a	P > M ^a		
-C*		P > S ^a	S > M ^b	P > M ^a	P < S ^a	S < M ^a	P < M ^a		
-H*		P > S ^c		P > M ^c	P < S ^a	P < M ^a			P < M ^c
+L*			S < M ^a	P < M ^a		S > M ^c	P > M ^a		
+O*		P < S ^a	S < M ^a	P < M ^a	P > S ^a	S > M ^b	P > M ^a		P > M ^d
-Q ₃ *			S > M ^d	P > M ^c	P < S ^a	S < M ^c	P < M ^a		
+Q ₄ *		P < S ^a	S < M ^a	P < M ^a	P > S ^a	S > M ^a	P > M ^d		P > M ^c

¹Group \bar{F} = Fathers > Mothers
 Group \bar{S} = Fathers = Mothers
 Group \bar{M} = Mothers > Fathers

²a = p < .001
 b = p < .01
 c = p < .05
 d = p < .10

³Extra = Extraversion
 Indp = Independence
 Anx = Anxiety
 Cort = Cortertia
 Neur = Neuroticism

*Constituent of second-order Anxiety.

**Anxiety is directly related to Neuroticism.

Table 9. Statistically Significant 16 PF Differences Between Cortertia-Selected Groups \bar{F} , \bar{S} , and $\bar{M}^{1,2,3}$

	Mothers		Fathers		Daughters		Sons	
B				$F > M^d$				
C			$S > M^c$				$S < M^d$	$F < M^d$
D							$F > S^d$	
G				$F > M^d$				
H	$F < S^d$	$S < M^b$	$F < M^a$	$S < M^d$		$S < M^c$		
J								
M								
N							$F > S^c$	$S < M^d$
O								
Q ₁			$F > M^c$					
Q ₂				$S > M^b$	$F > M^a$		$S > M^d$	$F > M^c$
Q ₃		$S > M^d$						
Q ₄						$S > M^d$	$F > S^c$	
Extra		$S < M^b$	$F < M^a$	$S < M^b$	$F < M^b$		$S < M^d$	
Indp		$S < M^c$	$F < M^c$				$F > S^d$	
Anx								
Neur	$F > S^d$				$F < S^d$		$S > M^d$	$F > M^c$
Cort	$F < S^a$	$S < M^a$	$F < M^a$	$F > S^c$	$S > M^a$	$F > M^a$		
-A*				$F < S^d$	$S < M^a$	$F < M^a$		
+E*	$F < S^c$	$S < M^a$	$F < M^a$				$S < M^c$	$F < M^c$
+F*		$S < M^d$	$F < M^b$				$S < M^c$	
-I*	$F < S^b$		$F > M^a$					
+L*	$F < S^b$	$S < M^a$	$F < M^a$					

¹Group \bar{F} = Fathers > Mothers
 Group \bar{S} = Fathers = Mothers
 Group \bar{M} = Mothers > Fathers

²a = $p < .001$
 b = $p < .01$
 c = $p < .05$
 d = $p < .10$

³Extra = Extraversion
 Indp = Independence
 Anx = Anxiety
 Cort = Cortertia
 Neur = Neuroticism

*Primary factor that contributes to second-order Cortertia.

Group M) and thus about 2 might be expected to reach the .05 level by chance alone. Excluding the selection factors, the number of group differences that achieved statistical significance for parents were: Extraversion = 2 for mothers (M) and 8 for fathers (F); Independence = 7M and 6F; Anxiety = 2M and 12F; and Cortertia = 8M and 7F. Hence, the average number of statistical significances per dimension for mothers and fathers was 5 and 8, respectively, compared to the 2 that might be expected by chance. Thus, these findings somewhat exceeded chance expectancies, and lend some support to the first part of the hypothesis.

Many additional differences between the F, S, and M Groups reached statistical significance but this may have been due to the experimental groupings. That is, for example, on the Extraversion dimension, Groups F, S, and M were constructed to contain mothers who scored below, equal to, and above, respectively, their spouses on Extraversion. Consequently, it was not surprising to find significant differences for mothers in the direction of F < S < M on Extraversion and its constituent factors. Similarly, since these Groups were constructed for fathers to be, respectively, lower, equal to, and higher than their wives on Extraversion, it is not surprising that there were significant differences for fathers on the Extraversion factors in the direction of F > S > M. Note, however, that these findings were not directly or necessarily generated by the

selection process. (For example, fathers being higher than mothers in the extreme Group F could have occurred by mothers who were average choosing husbands who were well above-average, or by mothers who were exceptionally low choosing husbands who were only average; additionally, Group S could have contained spouses who were more-or-less equal but both equally very high or both very low, rather than both in the mid-range, as occurred.) The number of statistically significant inter-group differences on these selection factors far exceeded the chance expectation of one (about six traits times three comparisons = 18 tests): Extraversion = 11 for mothers (M) and 13 for fathers (F); Independence = 10M and 8F; Anxiety = 17M and 19F; and, Cortertia = 11M and 8F.

For sons and daughters, the number of significant ($p < .05$) trait differences between each set of three groups was notably fewer than for their parents. Compared to the three such differences per set expected by chance (20 traits times 3 comparisons = 60 tests), the number of significant differences between the three groups were: Extraversion = 6 for daughters (D) and 3 for sons (S); Independence = 2D and 4S; Anxiety = 2D and 3S; and Cortertia = 1D and 7S. Thus, only in the Extraversion daughters' and the Cortertia sons' cases did the observed results appreciably exceed the chance level. These sparse findings only weakly support the hypothesis that parents' personality dissimilarity leads to

cross-generational alliances that would have permanent effects on the child's personality.

The expectation (Hypothesis 2a) that parent/child personality similarity (same-trait inter-correlations) would be greater for the cross-sex (mother/son, father/daughter) dyads than for the same-sex dyads in the two spouse-dissimilar groups (F and M) on each dimension was not confirmed. For each of the four dyads in each of the eight spouse-dissimilar groups (Groups F and M on each of the four dimensions), parent/child inter-correlations were transformed to z-scores and averaged across the 16 traits. Then, within each of these groups, each of the cross-sex dyads was compared to each of the same-sex dyads for significant differences: Mother/son was compared to mother/daughter and father/son; father/daughter was compared to father/son and mother/daughter. None of these 32 tests achieved statistical significance ($p < .05$). This suggests that the dyads were more-or-less equal with respect to overall personality similarity, and that if cross-sex, intergenerational alliances occurred in these spouse-dissimilar groups, they did not seem to affect overall personality similarity.

There are several other possible reasons for this lack of support for Hypothesis 2a (parent/child similarity resulting from parent/child alliances) and the very weak findings for children's differences in Hypothesis 1 (children's personality differences resulting from parent/child

alliances). One possible reason may be that this population is too "normal" to evidence strong effects. The parent-dissimilar groups included two-thirds of this "average" population of families. The prescribed family dynamics may not be strongly enough in evidence in such relatively "normal" and spouse-similar families to show significant effects on children's personalities.

A second problem here is that these parent/child alliances would presumably occur between each parent and only one child in the family. That is, the conflicted and dissatisfied spouses would turn to a "special" relationship with only one opposite-sex child, generally the eldest (the first to enter the family), not with all opposite-sex children. Thus, running these analyses on all opposite-sex children may have washed out the results. Certainly not all daughters in a family can show marked similarity to the father, for example, for then they would necessarily be quite similar to each other, which certainly does not seem true of most families. Additionally, some of these families had only male or only female children, and in these families one parent would presumably develop an alliance with a same-sex child, again confounding the present results.

Another problem with the present study that may have minimized results was that the experimental selection process left the parents in each group with a considerably constricted range on about a third of the personality traits.

Since each group of parents was selected to be high, medium, or low on Extraversion, Independence, Anxiety, or Cortertia, the parents in each group had a limited variance on the relevant second-order dimension and its constituent primary factors. Such restriction in variance necessarily limits the size of possible correlations; the parent/child correlations may have been artificially lowered by this condition.

One final reason for the limited results may be that these parent/child alliances may not be of a kind that affect relatively permanent personality traits such as the 16PF measures. These alliances may affect behaviors, dynamic motivations, or felt allegiances that are not reflected in the 16PF.

Further Analyses

The lack of confirmation of Hypothesis 2a, that greater overall personality similarity would occur for the cross-sex dyads, suggested a post-hoc hypothesis--that the different dyads would be similar on different personality traits. Thus, Table 10 was constructed to identify these traits that showed significant same-trait inter-correlations, either positive or negative, for each of the four dyads in Groups F, S, and M on each of the four dimensions. Although these results will be discussed in detail later in conjunction with the other findings, one remark can be made here about the overall findings. For both sons and daughters the

Table 10. Statistically Significant Parent/Child Same-Trait Correlations^{1,2,3}

Father/Daughter	Group F (fathers > mothers)	Daughters Group S (fathers = mothers)	Group M (mothers > fathers)	Father/Son Group P (fathers > mothers)	Sons Group S (fathers = mothers)	Group M (mothers > fathers)
Extraversion	Ind ^c	d ^a Extra ^a , Cort ^a , Neur ^d	I ^d , Q ^d , Q ^d ₄	d ^a , b ^a , f ^a , N ^a , Q ^d , Neur ^c	A ^d , b ^a , f ^a , Extra ^c	Group M (mothers > fathers) b ^a , e ^a , o ^a , Q ^d ₃ , Neur ^d
Independence	b ^a , c ^a , Ind ^c , Extra ^c	c ^a , e ^a , Q ^d , Aux ^e , Extra ^c	b ^a , I ^b	b ^a , d ^a , e ^a , Q ^d ₃ , Neur ^c , Aux ^d	A ^d , c ^a , o ^a , Cort ^c	d ^a , Q ^d , Extra ^c , Neur ^c
Anxiety	A ^a , c ^a , d ^a , Ind ^c , Extra ^c	d ^a , Q ^d ₃	e ^a , Q ^d ₃	A ^a , b ^a , N ^a , Q ^d ₃ , Q ^d ₄	b ^a , c ^a , d ^a , N ^a , o ^a , Aux ^a , Neur ^b	b ^a , e ^a , I ^b , o ^a , Q ^d ₃ , Neur ^c
Cortertia	e ^a , Ind ^c	b ^a , c ^a , Q ^d , Cort ^c	A ^d , b ^a , o ^a , Neur ^d	d ^a , b ^a , o ^a , Q ^d ₄	b ^a , N ^a , Q ^d ₃ , Ind ^d , Cort ^d	d ^a , d ^a , d ^a , b ^a , c ^a , e ^a , f ^a , g ^a , N ^a , o ^a , Q ^d ₃ , Ind ^d , Aux ^a , Neur ^d
Mother/Daughter				Mother/Son		
Extraversion	b ^d	b ^d , f ^c , Extra ^b , Cort ^d	b ^d , e ^c , Q ^d ₃	e ^c , f ^c	c ^c , c ^c , I ^b , Extra ^d , Aux ^d , Neur ^c	b ^b
Independence	b ^d , Ind ^b , Aux ^b	b ^d , e ^d	b ^b , e ^c	b ^d , d ^a , e ^c , b ^b , Q ^d , Extra ^c	b ^c , Neur ^d	A ^c , d ^a , Extra ^d , Ind ^d
Anxiety	b ^a , f ^c , Cort ^b	Ind ^c		b ^c , I ^d	c ^d , e ^b , d ^a , Neur ^c , Extra ^d	b ^c , N ^b , d ^b , Q ^d ₃ , Neur ^c
Cortertia	Q ^d ₃	b ^a , e ^c , f ^d , d ^d	b ^d , e ^c	b ^c , c ^c , I ^b , Extra ^d , Aux ^d , Neur ^b	b ^c , Ind ^c	f ^c

¹ d = p < .001
b = p < .01
c = p < .05
d = p < .10

² Ind^c = Independence
Extra = Extraversion
Aux = Anxiety
Cort = Cortertia

³ Correlations are positive unless otherwise noted.

primary traits that showed the greatest number of significant correlations (similarity) with parents' personalities were factors B (intelligence) and E (dominance). This suggests that these two traits show some particular proclivity for family resemblance, either through genetic or environmental processes.

Data for Hypothesis 2(b) are given in Appendix D because of their length. Each matrix shows all statistically significant inter-correlations for one of the four parent/child dyads from one of the three groups (F, S, and M) from one of the four dimensions ($4 \times 3 \times 4 = 48$ matrices). Since 21 parent traits were inter-correlated with 20 child traits in each matrix, the number of significant correlations that might occur by chance at the $p < .05$ level is 21. Appreciably more were observed: The average number of statistically significant correlations for the father/son, mother/son, father/daughter, and mother/daughter dyads were 42, 38, 24, and 28, respectively.

Some overall patterns were evident in these findings across the three types of data (the t-tests of trait differences between groups for each family member--Tables 6, 7, 8, and 9; significant trait similarities for each dyad in each group--Table 10; and, the significant parent/child trait inter-correlations found in the 48 matrices). First, sons showed much stronger effects in each domain. In Table 10, the father/son dyad showed similarity on far more traits

than did the mother/son, father/daughter, and mother/daughter dyads: the numbers of significant trait similarities were 42, 25, 21, and 18, respectively. Thus fathers and sons seem to show the highest degree of trait similarity, with mother/son having the next most, and the two daughter dyads showing the least. Likewise, in the cross-trait correlation matrices in Appendix C, father/son and mother/son dyads showed markedly more linkages that achieved statistical significance than did father/daughter or mother/daughter dyads: Average number of significant correlations per matrix were 42, 38, 24, and 28, respectively. Thus, sons' personality traits were linked much more frequently to both parents' than were daughters'. Furthermore, in Tables 6, 7, 8, and 9 sons showed 50% more significant trait differences than did daughters. These patterns all suggest that parents, but especially fathers, may in subtle ways interact more powerfully with their sons than with their daughters. Alternatively, this might result from sons' paying more attention to parents, being more susceptible to parental influence; or from sons' having one clear singular pattern of interrelationship with parents, but daughters' having several different patterns that are confounded in results. In any case, these striking results over a sizeable sample suggest some basic difference in family patterns for girls and boys and reinforce the earlier suggestion that research on children and parents should be collected separately for each dyad.

Sons and daughters also differed on which traits showed the greatest interrelationship with parents' traits. Table 10 indicates that on second-order traits sons showed by far the most similarity to parents on Neureticism (10 significant occurrences, compared to 3 on Extraversion, the next highest), while daughters showed the greatest similarity to parents on Independence (6 significant occurrences versus 3 on the next-highest--Extraversion). A similar pattern occurred in the overall parent/child trait intercorrelations. Number of significant linkages for daughters and sons, respectively, were distributed among the second-order dimensions as follows: Extraversion--28% (daughters) /12% (sons), Independence--24%/17%, Cortertia--24%/12%, Anxiety--16%/21%, and, Neureticism--8%/38%. Thus, sons had nearly three times as many linkages on Neureticism and twice as many on Anxiety as they did on the other dimensions, indicating that sons' mental health was linked in particularly important ways to their relationships with parents. For daughters, on the other hand, Neuroticism was the least important second-order factor, showing one-third as many linkages as Extraversion, Independence, and Cortertia, which were most important in their relationships with parents. These traits seem to be related to traditional sex roles for girls, in that Extraversion and Dependence are interpersonal dimensions, and Cortertia is a measure of emotionality. The results suggest important sex differences in these

parent/child linkages that revolve around mental health for boys versus interpersonal and emotional qualities for girls.

DISCUSSION

It is hard to find clear confirmation or lack of it in the literature for these findings of stronger overall parent/son interrelatedness focused in the area of Neuroticism and Anxiety versus the weaker but wider-ranging relatedness of daughters. The only recent authors who directly address this question (Maccoby & Jacklin, 1974) make the following, tentative observation:

It would be a formidable task to review all the socialization studies to see whether the correlations between parent behaviors and child characteristics are generally higher for boys than for girls. We have, however, reviewed a selected set of studies (Bayley & Schaefer, 1964; Bing, 1963; Hetherington, 1967; Honzig, 1967; Kagan & Moss, 1962; and Sears, Rau, & Alpert, 1965) with this question in mind. Taken as a whole, these studies do not indicate that either sex is generally more susceptible to home influence. (p. 73)

Any such conclusion, however, must be highly speculative, both because of the great volume of the relevant research and because of its shortcomings. The great majority of research into parent/child personality linkages either fails to analyze the data separately by gender (Barogona, 1964; Siegelman, 1965), samples only one sex of children (Coroso, 1978; Salley, 1977; Scheck, 1978),

studies only one child trait (Bayard-de-Volo & Fiebert, 1977; Lesser & Steininger, 1975; Lifshitz & Ramot, 1978), or calculates parent/child differences or proportions rather than correlations (Schneider, DeWinne, & Overton, 1980; Shilling, 1979). Unless parent/child correlations are given for children of each sex over a range of traits, it is impossible to judge whether one sex shows greater overall relatedness or in what area of personality this is focused.

A search of the last fifteen years of Psychological Abstracts revealed only five studies which investigated the correlation of multiple personality traits between parents and children of each sex. The first two studies (Grotevant, 1976; Grotevant, Scarr, & Weinberg, 1977) employed the Strong-Campbell Interest Inventory, an instrument typically used in reference to vocational interests rather than personality. Both studies found strong sex differences, as might be expected in the highly sex-typed domain of vocational interests, but no overall greater quantity of relationships for either sex child. Hill and Hill (1973) inter-correlated parents' and children's MMPI scores, also not a normal personality measure, but found no significant correlations between daughters or sons and parents on the ten clinical scales.

Troll, Neugarten, and Kraines (1969) looked at correlations between personality traits of college students and their parents, but used a poorly-researched questionnaire of

their own design on a fairly small sample. Although no one of the four parent/child dyads showed significantly stronger influence overall, different traits were important within different dyads. For example, "cognitive complexity" was significantly correlated only for the two parent/son dyads, while "intraception" was significantly correlated only for the two parent/daughter dyads, and "spontaneity" only for the two mother/child dyads. However, findings in this study were sparse, and it is difficult to tell how these traits would relate to the 16PF traits, particularly Neuroticism. The final study reviewed here (Scarr, Webber, Weinberg, & Wittig, in press) calculated parent/child trait intercorrelations on measures of extraversion, neuroticism, and physical and social anxiety. While these authors found twice as many significant linkages for daughters as sons on extraversion, they did not find a greater number of linkages for sons on anxiety, neuroticism, or overall.

While all of these studies used multivariate instruments, they examined only parent/child same-trait intercorrelations (similarity versus dissimilarity). The possibility that one child trait was associated strongly with different parent traits (off-diagonal, cross-trait correlations) was not examined, and so even these studies provide limited comparability to the present results.

Consequently, the question of differential quantity or content of parent/son and parent/daughter personality

linkages remains unanswered. While this trait literature does not clearly support the finding of greater parent/child relatedness for sons, very few studies include measures of anxiety and neuroticism, which were the outstanding traits for sons in the present findings.

Approaching this issue from another direction, the higher incidence of neuroticism or psychological disorder among boys is a well-established finding (e.g., Dreger et al., 1964; Rutter & Graham, 1966; LaPousse & Monk, 1964; and Werry & Quay, 1971). In reviewing the literature, Maccoby and Jacklin (1974) conclude:

Boys show greater vulnerability to anomalies of prenatal development and childhood diseases, as well as greater incidence of a variety of developmental problems, ranging in severity from enuresis to mental retardation and autism. (p. 119)

Other authors have found boys to be more susceptible to psychological stress such as family discord and disharmony and unpleasant separation experiences (e.g., Rutter, 1971, 1975). Even if this is a genetic vulnerability, as the latter author suggests, the particular psychological disorder would presumably develop within the context of specific family events and conditions, and consequently correlate with family/parent variables. Thus, the well-established greater vulnerability of boys to neuroticism supports the present finding of greater parent/son linkages centered around traits of Anxiety and Neuroticism.

Another area of research that bears on the present results is that of sex-role socialization. There is a strong body of evidence that boys are subject to clearer and more strongly-enforced sex-typing pressures than are girls (Bandura, Ross, & Ross, 1963; Donelson & Gullahorn, 1977; Hartley, 1959; Lynn, 1959; Mussen, 1969; Nadelman, 1974). Thus, opposite-gender behavior is far less tolerated in boys than girls from an early age onward. There are fewer sex-role restrictions on girls, who have been found to model a wider variety of behaviors from both parents (Fagot, 1974; Grusic & Brinker, 1972; Minuchin, Biber, Shapiro, & Similes, 1969; and, Perry & Perry, 1978). Boys have also been found to show greater anxiety about sex-role-inappropriate behavior (Ross & Ross, 1972; Wolf, 1975). These results suggest that parents may, indeed, do more socialization of sons than daughters, supporting the present finding of greater parent/child trait intercorrelations for sons. These results can also be seen as supporting the prominence of sons' Neuroticism in the present findings, since greater inhibition and repression of sex-role-inappropriate behavior may lead to neuroticism. Finally, this line of research suggests that daughters are allowed to model a wider range of behaviors of both parents. This supports the present finding of parent/daughter linkages' being spread fairly evenly over several traits versus the singular emphasis on Neuroticism for sons.

Consequently, a review of the parent/child trait relationship literature does not clearly support the present findings of greater parent/son relatedness focused in the area of sons' Neuroticism and Anxiety. This literature, however, is highly inconclusive in that there are very few studies that measure a full range of traits, include neuroticism and anxiety, or intercorrelate these to study the overall patterns of cross-trait linkages. Other lines of research did indicate a greater incidence of neuroticism in boys, stronger parental socialization of boys toward their traditional sex-role, and the modeling of a wider range of behaviors of both parents by daughters.

The following discussion will combine the three types of data in an attempt to clarify the family constellation in each of the three groups (F, S, and M), separately for each of the four dimensions (Extraversion, Independence, Anxiety, and Cortertia). Beginning with Extraversion, we shall look first at Group F ($F > M$), then Group S ($F \approx M$), and then Group M ($M > F$). For each group, we shall first turn to Table 6, 7, 8, or 9 and examine the significant personality traits of both parents in that

group; then turn to daughters, looking first at their significant trait differences in the same table, and then at their patterns of relationships with parents (similarities in Table 10, and overall trait linkages in Matrices, Appendix D), trying to understand how the particular daughter traits might be related to the particular parent traits and parent/child patterns. Lastly, this process will be repeated for sons. First-order traits will be indicated by letter name only, and so reference to Appendix B may be useful. Second-order traits will be capitalized, as usual, in order to distinguish them from the use of general trait concepts.

Extraversion

Group F. Compared to both national norms and to other mothers in this sample, these mothers were predictably low on Extraversion, and its constituent factors A-, F-, H-, and Q_2^+ (see Table 6); thus, they were cold, withdrawn, shy, introspective, and seclusive. Fathers were likewise predictably high on Extraversion and its constituent factors of A+, F+, H+, and Q_2^- compared to other fathers and to national norms; thus, they were warm, outgoing, dominant, impulsive, socially bold, and group-involved. Beyond the predictable Extraversion differences these fathers tended also to be G+, O-, E+, high on Independence and Cortertia, and low on Neuroticism. Thus, Group F couples tended to consist of introverted, withdrawn

wives and extraverted, tough-minded, ego-resilient husbands.

Not only were these spouses opposite on the selected-for Extraversion factors (mothers tending to withdraw from people and fathers tending to move toward people), but these fathers were in addition well-adjusted, confident, unfrustrated, tough-minded, and conventional. It seems perplexing that robust, outgoing men would choose such withdrawn, unsociable women, or vice versa, since they would seem to be very different in the way they would prefer to spend their time.

In Group F, daughters tended to be detached, tough-minded, unemotional, and self-controlled, possibly in defensive reaction to Introverted, Neurotic, intrusive mothers, and through identification with dominating, intrusive fathers. Table 6 indicates that these daughters were significantly A-, I-, Q₃+, and Cortertia+--withdrawn, tough, unemotional, and concerned about adhering to a socially-approved self-image. Matrices 1 and 2 in Appendix D provide the trait interrelationships between these daughters and each parent. Mothers' traits of Introversion, Neuroticism, L+, A-, H-, and O+ tended to be related to daughters' Cortertia+, I-, and E+. Thus, a pattern of Introverted, Neurotic, intrusiveness in mothers was linked with tough, assertive, unemotionality in daughters--possibly a defensive toughening of these daughters in reaction to mothers. Fathers' Independence, L+, and E+ were linked to

daughters' D+, E+, F+, O+, and Independence. (Table 10 also indicates that these fathers and daughters showed similarity on Independence, a trait on which these fathers were high.) Thus, tough, dominating, intrusive fathers tended to have daughters who were similarly tough and dominating, but also overactive, excitable, and impulsive--perhaps a case of father/daughter identification or alliance and oedipal-type excitability and attention-seeking.

Group F sons here showed the greatest number of overall parent/child correlations for either sex in any group on any of the four second-order dimensions. The interesting thing about these parent/child patterns was that father/son linkages were quite similar to the mother/son linkages--both linking Introversion, Dependence, and Neuroticism in parents to Anxious Neuroticism in sons--yet mothers and fathers were opposite (mothers were Introverted and fathers Extraverted, Independent and non-Neurotic). One might expect mothers and fathers to influence sons in opposite directions and cancel out each others' effects.

As Matrix 4 indicates, mothers' Introversion, Dependence, Cortertia-, E-, F-, H-, L-, and Q₃+ were linked with sons' Anxiety, Neuroticism, C-, E-, F-, H-, O+, and Q₂+. Sons' Anxiety, Neuroticism, emotional instability, guilt-prone insecurity, brooding introspection, seclusiveness, shyness, and conformity were linked with Dependence, Introversion, emotionality, submissiveness, brooding

introspection, timid withdrawal, and inhibited over-control in mothers. Similarly, fathers' traits of Dependence, Neuroticism, Introversion, A-, E-, F-, I+, and Q_2^+ were linked with sons' Anxiety, Neuroticism, C-, E-, F-, H-, O+, and Q_2^+ (see Matrix 3). Hence, fathers who were (looking at the opposite side of these correlations, since these fathers overall tended to show the opposite traits) Extraverted, socially-bold, group-involved, Independent, aggressive, emotionally tough, and non-Neurotic tended to have sons who were non-Anxious non-Neurotic, emotionally stable, unworried, confident, aggressive, socially bold, carefree, and group-involved. Therefore, since mothers and fathers were, in fact, opposite on many of these traits, it appears that they may have had a counter-balancing influence on sons.

However, as Table 10 indicates, sons showed greater similarity to their healthier fathers (on traits of Neuroticism, E, F, and O, plus dissimilarity on A and N), but similarity to their less-healthy mothers only on traits of E and F. This is consistent with the actual finding here (see Table 6) that these sons were, overall, not greatly different from other sons or from national norms, but that the deviations they showed were in healthy directions in that they tended to be more warm, outgoing, zestful, group-involved, unpretentious, natural, and self-disciplined (A+, G+, J-, N-).

Group S. Parents in the middle group tended to have few distinguishing characteristics: mothers tended to be more unruffled and phlegmatic (Q_4^-), and fathers tended to be brighter (B^+) and more sensitive and emotional (Cortertia-) compared to national norms or sample fathers (see Table 6).

It is interesting that here, where parents' personalities were most similar and marriages were hypothesized to be healthier, daughters showed far more linkages and similarity to mothers (their role models) than to fathers, or than daughters and mothers showed in the other two groups here. Daughters showed similarity to mothers (see Table 10) on traits of Extraversion, Cortertia, B, and E, but no significant similarity to fathers, and at most one similarity to mothers in either extreme group. Likewise, these daughters showed significantly more cross-trait linkages with mothers than with fathers, or than the extreme (F & M) group daughters had with either mothers or fathers. This suggests that these daughters might have identified more with the appropriate sex-role parent than did daughters in the extreme groups, where cross-sex alliances may have been formed.

Additionally these cross-trait linkages seemed related to sex-roles. Mothers' sex-role traits of timid, submissive, emotionally-sensitive, trusting, dependent (Cortertia-, Dependence, Introversion, E-, H-, L-, M-, and Q_2^+) were linked with similar traits of emotionally-sensitive,

submissive, cautious, introspective, dependent (Cortertia-, Introversion, A-, E-, F-, I+, and Q_2 +) in daughters (see Matrix 6).

The pattern with fathers, although less strong, was interesting because it was somewhat opposite (see Matrix 6). Fathers' traits of intelligent self-assured, socially bold, non-Anxious, and Independent (Independence, Anxiety-, B+, H+, and O-) were linked with daughters' traits of warm, relaxed, zestful, Extraverted (Extraversion, A+, J-, and Q_4 -). This suggests that if each parent conformed to his/her traditional sex-role (fathers self-assured and Independent, mothers Dependent, shy, and emotionally sensitive--all well-established sex differences on the 16PF), they may have had opposite, counter-balancing influences on daughters.

Sons in Group S also showed more linkages and similarity to mothers than to fathers and these revolved around mutual Neuroticism versus adjustment, while the fewer relationships with fathers revolved around mutual Extraversion versus Introversion. Mothers' traits of anxious, inhibited, guilt-prone, worrisome, conflicted, self-indulgent (Anxiety, Neuroticism, G-, H-, O+, Q_3 -) were linked with sons' traits of emotionally-unstable, immature, overactive, demanding, detached, brooding, and inhibited (Introversion, Neuroticism, A-, C-, D+, F-, H-, and Q_4 --see Matrix 8). Mother/son similarities (Table 10) also involved Neuroticism, emotional stability (C), self-discipline (G), and social inhibition

(H), with trends on Anxiety and Extraversion.

As mentioned, father/son bonds were fewer and revolved around Extraversion/Introversion (see Matrix 7). Father/son similarity (Table 10) occurred for Extraversion and H (social boldness), with trends on A (warmth) and B (verbal intelligence); and in cross-trait linkages, fathers' tough-minded, unsentimental Introversion (Introversion, Cortertia, H-, I-, Q₂+) related to sons' Neurotic Introversion (Introversion, Neuroticism, A-, E-, H-, and Q₂+)).

Group M. As anticipated mothers in Group M tended to be Extraverted, warm, expressive, and socially bold (A+, F+, H+, and Extraversion), relative to other sample mothers or to national norms. In addition, they tended to be brighter, socially naive, and tense (B+, N-, Q₄+) . Also predictably, these fathers tended to be Introverted, cold, taciturn, shy, submissive, and seclusive (Introversion, A-, E-, F-, H-, Q₂+) while also tending to be Dependent, Anxious, Neurotic, low on Cortertia, and less intelligent (B-). Thus, Group M couples tended to involve bright, naive, Extraverted wives and Dependent, Anxious, Neurotic husbands.

It is not clear why the husbands in the two extreme groups (F and M), in addition to being Introverted or Extraverted relative to their wives, were also at extremes on Dependence, Anxiety and Neuroticism. Introversion was not associated with Anxiety or Neuroticism for mothers. As will be seen in discussing the Anxiety dimension, quite different

traits are associated with high Anxiety and Neuroticism in women. Perhaps, being socially aggressive and uninhibited relative to wives was important to these husbands' confidence and ego strength. Or perhaps, when conflicted, men tend to withdraw from normal social relations, while other, non-neurotic factors are associated with social withdrawal in women. Alternatively, Extraverted, resilient wives may choose Introverted, Dependent, Neurotic spouses because of some need to nurture or feel needed and secure; while the Introverted wife may want a spouse who has not only the missing social skills of Extraversion, but who will also be confident and resilient. In any case, it is again somewhat difficult to understand on what rational and constructive basis these two opposite types would choose each other for life mates: rather, they seem to fit the pattern for problematic marriages delineated by the family theorists.

Daughters of these highly discrepant parents showed the fewest linkages with mothers and fathers of the three groups (see Matrices 9 and 10). Perhaps these seemingly conflicted marriages led daughters to detach themselves from parents and look elsewhere for emotional interactions and involvements. Patterns linked Anxious withdrawal in these fathers (Anxiety, Introversion, A-, F-, and H- --all, in fact, characteristic of fathers in this group) with daughters' tense aggressiveness (Anxiety, Neuroticism, Q₄+, and E+). Mothers' Extraversion, but particularly the warm,

close, "people-orientedness" of A+ was linked to Anxious, guarded Independence in daughters (Extraversion, Independence, Anxiety, E+, J+, and O+). This suggests that extreme Extraversion, especially when it includes the close, dependent, qualities of A+, may indicate intrusive, over-involvement with daughters, and lead to guilt-prone Anxiety (from over-internalization of mothers' demands, needs, and prohibitions) and guardedness in daughters. Overall, these daughters tended to be (see Table 6) non-Anxious and under-controlled, again emphasizing their unrelatedness to these parents.

Sons in Group M tended to be (see Table 6) somewhat poorer in adjustment compared to national norms but especially compared to sons in Group F: They were tense, conflicted, guarded, antisocial, aggressive, and socially shrewd and calculating (E+, G-, J+, N+, Q₄+). These sons had twice as many linkages with their Introverted, Neurotic fathers (which involved a pattern of mutual Neuroticism) than with their Extraverted mothers (see Matrices 11 and 12). Fathers' poorly-controlled and self-centered Neuroticism (Anxiety, Neuroticism, G-, M+, Q₂+, Q₃-) was linked with sons' conflicted, guarded, antisocial impulsive, Neuroticism (Neuroticism, Independence, D+, G-, J+, O+, Q₃-, Q₄+). These sons also showed more similarity to fathers than to mothers (see Table 10), and on these same Neuroticism traits: submissive-ness (E), guilt-prone apprehensiveness (O), conflicted under-

control (Q_3), and Neuroticism intelligence (B). Interrelationships with mothers tended to be ameliorating, although far weaker, because, although the pattern of correlations was quite similar to those with fathers, mothers here were the opposite of fathers. Mothers' socially bold, uninhibited, unconventional, emotional stability (low Anxiety and Neuroticism, B+, C+, F+, H+, Q_1 +) linked with sons' aloof, unemotional, tough-minded aggressiveness (Independence Cortertia+, A-, E+, and I-).

Summary. Parents in the two extreme groups were opposite to each other on Extraversion and its component factors, but fathers were additionally extreme on Independence, Cortertia, Anxiety, and Neuroticism.

Sons were better-adjusted in Group F where they had extremely strong and similar linkages with both mothers and fathers involving parents' Dependent, Introverted Neuroticism and sons' Introverted Neuroticism. Sons in Group S tended to be withdrawn, cautious, and submissive, and had a greater number of linkages with mothers than fathers, again revolving around mutual Neuroticism. Sons in Group M were poorest in adjustment (guarded, conflicted, antisocial, aggressive, manipulative) and showed strong linkages with fathers, which again involved mutual Neuroticism. Thus, when fathers were healthiest (non-neurotic, non-Anxious, and outgoing), sons seemed to be better adjusted and had more interrelationships with both parents.

Daughters, on the other hand, showed very few linkages with either parent in Group M, where mothers were most outgoing. They showed the greatest number of linkages with Group S mothers, and these involved mutual sex-typed traits of shyness, Dependence, and emotional sensitivity. In Group F (where fathers were Extraverted, tough, and non-Neurotic and mothers Introverted), daughters showed sex-role-inappropriate traits of detached, unemotional tough-mindedness. These were linked with intrusive, Anxious Introversion in mothers and with dominant, intrusive tough-mindedness in fathers. Thus, daughters did not fare particularly well in any group, but were warm and sensitive (sex-role appropriate) in Group S and least Anxious in Group M, where there were few relationships with either parent.

Independence

Group F. As might be expected, Group F mothers (see Table 7) were Dependent, submissive, conventional, and conforming ($E-$, $M-$, Q_1) relative to other mothers and to national norms. Beyond these predictable findings, Group F mothers were moralistically conscientious, socially shrewd, tough-minded, and less Neurotic ($G+$, $I-$, $N+$, Neuroticism-). Fathers here tended to be Independent, aggressive, dogmatic, self-indulgent, and socially bold ($E+$, $G-$, $H+$, $L+$), relative to other fathers and to national norms. In addition to

these predictable differences, fathers tended to be Extra-verted, high-spirited, socially bold, and group-oriented (F+, H+, Q₂-). Thus, couples in Group F tended to contain Dependent, conforming, unconflicted wives, and dominating, impulsive, gregarious, aggressive husbands.

Daughters in this group tended to be higher on Neuroticism, and showed trends toward being more Independent, Anxious, subdued (F-), and emotionally sensitive (I+), as seen in Table 7. Daughters' interrelationships with mothers were far more numerous than with fathers (see Matrices 13 and 14) and involved a pattern of mutual Anxious Neuroticism (mothers' Anxiety, Neuroticism, C-, G-, N-, O+, Q₃-, Q₄+ were linked with daughters' Anxiety, Neuroticism, C-, D+, G-, O+, Q₄+). Trait similarity (Table 10) also occurred on traits of Anxiety, Independence, and emotional instability (C-). Daughters' relationships with fathers were fewer (see Matrix 14), but involved traits present in both fathers and daughters here: Fathers' dominating, impulsive, unconventional Independence (E+, F+, L+, Q₁+, Q₂+) was linked with daughters' Anxious, Neurotic Independence (C-, D+, N+, O+, Q₃-, Q₄+). Trait similarity also occurred on traits of emotional stability (C), Anxiety, and Independence. Thus, these daughters showed similarity to both parents on traits of Anxiety, stability, and Independence, yet these parents tended to be opposite on these traits, and perhaps had counterbalancing effects on daughters.

However, like fathers, these daughters were, in fact, more Independent.

Sons in this group tended to be (see Table 7) more detached, tough-minded, unemotional, and aggressive (Cortertia+, A-, E+). Strong interrelationships occurred with both parents, and involved traits that were quite characteristic of these mothers and fathers (see Matrices 15 and 16): Fathers' Extraverted, aggressive, unconflicted Independence (Independence, Extraversion, Neuroticism-, B+, C+, E+, F+, H+, O-, Q₁+) was linked with sons' confident, uninhibited, emotional stability (Anxiety-, Neuroticism-, B+, C+, D-, E+, H+, O-). However, mothers' inhibited, submissive Dependency (elevated traits in these mothers) was linked with traits opposite of those with which fathers' were linked: withdrawn, inhibited Neuroticism in sons (Neuroticism+, Anxiety+, Introversion, A-, C-, E-, F-, H-). This suggests that parents may have influenced sons in opposite counterbalancing directions, which is consistent with sons' lack of overall differences on these traits. The tough, detached, aggressive traits that were present for these sons were not linked to traits of either parent here. Perhaps these sons were toughened by the conflict or disparity between such opposite parents and influences.

Group S. As expected, there were fewer parental differences in this intermediate group (Table 7). Mothers tended to be more self-controlled and concerned with their

social image (Q_3+), while fathers were moralistically self-disciplined, emotionally stable, accepting, and non-Neurotic ($C+$, $G+$, $L-$). Hence, both parents tended to be self-disciplined, consistent, and over-controlled.

Group S daughters tended to be more tough-minded and socially shrewd ($I-$, $N+$). Interrelationships with mothers were very sparse (see Matrix 17) but centered around unconflicted adherence to emotionally-sensitive, dependent sex-roles (mothers' $E-$, $I+$, $L-$, Q_1- with daughters' low Anxiety, low Neuroticism, Dependence, Cortertia-). Interrelationships with fathers were more numerous (Matrix 18), but linked fathers' non-Anxious, non-Neurotic Extraversion with opposite, sex-role inappropriate traits of Anxious, tough-minded (Cortertia+) Independence in daughters. Thus, as Table 10 indicates, daughters were similar to fathers on dominance (E) but opposite on Anxiety and stability (C). Consequently, daughters may have been influenced in opposite directions by their parents on sex-role traits of dominance and Independence, perhaps with the resultant effect that daughters became toughened and socially shrewd.

Sons in this group also tended to be socially shrewd and manipulative (see Table 7). Again, they tended to have strong inter-relationships with both parents that resolved around mutual Neuroticism (see Matrices 19 and 20). Fathers' withdrawn, inhibited, antisocial Neuroticism (Introversion, Neuroticism, Anxiety, $A-$, $F-$, $G-$, $H-$, $L+$, $N-$,

Q₂+) was linked with sons' tense, guarded, antisocial Neuroticism (Neuroticism, Independence, A-, B-, G-, H-, J+, O+, Q₂+, Q₄); while mothers' apprehensive conforming, insecure Neuroticism (Anxiety, Neuroticism, A+, C-, H-, N-, O+, Q₁-, Q₄+) was linked with sons' withdrawn, submissive, agitated, Neuroticism (Anxiety+, Neuroticism+, Introversion, A-, C-, D+, E-, H-, O+, Q₄+) . Since neither parent was particularly high or low on Neuroticism here, it is not surprising that sons, overall, were not outstanding on Neuroticism (Table 7), but were somewhat detached and socially shrewd (N+). Here, again, however, parent/child linkages revolved around mental health versus adjustment for boys, and sex-role traits of submissive dependence for girls.

Group M. These mothers were predictably high (Table 7) on Independence and its component factors of aggressiveness, tradition-questioning, imaginative inner absorption, social naiveté, and self-indulgence (E+, G-, M+, N-, Q₁+) . In addition, these mothers tended to be sensitively tender-minded, impulsively under-controlled, and high on Neuroticism (I+, Q₃-) . Fathers tended to be high on Dependence and its component traits of submissiveness and social inhibition (E-, H-), as well as being high on Introversion, Neuroticism, brooding introspection, seclusiveness, and emotional instability (C-, F-, Q₂+) . Thus, families in Group M tended to have aggressive, Independent, untraditional, and Neurotic mothers married to withdrawn, inhibited, Dependent, Neurotic husbands.

It is interesting to note that both parents in Group M showed traits strongly counter to sex-roles and had elevated Neuroticism scores, while Group F parents tended to conform to sex-roles and were, if anything, low on Neuroticism. Thus, high and low Neuroticism appear to follow closely upon men's and women's departure from, or adherence to, their respective traditional sex-roles. It is interesting, too, that different traits were associated with Independence for the sexes: for mothers it was associated with G-, Q₁+, and Q₃-, traits of unconventionality, disregard for traditions and standards, and conflict of self-image; while for fathers it was associated with carefree, uninhibited Extraversion and Adjustment (low Neuroticism). Thus, for fathers to be Independent and extrapunitive seemed only to require lack of inhibition, while for mothers it seemed to require some traits of antisocial unconventionality. Similarly, at the other end of the scale, Dependence, in fathers, was associated with inhibited Neuroticism and seclusive Introversion, but with conventionality and respect for social norms in mothers. In any case, it is apparent that of the parent-dissimilar groups the one where traditional sex-roles are followed is accompanied by better adjustment, while the one where parents deviate from sex-roles is accompanied by high Neuroticism (even though these couples, in Group M, are actually least disparate, since, because of sex differences on this trait, Independent women

are actually only about at the norm for men, and Dependent men are only around the norm for women).

As on the Extraversion dimension, it is difficult to find rational, constructive bases for the partnerships of such opposites as in the extreme groups here. Unconscious dynamics, however, might explain why the aggressive, uninhibited, strongly-defended, Independent (or counter-dependent) fathers of Group F might be attracted to the submissive, Dependent, controlled mothers there, who represent parts that are missing in their own personalities, and vice versa.

Daughters of these counter-sex-role parents tended to be (Table 7) less Anxious and Neurotic, and more Extraverted and happy-go-lucky (F+). They had extremely few interrelationships with parents, but those found involved traits that were elevated in these parents (see Matrices 21 and 22): Fathers' submissive, emotionally-sensitive Introversion (Introversion, B-, E-, I+, L-, O+, Q₃-) was linked to daughters' sociable, submissive, unconflicted, emotional sensitivity (Cortertia-, A+, E-, G+, H+, I+, O-); mothers' tough-minded, aggressive Neuroticism (Neuroticism+, Anxiety +, Independance+, Cortertia+, C-, E+, L+, I-) was linked with daughters' impulsive, over-excitabile Extraversion (Extraversion+, D+, E+, F+, I-, J-, Q₂-).

Overall, it is interesting that these daughters, with two sex-role-inappropriate and Neurotic parents, turned

out to be below average on Anxiety and Neuroticism; while in Group F, where both parents were sex-role appropriate and somewhat low on Neuroticism, daughters tended to be high on Neuroticism and on Indpendence--a sex-role-inappropriate trait. It is true that Group M daughters had notably few linkages with either parent, and perhaps they somehow distanced themselves from parents, looking elsewhere for healthier interaction and involvement. Also, it may be important to note that parents in this group were actually least disparate while those in Group F were extremely disparate (see Summary). In any case, it is noteworthy that daughters of two such Neurotic and sex-role-inappropriate parents were outgoing and low on Anxiety and Neuroticism.

Sons in this group tended to be (see Table 7) submissive and emotionally sensitive (Cortertia-, E)--opposite of the tough, aggressive sons of sex-role inappropriate parents in Group F. These sons had almost twice as many linkages with fathers as with mothers (see Matrix 23) and they consisted of a pattern of mutual Neuroticism that involved many of the traits that were elevated in both fathers and sons here: Fathers' withdrawn, submissive Neuroticism (Neuroticism+, Introversion, A-, E-, F-, G-, H-, N-, O+, Q₁-, Q₂+) was linked with sons' withdrawn, hostile, emotionally-sensitive Neuroticism (Neuroticism+, Cortertia-, Indpendence+, Introversion+, D+, E-, G-, H-, I+, J+, O+, Q₄+). Bonds with mothers (see Matrix 24) were far fewer and did not involve traits that were particularly characteristic

in these mothers and sons (again, however, they centered around sons' Neuroticism versus Adjustment): Mothers' bold, aggressive Extraversion (Extraversion+, Cortertia+, E+, F+, H+, Q₁-) was linked with sons' calm, sociable, unconflicted, low Neuroticism (Anxiety-, Neuroticism-, C+, H+, O-, Q₂-, Q₄-). Thus, mothers may have had some ameliorating effect on the Introversion and Neuroticism dimensions of the withdrawn, emotionally-sensitive Neuroticism linked with fathers' personalities here--resulting in sons' being only emotionally-sensitive, as they turned out. Again, however, patterns with both parents involved primarily sons' Neuroticism versus Adjustment.

Summary. Parents in Group F and M showed the extremes of adherence to and deviance from sex-roles and of low and high Neuroticism: In Group F, mothers were submissive, conventional, Dependent, and non-Neurotic, while fathers were socially bold, aggressive, and Independent. In Group M, mothers were aggressive, unconventional, and Independent, while fathers were submissive, withdrawn, and Dependent--and both parents were Neurotic. As discussed earlier, it was interesting that Neuroticism seemed so contingent upon departure from traditional sex-roles. In addition, parents in Group M were actually most similar (in terms of raw scores) while parents in Group F, at their sex-role appropriate extremes, were extremely dissimilar, in other words, because of sex differences, the highly Independent women in

Group M were still only around the norm for men, while these highly Dependent men were only around the norm for women--not really very far apart; while in Group F, women already scoring highly Dependent relative to men, the extremely Dependent women and Independent men were more discrepant.

This may help to explain the seeming paradox of daughters' being Neurotic and Independent (sex-role-inappropriate) in Group F, where parents were sex-role-conforming and non-Neurotic, but being non-Neurotic in Group M where both parents were Neurotic and sex-role-deviant. Perhaps in Group F there was a great deal of underlying conflict and dissension due to parents' extreme dissimilarity; also daughters may have been identified or allied with their aggressive fathers here (as hypothesized in these spouse-dissimilar families) and thus acquired sex-role-inappropriate, aggressive traits. In Group M, however, since parents were in fact most similar, perhaps the lack of conflict left daughters more stable. Overall, however, daughters in Group M had far fewer linkages with parents than did sons, suggesting that daughters in these Neurotic families may have looked elsewhere for involvements; while the greatest number of linkages for daughters occurred with their sex-role-appropriate mothers in Group F, where mothers who were Anxious and conflicted in their submissive roles, tended to have Anxious and conflicted daughters.

Sons had twice as many linkages with parents as did daughters in each of these groups, and all of them revolved around sons' Neuroticism; indeed, father/son linkages in all three groups revolved around mutual Neuroticism. The opposite parent configurations in Groups F and M seemed to have opposite effects on sons too: Sons were tough, detached, and unemotional in Group F, but submissive and emotionally sensitive in Group M. If emotional sensitivity can be said to be more healthy or valuable than aggressive toughness, then sons also can be said to be more healthy in Group M, where parents were sex-role deviant but least disparate, perhaps being toughened by the conflict or dissension among such dissimilar parents in Group F.

Both sons and daughters had almost twice as many linkages with their same-sex parent when s/he was in the Dependent role (father/son in Group M and mother/daughter in Group F), as they did with the opposite-sex parent in that group, with the opposite-sex parent when s/he was Dependent, or with the same-sex parent when s/he was Independent. This could be understandable in terms of simple dependence on the child. However, because this strong relationship did not occur with opposite-sex parents when they were Dependent, a pattern of identifying with the difficult situation of the sex-role-appropriate parent (Dependent relative to Independent, extrapunitive spouse) is instead suggested, particularly since the patterns here involved mutual parent/child Neuroticism.

Anxiety

Group F. Mothers tended to be (see Table 8) lower than other mothers or than national norms on Anxiety and its constituent factors of C-, H-, L+, O+, Q₃-, Q₄+; thus, they were emotionally stable, self-assured, socially uninhibited, relaxed, unconflicted, and followed a consistent self-image. Additionally, Group F mothers tended to be lower on Neuroticism and more moralistically conscientious (G+). Fathers tended to be higher than other fathers or than general norms on Anxiety and its constituent factors of C-, H-, L+, O+, Q₃-, and Q₄+; thus, they were emotionally unstable, tense, conflicted, timid, suspicious, worrying, and inconsistent in self-image. They also showed elevated scores on Neuroticism, Introversion (A-, E-, F-, G-, I+, M+ N-, Q₁-); hence, they were withdrawn, introspective, tender-minded, dependent, and self-indulgent. Consequently, these couples tended to pair an unconflicted, uninhibited, stable, resilient mother and a conflicted, introverted, dependent, Neurotic father.

In these families where mothers were markedly more emotionally healthy than fathers, daughters tended to have around twice as many linkages with both parents as did sons (see Matrices 25 and 26). These interrelationships seemed to involve similar patterns with daughters' sex-role traits of sensitive dependency, but, because parents were opposite, they may have influenced daughters in opposite directions and counterbalanced each other. Mothers' tender-minded,

emotionally-sensitive, Dependence (Dependence+ Cortertia-, E-, I+, L-) was linked with daughters' emotionally-sensitive Dependence (Dependence+, Cortertia-, E-, I+, Q₂+). This pattern seemed to stress mutual sex-roles, as did mother/daughter similarity (Table 10), which occurred for submissive dependence and emotional sensitivity (E-, Cortertia-). Linkages with fathers involved traits that were significantly elevated in this group of fathers: Fathers' withdrawn, self-indulgent, emotionally tender-minded Neuroticism (Neuroticism+, Introversion+, Cortertia-, A-, C-, F-, H-, I+, G-, Q₂+, Q₃-, Q₄+) was linked with daughters' tough, Anxious Independence (Cortertia, Independence+, Anxiety+, Neuroticism+, C-, D+, E+, J+, Q₂+, Q₃-, Q₄+) . It would seem that these inhibited, conflicted, intrapunitive fathers somehow influenced their daughters to be extrapunitive, though conflicted, perhaps acting out the hostility that these fathers felt but inhibited so strongly. Alternatively, these daughters' angry, conflicted, toughness may have resulted from difficult, conflictual, unrewarding interactions with their unstable, self-indulgent Dependent fathers. In any case, patterns of traits associated with the healthier mothers seemed to counter-balance these effects somewhat, since daughters here (see Table 8) were only withdrawn and tending toward Dependency and conflict (Introversion+, Dependence+, A-, Q₄+)--i.e., they were more emotionally healthy than might have been expected from

interactions with fathers alone.

In these families where fathers were markedly less emotionally healthy (Anxious, Neurotic) than mothers, sons, as mentioned, showed far fewer linkages with either parent than did daughters. These sons tended to be (Table 8) withdrawn, guarded, worrying, conflicted, impulsive, and anti-social (F-, G-, H-, J+, O+, Q₄+)--seemingly not a very emotionally healthy profile. These traits may have been related to linkages with fathers (Matrix 27), which, although sparse, linked fathers' traits of withdrawn, submissive, self-indulgent, conflicted instability (C-, E-, G-, H-, M+, O+, Q₃-, Q₄+) with sons' traits of withdrawn, guarded, worrying, conflicted, impulsive Neuroticism (Neuroticism +, Anxiety+, C-, D+, F+, H-, I+, J+, O+, Q₂+, Q₃-, Q₄+) . Father/son similarity (Table 10) also involved similar traits of withdrawal, self-conflict, and tension (A, B, Q₃, Q₄) . Sparse linkages with these more-healthy mothers (Matrix 28) linked mothers' aggressive Independence with sons' achieved intelligence (B+), and mothers' uninhibited Extraversion (Extraversion+, F+, H+) with sons' aggressive, demanding, conflicted Independence (Independence+, D+, E+ F+, J+, O-, Q₄+) . These later two patterns suggest that mothers who were aggressive, uninhibited, and Extraverted may have favored or encouraged sons with special attention that developed sons' intellectual abilities, confidence, and aggressiveness, but which left their sons conflicted due to

this alliance's cross-generational nature, which perhaps raised inappropriate expectations, wishes, and responsibilities. Thus, sparse linkages with both parents involved the withdrawn, conflicted, impulsive traits that were elevated in these sons, but these linkages, including trait similarity, were strongest with fathers. It could also be that in these families some sons modeled fathers and others (fewer in number) were allied with mothers.

In summary, in this group of calm, resilient mothers and Introverted, Neurotic fathers, both sex children, but particularly sons, tended to be withdrawn and conflicted, although daughters had far stronger relationships with both parents, which revolved around sex-role traits.

Group S. As usual, parents in this intermediate group showed few extreme scores (see Table 8). Mothers tended to be conventional, cautious, introspective, adaptable, and emotionally sensitive relative to the other mothers and to norms (Cortertia-, F-, L-, Q₁-); while fathers tended to be liberal, unconventional, warm, and less intelligent than other fathers or than national norms (A+, B-, Q₁+).

Daughters in Group S tended to be high on Neuroticism and Independence (see Table 8), but had very few linkages with either parent (see Matrices 29 and 30). Interrelationships with mothers involved mutual sex roles: Mothers' submissive, conventional Dependence (Dependence+, E-, M-,

N+) was linked with daughters' cautious, inhibited, self-controlled Dependence (Dependence+, E-, F-, Q₃+); and mother/daughter similarity also occurred on Independence/Dependence. Fathers showed two very weak patterns: Fathers' aggressive, but self-controlled, Extraversion (Extraversion+, Neuroticism-, E+, F+, G+, H+, Q₂-) was linked with daughters' achieved intelligence (B+); while fathers' self-indulgent emotional sensitivity (I+, N+) was linked with daughters' guarded, conflicted, Neuroticism (Anxiety+, Neuroticism+, D+, E-, H-, J+, Q₄+).

Sons in Group S showed no significant trait differences, but had strong linkages (two or three times as many as daughters) with both parents (see Matrices 31 and 32) that involved mutual Neuroticism versus mental health. Fathers' withdrawn, submissive, anxious Neuroticism (Neuroticism+, Introversion+, Dependence+, E-, F-, H-, O+, Q₂+, Q₃-, Q₄+) was linked with sons' seclusive, anxious, tender-minded Neuroticism (Neuroticism+, Anxiety+, C-, E-, F-, H-, I+, O+, Q₂+)--both very inhibited, intrapunitive profiles. These fathers and sons also showed significant similarity (Table 10) on traits of Neuroticism, Anxiety, guilt-prone apprehensiveness, submissive dependence, and brooding introspection (E-, F-, O+). Mothers' withdrawn, inhibited, emotionally sensitive Neuroticism (Neuroticism+, Cortertia-, Introversion+, C-, E-, F-, H-, I+, L-) was linked with sons' withdrawn, submissive Neuroticism (Neuroticism+, Introversion+,

C-, E-, F-, H-, I+, O+, Q₂+), with mother/son similarity (Table 10) also occurring on traits of emotional instability (C), submissive dependency (E), retiring introspectiveness (F), Introversion, and Neuroticism.

Thus, in this more average (and parent-similar) group of families, sons had between two and three times as many linkages with both parents as did daughters, and these involved patterns of mutual Neuroticism, versus mental health while mother/daughter linkages involved degrees of mutual adherence to a conventional sex-role.

Group M. In this group where mothers were selected to be much higher than fathers on Anxiety, mothers exceeded the national norms and other sample mothers on Anxiety and its constituent factors of emotionally unstable, timid, suspicious, guilt-prone, conflicted self-image, and overwrought tension (C-, H-, L+, O+, Q₃-, Q₄+). In addition, mothers had elevated scores on Neuroticism, Independence, impulsive expressivity, unconventionality, and antisocial self-indulgence (F+, G-, Q₁+)--a tough, counter-dependent, impulsive Neuroticism, unlike the sensitive, intrapunitive traits associated with Anxious fathers, and a profile generally deviant from cultured sex-roles. Fathers in this group were lower than other sample fathers or national norms on Anxiety and its constituent factors of emotionally mature, socially adventuresome, flexible, self-assured, follows consistent self-image, relaxed (C+, H+, L-, O-, Q₃+, Q₄-). In

addition, they were non-Neurotic, Extraverted, impulsively enthusiastic, socially shrewd, aggressive, tough-minded, task-oriented, conventional, moralistically conscientious, and intelligent (Neuroticism-, Extraversion+, Cortertia+, E+, F+, G+, I-, M-, N+). Thus, Group M families tended to have tough, impulsive, Neurotic mothers and tough, Extraverted, resilient fathers.

It is interesting that the style associated with Neuroticism for mothers was extrapunitive and thus opposite of the intrapunitive style associated with Neuroticism in men (this will be discussed later). This, however, left Group M spouses similar in their extrapunitive, emotionally tough surgency (F+, I-). Overall, these spouses were the most discrepant on the Anxiety dimensions in terms of raw scores (much more discrepant than spouses in Group F) probably because they were chosen to be opposite in the direction of their already-contrasting sex-typed traits (men more strongly-defended, women more Anxious).

Group F spouses, on the other hand, being counter to these sex-roles, were actually within the average range in terms of their spouse's norms, and hence not so dissimilar. Thus, Group M spouses, while highly discrepant in the direction of traditional sex-roles on Anxiety, were both tough-minded and high-spirited.

Therefore, it is particularly interesting that both sons and daughters appeared to be most stable and emotionally

healthy in this group, although daughters showed very few interrelationships with either parents. Daughters here (see Table 8) tended to be non-Neurotic, Extraverted, warm, relaxed, and unconflicted (Extraversion, Neuroticism-, A+, Q₄-). These daughters had very few associations (Matrix 33) with their Neurotic mothers (and no trait similarities with them--see Table 10) that linked mothers' aggressive, unconventional Independence (Independence+, E+, M+, Q₁+) with daughters' warm, gregarious, self-disciplined non-Neuroticism (Neuroticism-, Extraversion+, A+, E-, G+, H+, I+, J-, Q₂-). Seemingly, when these Anxious mothers were also aggressive and extrapunitive (rather than intrapunitive), strength and sociability was fostered in daughters, perhaps because this independence denoted strength in their Neurotic role models, or perhaps because it left their Neurotic mothers less dependent on or involved with them.

Weak interrelationships with fathers (Matrix 34) linked fathers' aggressive, impulsive, dogmatic tough-mindedness (Cortertia+, E+, F+, I-, Q₁-) with daughters' aggressive, conflicted, withdrawn Independence (Independence+, Neuroticism+, Anxiety+, A-, D+, E+, H-, J+, N-, O+, Q₄+). Thus, when these Extraverted, non-Anxious, resilient fathers were also aggressive, unemotional, and tough-minded, daughters may have become withdrawn and tough as a chronic defensive reaction.

Sons, like daughters, were healthiest (least Anxious and Neurotic) in Group M and showed strong interrelationships with both parents centered around sons' mental health (Matrices 35 and 36). Sons here tended to be (see Table 8) zestful, gregarious, self-assured, unconflicted, conscientious, and self-disciplined (F-, G+, H+, J-, O-, Q₄-). Mothers' withdrawn, submissive, worrying Neuroticism (Anxiety+, Neuroticism+, C-, E-, H-, O+, Q₂+) was linked with sons' overwrought, guarded, antisocial, Anxious Neuroticism (Anxiety+, Neuroticism+, Independance+, A-, C-, G-, I+, J+, O+, Q₄+) . Fathers' withdrawn, inhibited, dependent Neuroticism (Neuroticism+, Dependence+, Introversion+, A-, E-, F-, H-, O-) was linked with sons' withdrawn, overprotected, antisocial Neuroticism (Neuroticism+, C-, D+, E+, F-, G-, H-, I+, J+, O+, Q₄+) ; and father/son similarity (see Table 10) also occurred on Neuroticism, submissive dependence, apprehensiveness, seclusiveness, and tender-mindedness (E, I, O, Q₂) . Thus, dependent, intrapunitive Neuroticism in either parent was linked with Anxious, tender-minded, antisocial Neuroticism in sons; but since Group M parents were opposite on these traits, they may have had counterbalancing effects. Presumably, these sons turned out to be so non-Neurotic because the healthy parent (father) was their sex-role model, and because even these highly Neurotic mothers were not Dependent and intrapunitive but Independent and impulsive in their Neurotic style.

Thus, in these families with tough, Anxious, Neurotic mothers and tough, Extraverted, resilient fathers, both daughters and sons tended to be emotionally healthy, although sons had strong interrelationships with both parents involving mutual Neuroticism versus mental health, while daughters showed few correlations with both parents.

Summary. As with groups on the Extraversion dimension, fathers here had additional traits associated with Anxiety while mothers did not. Fathers' Anxiety was associated with Neuroticism, Introversion, and various intrapunitive traits like submissive dependency, sober conscientiousness, and over-protected sensitivity (E-, F-, I+); while low Anxiety and Neuroticism were accompanied by Extraversion and various tough, extrapunitive traits like dominance, aggressiveness, impulsivity, and tough-mindedness. This same cluster of traits was also found for fathers in the low and high Extraversion groups (and equations for these second-order dimensions are fairly similar for males and females, so this is not a statistical phenomenon).

It seems reasonable that anxiety and neuroticism would be associated with withdrawal and difficulty in relating to others (Introversion), with greater emotionality (Cortertia-), and with long unmet dependency needs (Dependence), while unconflicted, uninhibited, self-confident (non-Neurotic) individuals might go out to others more (Extraversion) have less complex, self-defeating, and

dependent relationships (Independence), and tend to be more strongly defended and thus tougher and less emotional (Cortertia). But seemingly this reasoning should hold for women as well as men. One explanation might be that the traditional female sex-role prescribes worried, sensitive, emotional, unstable, and dependent traits while men are expected to hide these and appear stronger, less emotional, and less dependent (as 16PF norms clearly indicate). Thus, when men feel conflicted and inadequate, they may need to withdraw and hide these feelings, becoming Introverted and Neurotic, in addition to being sensitive, anxious, and dependent.

Supportive of this hypothesis is the fact that women who were high on Anxiety and Neuroticism (Group M) did not evidence the inhibited, intrapunitive traits associated with Neuroticism in men, but showed extrapunitive, under-controlled traits, such as high-spirited impulsivity, antisocial self-indulgence, tradition-questioning unconventionality, unsentimental tough-mindedness, and Independence (Cortertia+, Independence+, F+, G-, Q₁+). This suggests again that perhaps the inhibited, dependent, intrapunitive traits associated with Neuroticism in men are not experienced as inappropriate or problematic in women while these aggressive, extrapunitive traits are (and vice versa for men). Thus, neuroticism may in some part be a result of rejection by others and of deviation from internalized standards of

socially approved traits or behaviors.

Another theory here would be that to the extent that children are emotionally healthy and have non-conflictual relationships with parents, they tend to identify with and internalize their parents' sex-role-appropriate expectations and self-images. Thus, males would acquire aggressive, extrapunitive traits and females would acquire submissive, intrapunitive traits, unless they became independent of or actively rejecting of parents and their expectations. An alternate view would be that these opposite types of neuroticism do exist for each sex but did not choose or get chosen by healthy spouses (e.g., extrapunitive, neurotic men do exist but do not choose or get chosen by resilient, non-Neurotic women). In any case, husbands for some reason had a greater number of extreme traits that went along with high and low Anxiety, and high and low Extraversion, than did wives.

Other interesting patterns occurred for children. Both sex children were above average on emotional health (less Anxious, Neurotic, conflicted, guarded, withdrawn, and antisocial) in Group M where fathers were emotionally healthy and mothers were not, but the children were below average on emotional health in Group F where mothers were emotionally healthy and fathers not. This suggests a greater influence of fathers' level of mental health on the whole family.

Another interesting finding was that in the two extreme groups children of the same sex as the healthy parent (daughters in Group F and sons in Group M) had strong linkages with both parents, while the opposite-sex children had very weak linkages with both parents. Perhaps both parents were more involved with the children of the same sex as the healthy parent and minimally involved with the opposite-sex children. Perhaps such parent-discrepant families set up a myth that either all males or all females are healthier, pleasanter, or more valuable. Or perhaps the same-sex children as the neurotic parent saw their sex role as so unpleasant that they detached themselves from the whole family system, seeking emotional attachments elsewhere.

Finally, it was again found that the great majority of parent/son interrelationships in all three groups (five out of six) revolved exclusively around mutual parent/son Neuroticism, while this was true of none of the parent/daughter interrelationships. The majority of parent/daughter linkages involved daughters' sex-role traits of sensitive Dependence.

Cortertia

Group F. Although parents in Groups F and M were opposite on Cortertia, as selected, they tended to be opposite on different sub-factors of Cortertia, thus tending to minimize their outright differences. Mothers in Group F (Table 9) tended to be low, relative to other mothers and to

general population norms, on Cortertia and its sub-factors of submissive, shy, threat-sensitive, introspective, retiring, adaptable, and tender-minded (E-, F-, H-, I+, L-). Additionally, they had elevated scores on Introversion, Neuroticism, Dependence, and unconventionality (Q_1 +). Fathers were higher than other fathers or general norms on Cortertia and its constituent factors of cold, detached, tough-minded (A-, I-), and also tended to be Introverted, introspective, threat-sensitive, seclusive, adaptable, self-disciplined, and intelligent (B+, F-, H-, G+, L-, Q_2 +). Thus, Group F couples tended to involve a withdrawn, submissive, Neurotic, tender-minded mother and a withdrawn, inhibited, self-controlled, unemotional father.

Consequently, both parents were Introverted and intrapunitive relative to norms for their sex. They were opposite on only one first-order trait (I), and were in the same direction on three (F, H, and L). This suggests that perhaps large absolute differences on the Cortertia factors (a dimension with substantial sex differences) leave couples too different to get along well with each other--one attending exclusively to feelings, the other to tasks. Indeed, these spouses were extremely discrepant on Cortertia (in terms of raw scores), since they were selected to be opposite in the directions in which they already contracted due to normative sex differences; hence, they were still further apart at sex-role-appropriate extremes. Perhaps differing

absolutely on the first-order Cortertia factors, particularly along extrapunitive/intrapunitive lines, would leave couples too opposite to get along and marry.

Daughters of these withdrawn, intrapunitive, emotional mothers and withdrawn, unemotional fathers tended to be lower on Anxiety (Table 9) and to have much more numerous associations with mothers than with fathers, both of which revolved around traditional sex roles (see Matrices 37 and 38). When these inhibited, submissive mothers were also conflicted, Anxious, intrusive, and dogmatic (Anxiety+, Neuroticism+, C-, L+, M-, N-, O+, Q₄+), daughters tended to be tough, group-dependent, and less intelligent (Cortertia+, Extraversion+, B-, I-, Q₂-, Q₃-, Q₄-). This suggests that daughters' rejection of, or adherence to, emotionally sensitive sex-roles was determined by whether their mothers were conflicted and Neurotic or unconflicted and accepting of their own submissive, emotional sex-roles. Very weak interrelationships with fathers also seemed to leave daughters toughened and conflicted: Fathers' bold, under-controlled Independence (Independence+, H+, Q₃-) was linked with daughters' tough, conflicted Independence (Independence+, Cortertia+, F-, J+, Q₄+); father/daughter similarity also occurred on aggressiveness (E) and Independence (Table 10).

Sons (Table 9) tended to be withdrawn, conflicted, demanding, and Neurotic (Neuroticism+, Independence+, A-, C-, D-, N+, Q₂+, Q₄+), and to have twice as many linkages with

mothers as with fathers that involved a pattern of mutual Neuroticism versus mental health (Matrices 39 and 40). Mothers' withdrawn, Anxious, self-indulgent Neuroticism (Neuroticism+, Anxiety+, Cortertia-, B-, C-, F-, G-, H-, O+, Q₂+, Q₃-) was linked with sons' Anxious, over-protected, demanding, Neuroticism (Anxiety+, Neuroticism+, C-, D+, E-, F-, G-, H-, O+); and mother/son similarity (Table 10) occurred on Neuroticism, Anxiety, Extraversion, self-indulgent undependability, timid inhibition, and intelligence (B, G, H). Since sons and mothers in this group both tended to be elevated on these traits, this seems to be an important pattern for this group. The much weaker bonds with fathers included a pattern linking mutual degrees of tough aggressiveness and a pattern linking mutual Neuroticism versus adjustment: Fathers' Independence, B+, E+, F+, O-, and Q₁+ were linked with sons' Cortertia+, A-, B+, E+, I-, and O-; and fathers' Anxiety+, Neuroticism+, G-, I+, L+, and Q₄+ were linked with sons' Independence+, H-, O+, and Q₄+. These suggest that when the hard, unemotional fathers in this group were also conflicted or extrapunitive (rather than stable or intrapunitive), sons became tough and hardened but conflicted.

Thus, in this group of withdrawn, emotional, Neurotic mothers and withdrawn, unemotional fathers (sex-role-appropriate directions on this dimension), sons were markedly Neurotic, showing strong patterns of mutual Neuroticism

with mothers, while daughters were non-Anxious, also showing stronger interrelationships with mothers that revolved around sex roles.

Group S. Mothers in Group S tended to be unconflicted adherents to traditional sex roles (see Table 9); they were shy, submissive, emotionally sensitive, unconflicted, and Dependent (Dependence+, Neuroticism-, E-, H-, I+, Q₃+). Fathers here also tended to be self-controlled and stable, and to adhere to a tough, unemotional sex role: They were emotionally stable, self-disciplined, withdrawn, unemotional, and tough-minded (A-, C+, F-, G+, H-, I-). Thus, both parents tended to be self-controlled and stable and to follow their respective dependent and tough-minded sex roles.

Daughters in Group S tended to be poorly adjusted and had weak interrelationships with both parents, although stronger ones with father (Matrices 41 and 42). These daughters tended to be (Table 9) Anxious, conflicted, and antisocial (Anxiety+, G-, Q₄+). Fathers' withdrawn, tough-minded, antisocial Neuroticism (Cortertia+, Anxiety+, Neuroticism+, A-, G-, H-, N-, Q₂+, Q₃-, Q₄+) was linked with daughters' conflicted, aggressive, manipulative tough-mindedness (Cortertia+, E+, G-, J-, I-, N+, O-, Q₄+), with father/daughter similarity (Table 10) also occurring on traits of antisocial self-indulgence, conflicted turmoil, and detached tough-mindedness (Cortertia, G, Q₄). Seemingly, daughters became toughened and conflicted in a defensive response to

these withdrawn, antisocial, and poorly-controlled fathers. This pattern seems an important one since these particular traits were elevated in both fathers and daughters. The very weak mother/daughter interrelationships seemed to involve mutual sex roles: Mothers' adaptable, conforming, conventional Dependence (Dependence+, Introversion+, A-, E-, F-, L-, M-, Q₁-) was linked to daughters' worrying, introspective, warm, emotional sensitivity (Cortertia-, A+, E-, F-, I+, O+, Q₃+).

Sons in Group S tended to be Dependent, withdrawn, socially naive, submissive, stoical, phlegmatic, and emotionally unstable (Dependent+, Introverted+, A-, C-, D-, E-, N-, Q₄-). Of the three groups, these sons had the fewest linkages with parents, although somewhat more with mothers than fathers. Mother/son interrelationships (Matrix 44) revealed a pattern of mutual inhibited Dependence, involving traits that were, elevated in both Group S mothers and sons: Mothers' shy, inhibited, submissive, conforming Dependence (Dependence+, B-, E-, F-, H-, M-, Q₁-) was linked with sons' inhibited, stoical, phlegmatic Dependence (Dependence+, B-, D-, F-, Q₄-); mother/son similarity (Table 10) also occurred on Independence/Dependence.

Although father/son linkages were few, they formed several patterns (see Matrix 43). Fathers' tough-minded seclusiveness (Cortertia+, Q₂+) was linked with sons' tough, unemotional, but impulsive, group-dependence; seemingly sons

were toughened by these hard, distant fathers and left with unmet dependency needs. Fathers' self-indulgent, absent-minded, inward absorption (E-, I+, M+) was linked with sons' withdrawn, apprehensive, manipulative Neuroticism (Neuroticism+, A-, D+, H-, N+, O+); perhaps the unpredictability and self-centeredness in these fathers left sons wary of people and necessitated manipulation in order to get their own needs met. Finally, fathers' shrewd, suspicious, self-indulgent aggressiveness (Independence+, E+, G-, L+, N+) was linked with sons' socially naïvé, impulsive, conventional Independence (Independence+, F+, N-, Q₃+).

In summary, both sons and daughters in this intermediate group had the fewest parent/child linkages of the three groups, although mother/son and father/daughter bonds were somewhat more frequent and revolved around the child's becoming tough and conflicted in response to an extrapunitive parent.

Group M. Mothers in Group M were higher than other mothers or general norms (Table 9) on Cortertia and its constituent traits of aggressive, tough-minded, socially bold, high-spirited (E+, F+, H+, I-). In addition, mothers tended to be Independent, Extraverted, unself-disciplined, and conventional (Q₁-, Q₃-). Fathers were low on Cortertia and its constituent traits of warmth, tender-mindedness, and jealous suspicion (A+, I+, L+). They also tended to be Extraverted, impulsive, high-spirited, group-dependent,

self-indulgent, and less intelligent (Extraversion+, B-, F+, G-, H+, Q₂-). Thus, couples in Group M tended to contain tough, aggressive, socially uninhibited, Independent wives and warm, sociable, impulsive, emotionally sensitive, jealous, self-indulgent fathers--both configurations sharply at odds with sex-role stereotypes.

As was true in Group F, although selected to be opposite on Cortertia, these spouses turned out to actually differ on only one first-order dimension and to be similar on several (Extraversion, impulsivity, under-control), suggesting that perhaps people who are directly opposite on these factors are too incompatible to marry. Additionally, although these mothers are significantly higher than other mothers and these fathers significantly lower than other fathers on Cortertia, because there are strong general sex differences on this dimension, these low fathers are actually quite near the norm for women and these high mothers quite near the norm for men. Thus, these spouses are actually the most similar of the three groups, in terms of raw scores. In this context, it is particularly interesting that both sons and daughters here turned out to be the best emotionally adjusted of the three groups.

Daughters (see Table 9) tended to be self-disciplined and unconflicted (G+, Q₄-). Interrelationships with both parents were equally strong (see Matrices 45 and 46), and both involved two patterns--one revolving around mutual

degrees of Anxiety or Neuroticism, and the other around mutual toughness/aggressiveness versus sensitivity/submissiveness (daughters' sex roles). Mothers' tough, aggressive Independence (Independence+, Cortertia+, E+, N-) was linked to daughters' aggressive, high-spirited, conflicted Independence (Independence+, Extraverison+, D+, E+, F+, J+, Q₂-, Q₄+); also, mothers' anxious self-indulgent under-control (A+, G-, O+, Q₃-) was linked with daughters' conflicted, aggressive Anxiety (Anxiety+, Independence+, D+, E+, J+, O+, Q₃-, Q₄+). Fathers' impulsive, unstable, overwrought, intrusive Neuroticism (Anxiety+, Neuroticism+, C-, F+, L+, O+, Q₄+) was linked with daughters' withdrawn, apprehensive Neuroticism (Anxiety+, Neuroticism+, A-, B-, C-, F- O+); also, fathers' impulsive, dogmatic Extraversion (Extraversion, F+, H+, L+ Q₂-) was linked to daughters' aggressive, withdrawn tough-mindedness (Cortertia+, Anxiety+, D+, E+, F-, H-, I-, O+). Thus, extrapunitiveness in either parent, especially when associated with impulsivity, was linked to toughness and conflict in daughters; likewise, Anxiety and conflict in either parent was linked to Neuroticism in daughters. Overall, daughters showed more similarity (Table 10) to mothers on aggressiveness (E) which was elevated in these mothers, and to fathers on guilt-prone apprehensiveness (O) and Neuroticism.

Sons also tended to be better adjusted in Group M, and had exceedingly numerous linkages with fathers (the

greatest of any in the whole study), that revolved around mutual Neuroticism versus adjustment (see Matrix 47). Sons tended to be (Table 9) warm-hearted, group-oriented, emotionally stable, socially shrewd, independent, and low on Neuroticism (A+, C+, E+, N+, Q₂). Fathers' withdrawn, submissive, inhibited, brooding Neuroticism (Neuroticism+, Introversion+, Anxiety+, A-, C-, E-, F-, H-, O+, Q₂+) was linked with sons' guarded, self-indulgent, demanding, insecure Neuroticism (Neuroticism+, Anxiety+, A-, C-, D+, F-, G-, H-, J+, O+, Q₃-, Q₄+) . Father/son similarity (Table 10) also occurred on traits of Neuroticism, Anxiety, Dependence, submissiveness, introspectiveness, antisocial self-indulgence, guilt-prone apprehensiveness, seclusiveness, and conflicted self-image (E, F, G, O, Q₂, Q₃). Thus, the more conflicted and withdrawn these sex-role-deviant fathers were, the more conflicted and hostile were their sons. The fact that these fathers overall tended to be Extraverted and uninhibited (hence, somewhat non-Neurotic) may explain why these sons, overall, were sociable and non-Neurotic.

Interrelationships with mothers were far fewer (see Matrix 48) and contained two patterns. The more shrewd, intrusive, impulsive, unconventional, and conflicted (F+, L+, N+, Q₁+, Q₄+) that these tough, aggressive, Extraverted mothers were, the more outgoing, confident, and non-Neurotic were their sons (Neuroticism-, Anxiety-, C+, E-, F+, G+, H+, O-). It is a little hard to understand how sons were made

less Neurotic by these extrapunitive mothers' being more conflicted and extrapunitive. It could be that the addition of these traits made mothers consistent (tough, aggressive women who are also conforming and convention-respecting is somewhat of a contradiction), or it could be that sons here became over-defended and thick-skinned (since they were already, on an average, non-Neurotic and Extraverted). The second pattern linked mothers' Anxious, brooding, antisocial Neuroticism (Neuroticism+, Anxiety+, C-, F-, G-, N+, O+, Q₁+, Q₄+) with sons' withdrawn, brooding, conflicted Dependence (Introversion+, Dependence+, A-, C-, E-, F-, G-, Q₃-). This suggests that to the extent that these aggressive, counter-sex-role mothers were conflicted, intrapunitive, and depressed, they may have formed strong, alliances with sons that left sons Dependent, withdrawing from social contact, and conflicted.

Thus, although Group M parents were at extremes for their respective sexes on Cortertia, being counter to traditional sex roles (tough, aggressive women and gentle, impulsive men), they were actually the most similar spouses of the three groups. Despite these parents' sex-role deviance, both children were the most emotionally healthy of the three groups, with sons having very strong linkages with fathers involving mutual Neuroticism, and daughters having moderate but similar linkages with both parents.

Summary. In the two extreme groups here both parents were either extremely sex-role adherent or deviant. The submissive, sensitive women and tough-minded, detached men in Group F were extremely dissimilar in terms of raw scores (being at sex-role extremes), while the tough, aggressive women and sensitive, emotional men in Group M were actually the most similar of the three groups of spouses.

Thus, it is interesting and consistent with the hypothesis that marriages between opposites are problematic to find that children were the best adjusted and emotionally healthy in Group M (where parents were most similar, but sex-role-deviant) and poorly adjusted in Group F (where parents were most dissimilar and sex-role-adherent). This suggests that children may be more healthy if raised by parents who are either similar or androgynous. Since this simple relationship of similar parents/healthy children did not occur on dimensions of Anxiety and Extraversion, but did occur to some degree on Independence (another trait with strong sex differences), it may be that similarity versus complementarity on sex-typed traits (androgeny) is the important element here.

Sons in both extreme groups had very strong linkages with the emotionally sensitive, intrapunitive (Cortertia-) parent that revolved around mutual Neuroticism versus adjustment. This suggests that a sensitive, intrapunitive parent of either sex when married to a tough, unemotional

spouse, may seek out a strong relationship with sons rather than daughters--perhaps because sons are perceived as a stronger ally. Apparently this relationship can be either negative (Neurotic) or positive (mental-health promoting).

Once again, overall, parent/son interrelationships tended to revolve around sons' Neuroticism (in five out of six instances) while parent/daughter interrelationships revolved around daughters' sex-typed traits of emotional sensitivity and Dependence.

Finally, in the two extreme F and M groups, while parents were in opposite directions on Cortertia, as selected, they tended to differ mainly on the emotionally sensitive versus tough aspect rather than on the more aggressive, dogmatic, extrapunitive aspect that is also a part of this dimension. Additionally, these parents were similar on other dimensions (Extraversion, impulsivity). The spouses in the extreme Independence groups also were less directly opposite as a result of differing on separate sub-factors of Independence, while their counterparts in the extreme Extraversion and Anxiety groups differed more directly. Hence, selection of the most disparate married couples on Independence and Cortertia generated sets of couples that were less discrepant than those similarly selected on Extraversion and Anxiety. These findings suggest that inherent qualities of the former dimensions may make spousal dissimilarity unlikely.

This view was supported by several other findings. First, beyond differing less than they might, spouses in the extreme groups on Independence and Cortertia also showed some similarity on other dimensions: On Cortertia, both Group F parents were Introverted and intrapunitive (F-, H-, L-), while both Group M parents were Extraverted and extra-punitive, thus lessening spouses' overall differences. On Independence, both Group M parents were high on Neuroticism; additionally, the Dependent Group M fathers were self-sufficient (Q_2+) like their Independent wives, and these Independent wives were more sensitive and insecure (I+) like their Dependent husbands. These assorted similarities between spouses selected to be the most opposite on Independence and Cortertia further diminished the overall differences between spouses in Groups F and M.

Further supporting evidence emerged from the Anxiety and Extraversion data, where the spouses selected to represent opposites were also discrepant on other dimensions, contributing to even greater overall differences. Thus, the extreme Anxiety groups were also extreme, and therefore more opposite, on Neuroticism, while fathers in the extreme Extraversion groups were also extreme on Neuroticism, Cortertia, and Independence. Finally, additional support can be found in the fact that on both the Independence and Cortertia dimensions, in Group F, where spouses differed the most in raw scores, their children tended to be more Neurotic,

while Group M children--whose parents were actually the most similar in raw scores--tended to be low on Anxiety and Neuroticism. Similar trends were not observed, however, for children in the Anxiety and Extraversion groups.

These patterns of findings suggest that parents in dyads that differed in terms of Anxiety or Extraversion were more compatible, despite these differences, than were couples who differ on Independence or Cortertia. Someone who is Extraverted could conceivably complement the abilities of someone who is Introverted, and vice versa. Similarly, someone who is self-controlled, strongly-defended, and resilient (low Anxiety) may complement someone who is highly Anxious. It seems somewhat harder to see how the Anxious person is attractive to the non-Anxious--perhaps because s/he is less controlled, more complex, and stimulating, or more alert to possible dangers. Also, perhaps, s/he is less threatening and thus more attractive to the strongly defended person who presumably became so in response to some long-term threatening person or situation. Independence, on the other hand, being a very interpersonally-directed quality, would indeed seem less prone to compatibility at its extremes: The Independent person might well tend to feel "clung to" by the Dependent person, while the Dependent person would feel pushed away unsupported, and perhaps abused by the extra-punitive, Independent person. It is a little harder to imagine why disparity on Cortertia would be so incompatible.

However, if one person focuses on sensitive emotions and enjoys closeness, it is difficult to see what they would have in common or talk about with someone who is detached, cognitive, and task-oriented. In any case, spouses in this sample's extreme Anxiety and Extraversion groups were more directly opposite than spouses in the extreme groups on extrapunitive Independence or emotionally-sensitive Cor-tertia. Overall, these findings suggest that a refinement of the similarity/complementarity issue with respect to mate selection would do well to take account of patterns of specific traits on which similarities or differences tend to facilitate enduring dyadic relationships.

CONCLUSIONS

The hypotheses of this study were only partially confirmed. Hypothesis 1, that there would be significant trait differences between Groups F, S, and M for mothers, fathers, daughters, and sons was only moderately supported, and mainly with respect to parents. Excluding the second-order dimensions used to select the particular set of groups plus their constituent primary factors, the average numbers (across the four dimensions) of significant group differences for mothers and fathers were five and eight, respectively, compared to the two that might be expected by chance. Many additional differences between Groups F, S, and M reached statistical significance but may have been due to the group-selection procedure.

For daughters and sons, the number of significant trait differences between each set of groups was notably smaller. Compared to the three such differences expected by chance, the average number (across the four dimensions) for sons and daughters was close to three and four, respectively. These sparse findings lend little support to the hypothesis that parents' personality dissimilarity leads to cross-generational alliances that would have permanent effects on the children's personalities.

Hypothesis 2(a), that in the two spouse-dissimilar groups (F and M) on each dimension parent/child personality similarity would be greater for the cross-sex dyads than for the same-sex dyads, was not confirmed. Instead, patterns of similarity tended to differ in content, rather than strength, from group to group and dyad to dyad, reflecting the content of the overall parent/child linkages for that particular group and dyad.

Results for Hypothesis 2(b) were, once again, somewhat greater than chance, but primarily for parent/son linkages. The average number of statistically significant parent/child correlations for the father/son, mother/son, father/daughter, and mother/daughter dyads were 42, 38, 24, and 28, respectively, compared to the chance expectation of 21.

Several possible explanations for the often weak results were discussed. One reason may be that the sample was too "normal" to evidence the hypothesized family dynamics; the parent-dissimilar groups included two-thirds of this "average" population of families. A second problem here is that these special parent/child alliances may well have occurred between each parent and only one opposite-sex child, and, thus, running the analyses on all opposite-sex children may have obscured the results. Another difficulty with the parent/child results may have been the restriction in range of parents' traits due to the selection process.

The sample of parents did show some systematic differences from test norms, and these biases may have influenced the findings. Finally, these parent/child dynamics and their effects may not be of a kind which is measurable by a paper-and-pencil personality measure such as the 16PF.

This study's basic hypothesis, that marriages between people whose personalities are opposite tend to be conflicted, dissatisfying, and foster inappropriate cross-generational alliances, was at least indirectly supported by a number of findings. First, all six occurrences of elevated parental Neuroticism were in the parent-dissimilar groups: Among mothers, high Neuroticism occurred for the low-Cortertia mothers (Group F), the high-Independence mothers (Group M), and the high-Anxiety mothers (Group M); among fathers, high Neuroticism occurred for Introverted fathers (Group M), Dependent fathers (Group M), and high-Anxiety fathers (Group F). Thus, parents in the spouse-dissimilar groups tended to be more conflicted and poorly adjusted.

These findings also suggest strong sex differences in traits associated with Neuroticism. For fathers, a consistent cluster of Introverted, Dependent, intropunitive traits was associated with Neuroticism in all three places that it occurred. In addition to the Anxiety traits, these included Introverted, Dependent, submissive, obedient (E-), detached, withdrawn (A-), threat-sensitive, timid (H-),

introspective, inhibited (F-), seclusive, aloof (Q_2+), emotionally-sensitive, tender-minded (I+), conventional, and authority-respecting (Q_1-). Most of these traits are sex-role inappropriate for males, who generally score distinctly lower on them than do women on 16PF population norms. The findings for mothers were slightly more complex. However, two of the three times that elevated Neuroticism occurred for mothers (and particularly in the high-Anxiety, High-Neuroticism group) it was associated with sex-role-inappropriate traits of Independence, Cortertia (emotional toughness), unconventional, tradition-questioning (Q_1+), dominant, aggressive (E+), undisciplined, unconcerned with socially appropriate self-image (Q_3-).

These sex differences also occurred consistently among sons and daughters. For instance, daughters' Neuroticism was associated with Independence (Group S on the Anxiety dimension), and low Anxiety was associated with low Cortertia or emotional sensitivity (Group M on Extraversion). Throughout the cross-trait linkages when parent traits were linked with sons' Neuroticism they were also linked with sons' traits of submissive, inhibited, timid, emotionally sensitive; but when parent traits were linked with daughters' Neuroticism, the associated daughter traits were Independence, dominance, and emotional toughness (Appendix D).

Although no conclusions can be drawn from these associations of sex-role-inappropriate traits and Neuroticism in both parents and children, they certainly are consistent with a theory of Neuroticism as caused by social censure over non-conformity. They are also consistent with a conceptualization of Neuroticism as caused by conflict with, or neglect by, parents whose roles and expectations (including sex-roles) are consequently not internalized or else outright rejected, by the child. These findings are also consistent with the simpler generalization that deviance from social norms in one area is associated with deviance in other areas of social adjustment or orientation.

This study's basic hypothesis was also supported by the tendency for both sex children to be healthier (less Anxious and Neurotic) in the group in which parents were most similar and thus most sex-role deviant. On Independence and Cortertia, the two dimensions with the strongest sex differences, Group F parents tended to be most firmly attached to the culturally-prescribed sex-roles, and hence most different from each other. Their children tended to be Anxious and Neurotic. In Group M, where parents were the most deviant from traditional sex-roles but most similar (in terms of raw scores), children of both sexes tended to be adjusted. This is consistent with the basic hypothesis that parents who are most similar have fewer unconscious dynamics, conflicts, and inappropriate cross-generational alliances.

It is also consistent with the theory that androgynous parents raise healthier children, either because they present less restrictive role models or because they are more complete and competent people.

On the other dimensions, childrens' mental health/Neuroticism exhibited more complex patterns. On Extraversion, children of both sexes tended to be healthier in the group having the healthier same-sex parent, and least healthy where their same-sex parent was least adjusted. This pattern was much stronger for boys, however, than for girls. On the Anxiety dimension, both sex children tended to be best adjusted in Group M where fathers were non-Anxious and non-Neurotic and mothers were highly Anxious and Neurotic. Both of these patterns suggest a somewhat stronger influence of fathers in families.

Parents' mental health was also related to quantity of children's linkages. Sons tended to have more numerous linkages with both parents in groups where fathers were low on Neuroticism (Group F on Extraversion and Group M on Anxiety), but to have few linkages with either parent in groups where fathers were high on Neuroticism (Group M on Extraversion and Group F on Anxiety). This was also true for daughters on the Anxiety dimension: Where mothers were healthy and fathers unhealthy, daughters had strong linkages with both parents; but where mothers were unhealthy, daughters had few linkages with either parent. It may be that in

these highly spouse-discrepant families one sex was seen as healthy and the other as problematic or weak, and that this "myth" was extended to the children also. Thus, children of the same sex as the healthy parent may have been valued, attended to, and interacted with more, while the opposite-sex children were discounted and/or overlooked.

Another interesting pattern occurred in the parent-discrepant groups on Cortertia. Here sons were very strongly bonded to whichever parent was lowest on Cortertia. Thus, sons had numerous linkages with submissive, inhibited, emotionally-sensitive (and Neurotic) Group F mothers, and strong relationships with sensitive, over-protected, self-indulgent (and unstable) Group M fathers. Both of these linkages revolved around mutual parent/son Neuroticism versus adjustment. This linkage with the emotionally-sensitive parent occurred for boys but not girls, who tend to be thought of as more emotionally sensitive. Perhaps the emotionally-sensitive and Dependent parent in each case sought out a relationship with the seemingly strongest ally--the sons.

Several findings also suggested that spousal dissimilarity on Cortertia and Independence is less feasible than on Extraversion and Anxiety. First, spouses in the extreme Cortertia and Independence groups differed less directly than did their similarly-selected counterparts in Extraversion and Anxiety groups. This occurred because Cortertia

and Independence Group F and M spouses were extreme on different sub-factors of the relevant dimension. Beyond, differing less than they might, spouses in the extreme groups on Independence and Cortertia also showed some similarity on other traits, thus diminishing spouses' overall differences. Furthermore, spouses in the extreme Extraversion and Anxiety groups were also discrepant on other dimensions, contributing to even greater overall differences. Finally, additional evidence was found in the fact that on both the Independence and Cortertia dimensions, in Group F, where spouses differed the most in raw scores, their children tended to be more Nuerotic, while Group M children--whose parents were actually the most similar of the groups--tended to be low on Anxiety and Neuroticism. Similar trends were not observed, however, for children in the Anxiety and Extraversion groups. These patterns of findings suggest that inherent qualities of the Cortertia and Independence dimensions make spousal dissimilarity on them more incompatible than dissimilarity on Extraversion and Anxiety.

The most general findings of this study revolved around children's sex differences. As delineated in the discussion section, sons showed more statistically significant results than daughters in each area of this study. Sons and fathers each showed more significant trait differences than did daughters or mothers, respectively (see Tables 6, 7, 8, and 9). Father/son dyads also showed far

greater trait similarities than did the other dyads, with mother/daughter dyads having the least (see Table 10). Furthermore, in parent/child linkages, sons' linkages with fathers and mothers averaged almost twice those of daughters' (see Matrices 1-48). Finally, in all three of these areas, the relevant child's traits were different for sons and daughters: Of the second-order dimensions, Neuroticism and Anxiety showed by far the greatest number of statistically significant results for sons. For daughters, on the other hand, Independence showed the greatest number of parent/child similarities, and Independence, Extraversion, and Cor-tertia were closely tied in terms of overall linkages, with Neuroticism and Anxiety showing barely any.

The highly consistent overall pattern of these findings strongly suggests that parents interact differently with sons than with daughters. While the specific meaning of the greater number of findings for sons and parents is not clear, this trend suggests that sons and parents affected each other more than did parents and daughters. Parents may have paid more attention to sons, been more concerned with them, or valued them more highly. The differences in sons' and daughters' important traits suggest that parent/son interactions revolve around sons' mental health and adjustment, while parent/daughter interactions focus on interpersonal traits of dependence, sociability, and sensitive emotionality. The relevant literature, while not

clearly supporting these findings, is inconclusive in that seldom is a broad range of children's traits studied, anxiety and Neuroticism being almost entirely absent. Other types of research have demonstrated a greater vulnerability in boys to a wide range of emotional problems, which presumably would be related to family variables, as in the present findings. Additionally, other lines of research have found that most parents exert greater sex-role socialization pressures on boys than girls, presumably toward being more strongly-defended and perhaps non-Neurotic, while girls' interactions with parents involve a wider range of traits, as in the present results.

These findings strongly suggest that when research on parent/child interaction or influence does not consider daughters and sons, as well as mothers and fathers separately, important patterns are overlooked. Further research is first needed to confirm the present results, which then suggest several productive channels for investigation. First, the prominence of sons' Neuroticism versus adjustment parent/child interrelationships should be studied to try to determine how this pattern evolves. For example, the two alternative theories of role modeling versus induction might be tested, as well as examining the particular means of transmission through parents' socializing practices, disciplining methods, nurturing styles, etc. Similarly, the finding that parent/daughter interrelationships in so many

instances revolved around daughters' sex-typed traits of Dependence and emotional sensitivity (Cortertia) suggests that future research might profitably investigate the parental behaviors that mediate the development of these traits. Additionally, a closer look at actual parent/child interactions might help identify some of the reasons for the consistent findings of much stronger parent/son interrelatedness and similarity than parent/daughter relatedness or similarity.

Another interesting finding suggesting further research was that of much stronger parent/child linkages involving the child of the same sex as the healthy parent in families where one parent was Anxious and Neurotic and the other resilient and non-Neurotic. It was hypothesized that in such families an implicit belief may exist about the emotional health, desirability, or value of one sex over the other, and research might find support for this theory or develop others.

The present results also identify topics for the further research in the area of marital relations. First of all, the marriages of similar and dissimilar spouses should be investigated to find out what brings these people together, whether these marriages vary in consistent ways from each other, particularly in areas of marital satisfaction and parent/child relationships. Such research might elucidate how it is that spouses who are opposite on fundamental

dimensions such as Extraversion, Anxiety, Independence, and emotionality (Cortertia) get along together and work out the varied tasks of marriage and child-raising. The present results also suggest that important differences exist between the marriages of traditionally sex-typed couples and more similar, androgynous couples, and that their interactions with their children may differ significantly.

Thus, while the present study was somewhat limited by its use of trait data rather than situational or behavioral measures of parents' and children's interactions, it facilitated looking at a broad range of personality dimensions in a substantial sample, and identified several possible avenues for future research.

APPENDIX A

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

APPENDIX A

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, Q₄.

APPENDIX B

Descriptions and Some Research Findings on the 16PF Factors

APPENDIX B

Descriptions and Some Research Findings on the 16PF Factors¹

<u>Low Scorers: Description and Research Findings</u>	<u>Factor</u>	<u>High Scorers: Description and Research Findings</u>
<u>Detached, prefers things or words to people, unexpressive, aloof, rigid, distrusting, critical:</u> Found in occupations of physicist, engineer, writer and artist; higher on masculine dimension of the Strong Vocational Interest Blank (Harford, Willis & Deabler, 1967); child battering parents (Hyman & Mitchell, 1975); inmates who committed crimes against persons rather than against property (Mitchel, 1975); showing greater confusion, guilt, and conflict about aggression and expressing aggression covertly, (Madge, 1975); direction of personality change under long-term stress (Daniel, 1973; related to clinical ratings of "paranoid" and "schizophrenic" symptoms, to "denial of hostility," and to "great difficulty in early relationships" (Karson & O'Dell, 1976).	A	<u>Warm-hearted, outgoing, participating, trusting, people-oriented, soft-hearted:</u> Found in occupations of social worker effective therapist, employment counselor, nurse, Peace-Corp. volunteer, teacher, Roman Catholic brother, successful salesmen and business executives; tends to form groups more readily, and in groups to be more generous, remember people's names better and make more positive interpersonal statements (Cattell & Stice, 1966); rated higher on "warmth" and "empathy" (Price, 1973); rated as more "trustable" by either group members (Aberman, 1969); evokes greater student participation as teacher (Raiche, 1965); as marital partners, report more participation in social groups, clubs, and organizations (Barton & Cattell, 1972); clinical ratings of "strong dependency needs" (Karson & O'Dell, 1976).
<u>Low mental capacity, unable to handle abstract problems</u>	B	<u>Bright, fast-learning, high general mental capacity</u>
(Not present in any of the second-order dimensions of the 16PF.)		
<u>Emotionally unstable, easily upset or frustrated, changeable, uncontrolled:</u> Occupations of janitor, clerk, artist; found	C	<u>High age strength, emotionally stable and mature, calm, controlled, resilient:</u> Related to occupations involving a great

¹Where not otherwise noted, findings are from The Handbook for the 16 PF, pp. 77-109.

in a wide variety of neurotic disorders; related to low sexual gratification in marital partners (Barton & Cattell, 1972); to low levels of empathy (Purinton, 1973); to child-battering by parents (Hyman & Mitchell, 1975); to dissatisfaction with self and lower feelings of basic identity (Pearson, 1974); and, to anxiety and conflict about aggressive feelings and covert expression of aggression (Madge, 1975).

C deal of stress such as business executive, police officer, airline pilot, and athlete; to receiving more group ratings of "contributing to group cohesion" and "others want to be close to" (Cattell & Stice, 1966); to invoking high levels of interpersonal trust (Corazzini, 1974); to Overcontrolled Hostility scale of the MMPI, validated as a measure of suppressed or repressed hostility (White, et al., 1973); and to holding conservative social attitudes such as discouraging interracial marriage or controversial political discussions (Kreiger, 1967).

Phlegmatic, undemonstrative, stoical, deliberate, constant, self-effacing.

D Impatient, demanding, overactive, unrestrained, impulsive, distrustable, jealous.

(Not present in adult form of 16PF.)

Submissive, obedient, dependent, accommodating, conventional, docile:
Found to be related to occupations of janitor, clerical worker, accountant, and Roman Catholic brother; to group ratings of "shy" and "timid" (Aberman, 1969); to invoking high interpersonal trust (Corazzini, 1974); to high ratings of interpersonal "respect" (Price, 1973); to conformity in three experimental situations (Vaughan, 1964); to anxiety and conflict over aggressive feelings (Madge, 1975); to clinical ratings of "schizoid," "denial of hostility," and "hostility turned inward" (Karson & O'Dell, 1976); to a life-philosophy of restraint, moderation, and valuing of established

E Dominant, aggressive, competitive, independent, confident, stubborn: Found to be related to occupations of football player, police officer, salesperson, psychologist, writer, and military personnel; to behavior ratings of "leading," "initiating," "persuading," "directing," "verbal hostility," and "self-confident" (Butt & Fiske, 1965); to group ratings of "speaks most," "assertive," "bossy," "pushy," "disagrees most" (Aberman, 1969); to counseling behaviors of "directing," "advising," "suggesting solutions," "persuading," and "summarizing" (Mazer, 1964); to peer ratings of "talkative," "sociable," and "expressive" (Goldberg, et al., 1972); to self-reports of feeling "satisfied with self" (Pearson, 1974); to being a political action leader on college campuses (Winborn & Jansen,

achievements (Butt & Signori, 1965); and, to a "restrained" parenting style, characterized as highly inactive, retreating, uninvolved, and uncommitted (Webster, 1971).

E 1967); to high physical and verbal aggression in problem adolescents (Madge, 1975); to parents' child-battering (Hyman & Mitchell, 1975); to high scores on fascism and authoritarianism (Sweeney, Fiechtner, & Samores, 1975); to clinical ratings of "hostile" (Karson & O'Dell, 1976); to preference for active, chaotic, stimulating environments (Gorman, 1970); to women's adherence to feminist beliefs (McClain, 1978); and, to over-indulgence in alcohol (Barton & Cattell, 1975).

Taciturn, serious, sober, introspective, cautious, full of cares, brooding, inhibited, conscientious: Found to be related to occupations of Roman Catholic priest, scientist, nurse, engineer, and plant foreman; to intro-punitive reactions to frustration (Schalock & MacDonald, 1966); to chronic illness in childhood (Barton & Cattell, 1975); to anxiety and conflict about aggression (Madge, 1975); to a Buddhist-type life-philosophy of self-sufficiency, introspection, contemplation, avoidance of outward activity, and inward striving for development of the inner self (Butt & Signori, 1965); and, to clinical ratings of "greater internalized inhibitions," "hostility turned inwards," "suicidal," as well as to a wide range of neurotic syndromes (Karson & O'Dell, 1976).

F Surgent, enthusiastic, impulsive, happy-go-lucky, expressive, high-spirited: Found to be related to occupations of musician, performer, salesperson, and athlete; to peer ratings of "talkative," "expresses real feelings," "sociable," "easy to understand" (Goldberg, et al., 1972); to speaking more often and more effectively in groups (Cattell & Stice, 1966); to group members' ratings of "assertive," "pushy," "carefree," "spirited," and "bouncy" (Aberman, 1969); to spouses' report of high frequency of going out together, desiring and having sex more often, and being dominant in the relationship (Barton & Cattell, 1972); to bachelorhood, living in large cities, and overindulgence in alcohol (Barton & Cattell, 1975); to low concern about political issues (Simmons & Parker, 1968); to preference for a Dionysian life-style of pleasure-seeking and abandonment to sensual enjoyment in life (Butt & Signori, 1965); and to clinical ratings of "narcissism," "conversion

	F	hysteria," and "less severe standards and low threat of punishment in early life" (Karson & O'Dell, 1976)
<u>Low superego strength, disregards standards, expedient, self-indulgent, undependable, anti-social:</u>	G	<u>High superego strength, moralistic, staid, conscientious, persevering, responsible, disciplined, consistently ordered, puritanical, reveres authority:</u>
(Not present in second-order dimensions.)		
<u>Shy, timid, restrained, withdrawn, threat-sensitive, inhibited, emotionally cautious: Found to be related to occupations of engineer, university professor, farmer, and Roman Catholic brother or nun; to showing autonomic over-reactivity, and reporting feeling intensely shy, tormented by a sense of inferiority, feeling slow and impeded in expressing themselves, and disliking occupations with interpersonal contact; to ratings of "shy" and "timid" (Aberman, 1969); to being a "sensitizer" rather than "repressor" (Edwards, 1971); to showing poor adjustment after divorce (Heritage, 1974); to taking a job after high school rather than attending college (Barton & Cattell, 1975); to clinical ratings of "paranoid" and "schizoid" (Karson & O'Dell, 1976); and, to anxiety and conflict about aggression, and tendency to express aggression covertly (Madge, 1975).</u>	H	<u>Socially bold, adventurous, genial, active, thick-skinned, carefree, gregarious, uninhibited: Found to be related to occupations of football player, business executive, sales manager, and teacher; to lower autonomic system reactivity, to stress endurance, and to seeing fewer dangers in situations; to group behaviors of making more interpersonal-than task-oriented remarks, receiving higher popularity ratings, being elected more often as leader, receiving greater votes as an ineffective speaker, and reporting feeling "free to participate" and "greater self-satisfaction with contributions" (Cattell & Stice, 1966); to peer ratings of "talkative," "expressive," and "sociable" (Goldberg, et al., 1972); to preference for active, chaotic, stimulating environments (German, 1970); to marital reports of greater frequency of going out together, agreeing with each other, and showing dominance in the relationship (Barton & Cattell, 1972); to high defensiveness scores on the MMPI (Lebovits & Ostfeld, 1970); to preference for heated, controversial, discussions (Kreiger, 1967); and, to favoring capital punishment and having little concern for civil rights</u>

	H	issues (Simmons & Parker, 1968).
<u>Tough-minded, unsentimental, self-reliant, practical, rejects illusions, hard, logical:</u> Found to be related to occupations of athlete, mechanic, police officer, and business executive; to a life-philosophy of action- and task-orientedness, and outward use of energy (Butt & Signori, 1965); the ratings of low interpersonal empathy (Purinton, 1973); to high physical and verbal aggression in problem adolescents (Madge, 1975); and to being a conservative political leader on college campuses (Winborn & Jansen, 1967).	I	<u>Tender-minded, sensitive, dependent, insecure, clinging, over-protected, intuitive, self-indulgent, esthetic, impractical, flighty:</u> Found to be related to occupations of artist, musician, scientist, and psychologist; to peer ratings of "artistically sensitive to surroundings," "wide interests and knowledge," "refined speech/manners," "charming in social situations," "vivid imagination," and "intuitive" (Goldberg, et al., 1972); to group ratings of "slowing up group" and "fusses about detail" (Cattell & Stice, 1966); to high interpersonal empathy ratings (Price, 1973); to a life-philosophy of Buddhist contemplation, introspection, avoidance of outward activity, and development of the inner self (Butt & Signori, 1965); to high conformity in three experimental situations (Vaughan, 1964); and with leisure-time interests of going to museums and theatre, and reading and acting out drama (Cardenal, 1973).
<u>Zestful, vigorous, likes group activity and attention, sinks whole personality into group endeavors.</u>	J	<u>Guarded, internally restrained, acts individualistically, fastidiously obstructive, wrapped up in self, evaluates coldly.</u>
(Not present in adult form of 16PF.)		
<u>Trusting, tolerant, understanding, flexible, accepts personal unimportance, forgives and forgets:</u> Found to be related to occupations of psychologist, school counselor, teacher, and social worker; to high sociometric popularity ratings (Cattell & Stice, 1966); group ratings of "facilitates smooth functioning" (Haythorn, 1953); to intro-punitive reactions to frustration	L	<u>Suspicious, jealous, dogmatic, irritable, tyrannical, dwells on frustrations:</u> Found to be related to occupations of accountant, superintendent of schools, and university professor; to group ratings of "interferes with smooth functioning" (Haythorn, 1953); to high group ratings of "makes critical remarks," and low ratings of "friend to me" (Cattell & Stice,

(Schalock & MacDonald, 1966); to teacher ratings of "open, innovative classroom techniques" and "elicits greater student involvement" (Raiche, 1965); to high ratings of interpersonal warmth and empathy (Price, 1973); to ratings of "most helpful" as resident hall advisor (Miller, 1965); and, to openness to new information and reevaluation of judgments (Febinger, 1965).

L 1966); to extrapunitive reactions to frustration (Schalock & MacDonald, 1966); to ratings of "direct" rather than "indirect control" of students by teachers (Raiche, 1965); to masculine sex-role vocational choices, attitudes, and interests (Harford, et al., 1967); and to clinical ratings of "hostile," "paranoid," "projection," "social insecurity," "high internal tension," and the presence in early life of difficulties with continually-frustrated dependency needs resulting in mistrust and resentment (Karson & O'Dell, 1976).

Practical, down-to-earth, conventional, alert to practical, prosaic, earnest, dependable:

Found to be related to occupations of football player, mechanic, police officer, electrician, nurse, and plant foreman; to occupational ratings of "ingratiating," "subordinates self to others' needs," "over-socialized," "feels strong pressures toward social acceptability" (Sweeney & Fiechtner, 1974); to high conformity in three experimental situations (Vaughan, 1964); to a life-philosophy of action- and task-oriented, outward directed energy, and external orientation (Butt & Signori, 1965); to defensiveness on the MMPI (Lebovits & Ostfeld, 1970); to holding nonprogressive social attitudes, such as opposing interracial marriages and neighborhoods (Kreiger, 1967); to remaining in the same job for five years after high school (Barton & Cattell, 1975); and to the Masculinity dimension of the Strong Vocational Interest Blank (Harford, et al., 1967).

M Imaginative, unconventional, absorbed in abstract inner ideas, Bohemian, absent-minded, fanciful: Found to be related to occupations of artist, musician, university professor, teacher, and Roman Catholic priest; to peer ratings of "artistically sensitive to surrounding," "wide interests and knowledge," "enjoys analytic, penetrating discussion," "vivid imagination," "things of unusual aspects," "More interested in mental than material" (Goldberg et al., 1972); with creativity in researchers and artists (Drevdahl, 1956); with preference for chaotic, active, stimulating environments (Gorman, 1970); to life-philosophies of both Buddhist contemplation and introspection, and Dionysian sensual enjoyment (Butt & Signori, 1965); to teachers' ratings of using innovative, open-classroom techniques (Raiche, 1965); with openness to new information and reevaluation without prejudice (Febinger, 1965); to feeling unaccepted but unconcerned in groups, making original leadership suggestions which are

	M	rejected as unrealistic in the long run, and expressing more dissatisfaction with group unity and procedures (Cattell & Stice, 1966); and to leisure interests of going to museums and theatre, and reading and acting out drama (Cardenal, 1973).
<u>Socially naive, unpretentious, genuine, natural, socially clumsy, lacking insight.</u>	N	<u>Socially shrewd, polished, aware, calculating, detached, insightful, ambitious.</u>
(Not a constituent of any second-order dimensions.)		
<u>Untroubled, self-assured, placid, resilient, rudely vigorous, complacent:</u> Found to be related to occupations of athlete, police officer, and mechanic; to being seen as dominating by spouse (Brawn-Galkowska, 1972); to defensiveness on the MMPI (Lebovits & Ostfeld, 1970); to a life philosophy of action- and task-oriented, outward directed energy (Butt & Signori, 1965); and, to clinical ratings of "hostile" (Karson & O'Dell, 1976).	O	<u>Apprehensive, worrying, guilt-prone, brooding, easily upset, insecure, anxious:</u> Found to be related to occupations of psychotherapist, Roman Catholic priest, artist, accountant, and farmer; to not feeling accepted or free to participate in groups, trying to elicit high levels of group conformity to rules, viewing few peers as friends, and receiving peer ratings of "shy," "ineffective speaker," "hinderer," and "poor leader" (Cattell & Stice, 1966); to high ratings of interpersonal empathy (Price, 1973); to ratings of helpfulness as residence hall advisor (Miller, 1965); to peer ratings of "emotionally unstable," "easily tired," "easily upset," "distractable," "low self-possession," and "worries" (Goldberg, et al., 1972); to marital reports of low "sexual gratification," low "agreement," and low frequency of "doing something pleasurable together" (Barton & Cattell, 1972); to a variety of neurotic syndromes, but especially phobias, anxiety reactions, and hypochondriacal symptoms; and to clinical ratings of "hostility turned inward" and "suicidal tendencies" (Karson & O'Dell, 1976).

Conventional, respects/accepts authority, sticks to traditional:

Found to be related to occupations of mechanic, janitor, and nurse; to group ratings of "shy and timid" and "agrees with anything leader says" (Aberman, 1969); to occupational ratings of "ingratiating," "subordinating self to others' needs," "over-socialized," "feels strong pressures to be socially acceptable" (Sweeney & Fiechtner, 1974), to high church attendance in college students (McClain, 1970); to low tolerance of ambiguity and preference for authoritarian, dogmatic management styles (Sweeney & Fiechtner, 1975); to high conformity in three experimental situations (Vaughan, 1964); to a life-philosophy of restraint, moderation, and valuing of established achievements (Butts & Signori, 1965); to a parenting style characterized as intrusive, controlling, manipulative, and over-anxious (Webster, 1971); and to clinical ratings of "hostility turned inward," "depression," and "suicidal tendencies" (Karson & O'Dell, 1976).

Q₁

Liberal, free-thinking, experimenting, innovative, questioning:

Found to be related to occupations of university professor, scientist, artist, and psychologist; to group ratings of "less integrated into group" (Cattell & Stice, 1966); with "egalitarian" and "rebel" role preference (Sweeney & Fiechtner, 1975); to being a campus political action leader (Winborn & Jansen, 1966); with women's adherence to feminist beliefs (McClain, 1978); with teachers' ratings of creating open, autonomous climates in classrooms (Berends, 1969); to non-religious social attitudes (Kreiger, 1967); and to clinical ratings of "intellectualized aggression" (Karson & O'Dell, 1976).

Group dependent, sociable, follower, social approval sought and valued, goes with group:

Found to be related to occupations of nurse, teacher, salesperson, and school superintendent; to clinical ratings of "strong dependency needs," (Karson & O'Dell, 1976); to intense, over-emotional attachments during adolescence (Cattell & Stice, 1966); to high conformity in three experimental situations (Vaughan, 1964); to church attendance in college students (McClain, 1970); to adherence to traditional norms such as that "men should have more sexual freedom than women" (Kreiger,

Q₂

Self-sufficient, independent, prefers own decisions, resourceful, seclusive:

Found to be related to occupations of scientist, farmer, engineer, accountant, university professor, and artist; to being seen as seclusive as a child and as an early developer who associated with a few older friends; to showing a "controlling counseling style" of directing, advising, suggesting solutions, persuading, dominating, and showing confidence and self-sufficiency (Mayer, 1964); to group behaviors of expressing overt dissatisfaction with group processes, criticizing

1967); to remaining in the same job for at least five years after high school (Barton & Cattell, 1975); and, to impulsive, extra-punitive reactions to frustration (Schalock & MacDonald, 1966).

Q₂

others, and suggesting more independent solutions which tended to be rejected in the long run (Cattell & Stice, 1966); to being a political action leader on college campuses (Winborn & Jansen, 1969); to being open to new information and to reevaluation without prejudice (Febinger, 1965); to clinical ratings of "schizoid" (Karson & O'Dell, 1976); and, to a life-philosophy of Buddhist self-sufficiency, contemplation, and avoidance of outward striving or concern (Butt & Signori, 1965).

Unself-disciplined, impulsive, follows urges, careless of rules, lax: Found to be related to occupations of artist, musician, Roman Catholic priests, psychologists, and employment counselors; to a wide variety of neurotic syndromes; to group ratings of "shows widest range of emotions," "hinderer, and "ineffective leader" (Cattell & Stice, 1966); to clinical ratings of "under-controlled," "impulsive," and "acts out" (Karson & O'Dell, 1976); to a life-philosophy of Dionysian sensual enjoyment and pleasure seeking (Butt & Signori, 1965); to preference for active, chaotic, stimulating environments rather than subdued, ordered ones (German, 1970); to being a campus political action leader (Winborn & Jansen, 1967); to reports of low self-satisfaction and low basic identity (Pearson, 1974); to personality change under stress (Daniel, 1973); and to high sexual activity in marital partners and wives' low home-orientation (Barton & Cattell, 1972).

Q₃

Self-controlled, conscientious, persistent, compulsive, follows consistent socially-approved self-image: Found to be related to occupations of police officer, school superintendent, athlete, business executive, and physician; to group ratings of "effective leader," "makes more task-oriented remarks," "wants group to be run in more organized manner" (Cattell & Stice, 1966); to clinical ratings of "compulsive," "over-controlled," "obsessive," and "binds anxiety in constructive ways" (Karson & O'Dell, 1976); to high Overcontrolled Hostility on the MMPI, a measure of strong suppressed/repressed hostility (White, et al., 1973); to high scores on the Marlowe-Crowne Social Desirability Scale (Schmidt, 1969); to teachers' ratings of direct rather than indirect control of students (Raiche, 1965); to greater occupational promotions (Barton & Cattell, 1975); and, to a life-philosophy of restraint, moderation, and valuing of established achievements (Butt & Signori, 1965).

Relaxed, tranquil, phlegmatic, composed, unmotivated, torpid:
 Found to be related to occupations of airline pilot, physician, teacher, and social worker; to high sociometric popularity and leadership ratings (Cattell & Stice, 1966); to high levels of interpersonal respect and unconditional positive regard (Price, 1973); to high levels of interpersonal trust (Corazzini, 1974); to intro-punitive reactions to frustration (Schalock & MacDonald, 1966); and, to clinical ratings of "hostility turned inward" (Karson & O'Dell, 1976).

Q₄

Tense, driven, overwrought, frustrated, irritable, in turmoil, conflicted, emotional:
 Found to be related to occupations of artist, writer, musician, athlete, and editorial worker; to a wide variety of neurotic syndromes; to low ratings of interpersonal empathy (Purinton, 1973); to group behaviors of overt expression of dissatisfaction with leadership, not feeling accepted, and receiving fewer popularity and leadership votes (Cattell & Stice, 1966); to high frequency of disagreements in marital partners (Barton & Cattell, 1972); to anxiety and conflict over aggressive feelings, and high covert expression of aggression (Madge, 1975); to extra-punitive reactions to frustration (Schalock & MacDonald, 1966); and, to clinical ratings of "externally directed hostility" (Karson & O'Dell, 1976).

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+ (adventure-some), Q₂- (group dependent, and E+ (dominance). For children only, J- (zestful).

Anxiety: C- (low ego strength), O+ (guilt-prone), Q₄+ (ergic tension), L+ (suspicious insecurity), H- (threat-sensitive), and Q₃ (impulsive).

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

Independence: E+ (dominant), L+ (suspicious insecurity), M+ (imaginative inner-directedness), Q₁+ (radicalism), and Q₂ (self-sufficient). J+ (guarded individualism) present in children only.

APPENDIX C

Mean Scores on 16PF Factors that Achieved Statistical
Significance for Family Members in Groups F, S and M
on Extraversion, Independence, Anxiety, and Cortertia

Mean Scores on 16PF Factors that Achieved Statistical Significance for Family Members in Extraversion-Selected Groups F, S, and M¹

	Mothers			Fathers			Daughters			Sons		
	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group
	F	S	M	F	S	M	F	S	M	F	S	M
B	7.2	6.9	7.5	7.2	7.4	6.8						
C												
D												
E				6.7	5.0	4.6				6.0	5.6	6.1
G				6.4	6.0	5.7				5.9	5.5	5.2
I							4.5	5.5	5.2			
J										5.3	5.8	5.9
L												
M												
N	5.7	6.1	4.8							5.5	5.8	6.3
O				4.8	5.8	5.8						
Q ₁												
Q ₃							5.7	4.9	4.7			
Q ₄	5.5	5.0	5.8							5.3	5.1	5.8
Independence				4.2	3.1	2.8				5.3	5.4	6.0
Anxiety				5.4	5.9	6.1	5.9	5.4	5.2			
Covertia				6.7	6.0	6.6	6.1	5.3	5.2			
Neuroticism				0.8	7.9	10.8						
Extraversion	4.4	5.0	6.4	7.3	5.3	4.0						
+A*	4.2	5.2	5.9	6.3	5.7	4.6	4.6	5.5	5.2	5.7	5.0	5.5
+F*	4.9	5.1	6.0	7.4	5.1	4.5						
+H*	4.5	5.5	5.8	7.1	5.5	3.9						
-Q ₂	7.0	6.6	5.3	5.0	6.0	7.4						

¹Standardized population mean = 5.5 for all factors except Neuroticism.

*Primary factor that contributes to second-order factor Extraversion.

16PF Traits

Mean Scores on 16PF Factors that Achieved Statistical Significance for Family Members in Independence-Selected Groups F, S, and M¹

	Mothers			Fathers			Daughters			Sons		
	Group F	Group S	Group M	Group F	Group S	Group M	Group F	Group S	Group M	Group F	Group S	Group M
A										5.1	5.6	5.7
B												
C				5.8	6.1	5.2						
D												
F				6.2	5.6	5.1	5.3	5.6	6.1			
G	6.2	5.8	5.1	5.6	6.6	6.0						
H				6.2	5.4	4.8						
I	4.5	5.8	6.1				5.5	4.8	5.1			
J												
N	6.1	5.8	4.7				5.7	6.1	5.3	5.5	6.2	5.7
O												
Q ₃	5.7	6.1	5.1									
Q ₄												
Extraversion				6.4	5.5	4.8	5.3	5.2	5.8			
Anxiety							5.8	5.4	5.2			
Cortertia										5.9	5.7	5.2
Neuroticism	8.9	9.6	12.4	5.4	4.6	9.6	-6.3	-8.6	-9.9			
Independence	4.3	5.3	6.6	4.1	3.3	2.7	5.8	5.2	5.4			
+E*	4.5	4.8	6.0	6.4	5.7	4.2				6.1	6.1	5.4
+L*				5.4	4.4	4.6						
+M*	4.5	5.7	6.6									
+Q ₁ *	4.7	5.7	6.3									
+Q ₂ *				5.4	6.2	6.7						

¹Standardized population mean = 5.5 for all factors except Neuroticism.

*Primary factor that is a component of second-order factor Independence.

Mean Scores on 16 PF Factors that Achieved Statistical Significance for Family Members in Anxiety-
Selected Groups F, S, and M¹

	Mothers			Fathers			Daughters			Sons		
	Group F	Group S	Group M	Group F	Group S	Group M	Group F	Group S	Group M	Group F	Group S	Group M
A				4.9	5.9	5.6	4.9	5.0	5.6			
B				7.0	6.8	7.5						
D												
E				5.0	5.3	6.0						
F	5.2	4.9	5.9	5.0	5.7	6.2				5.6	5.1	4.9
G	6.1	5.8	5.3	5.0	6.4	6.7				5.1	5.7	5.8
I				5.0	4.4	4.3						
J										6.1	5.6	5.4
M				5.7	5.2	4.9						
N				4.3	5.4	5.5						
Q ₁	5.5	5.2	6.1	4.5	5.7	5.3						
Q ₂												
Extraversion				4.8	5.7	6.0	5.0	5.6	5.8			
Independence	5.3	5.2	5.8				5.1	5.7	5.4			
Cortertia	4.1	3.9	4.7	6.3	6.2	6.9						
Anxiety	4.8	6.2	7.6	7.4	5.7	4.4						
**Neuroticism	4.1	10.1	16.2	16.7	5.6	-2.1	-8.1	-7.1	-10.0			
-C*	6.3	4.9	4.0	4.0	5.9	7.2						
-H*	5.9	5.0	4.9	4.3	5.9	6.1				5.1	5.6	6.0
+L*	4.4	4.6	6.2	5.5	5.0	4.0						
O*	4.6	5.8	7.0	6.8	5.2	4.4				5.7	5.3	5.2
-Q ₃ *	6.1	5.8	5.0	5.4	6.3	7.1						
+Q ₄ *	3.9	5.4	6.9	7.2	5.4	4.2	5.6	5.4	4.9	5.7	5.3	5.0

¹Standardized population mean = 5.5 for all factors except Neuroticism.

*Primary factor that contributes to second-order Anxiety.

**Neuroticism is directly related to Anxiety.

16PF Traits

Mean Scores on 16PF Factors that Achieved Statistical Significance for Family Members in Cortartia-Selected Groups F, S, and M¹

	Mothers			Fathers			Daughters			Sons		
	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group	Group
	F	S	M	F	S	M	F	S	M	F	S	M
B				7.3	7.2	6.7						
C				5.9	6.1	5.1				5.4	5.4	6.0
D										5.6	5.1	5.2
G				6.3	6.2	5.6	5.3	5.1	5.9			
H	4.4	5.2	6.3	5.2	5.1	6.1						
J												
M										6.3	5.4	6.0
N												
O												
Q ₁	6.0	5.7	5.1							7.3	7.0	5.9
Q ₂				6.8	6.4	5.2						
Q ₃							5.2	5.8	5.1			
Q ₄										5.9	5.0	5.3
Extraversion	4.6	5.1	6.1	5.1	5.2	6.4				5.2	5.1	5.6
Independence	5.2	5.2	6.0							5.8	5.3	5.4
Anxiety							5.1	5.8	5.4			
Neuroticism	12.8	8.9	9.2							-7.7	-8.6	-11.1
Cortartia	2.4	4.3	6.1	7.4	6.7	5.2						
-A*				4.4	5.1	7.1				5.1	5.2	5.9
+E*	4.0	4.8	6.5							5.9	5.6	6.3
+F*	4.8	5.2	6.0	5.2	5.3	6.4						
-I*	6.5	5.0	4.9	4.2	4.4	5.1						
+L	3.9	5.0	6.4	4.4	4.8	5.2						

¹Standardized population mean = 5.5 for all factors except Neuroticism.

*Primary factor that contributed to second-order factor Cortartia.

Matrix 1. Extraversion—Selected Group F: Mother/Daughter Correlations (N=42)

	CHILD'S TRAITS																	
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgeency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-controlled	Internal Tension	Independence	Extraversion	Anxiety
A		.32 ^c																
B		.26 ^d						.32 ^c										
C																		
E					.32 ^c													
F					.42 ^b													
G					.27 ^d													
H					.26 ^d													
I																		
L	.28 ^d				.30 ^d		.40 ^b	.35 ^c										
M		.26 ^d																
N		.26 ^d	.27 ^d															
O	.43 ^b				.47 ^b													
Q ₁																		
Q ₂																		
Q ₃																		
Q ₄																		
Indepd.																		
Extrav.		.30 ^d						.35 ^c							.26 ^d		.34 ^c	
Anxiety	.28 ^d				.39 ^c				.27 ^d									
Cortex.							.28 ^d									.26 ^d		
Neurot.					.37 ^c				.39 ^c									.35 ^c

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Matrix 3. Extraversion--Selected Group F: Father/Son Correlations (N=82)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surrogacy	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-Sufficient	Internal Tension	Extraversion
A	20 ^d					20 ^d						-24 ^c				-25 ^f
B					23 ^c								-24 ^d			
C		-24 ^c														
E	19 ^d	45 ^a		31 ^b	28 ^c		33 ^b				40 ^a	-36 ^d			23 ^c	-35 ^a
F			21 ^d		20 ^d	25 ^c		24 ^c			-20 ^c	-36 ^c				-21 ^f
G							23 ^c		-25 ^c							-30 ^b
H				23 ^c												
I						-26 ^c	22 ^c		19 ^d		23 ^c					21 ^d
L	23 ^c		35 ^a										23 ^d		20 ^d	
M		24 ^c		-26 ^c											-33 ^b	-21 ^f
N						23 ^c			-42 ^a							
O								19 ^d		19 ^d						
Q ₁																
Q ₂	-19 ^d		25 ^c			-16 ^d		22 ^d		21 ^d			24 ^c	30 ^b	18 ^b	30 ^c
Q ₃						-19 ^d										
Q ₄							-21 ^d	19 ^d								22 ^c
Indepd.		26 ^c	52 ^a		22 ^c	27 ^c	29 ^b		-42 ^a	46 ^c					23 ^c	41 ^f
Extrav.			-31 ^b	24 ^c	24 ^c		31 ^b		-34 ^b	42 ^c					-35 ^a	-41 ^a
Anxiety									21 ^d							
Cortex.	-19 ^d															
Neurot.							-24 ^c	24 ^c		23 ^c	35 ^d				20 ^d	26 ^c

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Matrix 4. Extraversion--Selected Group F: Mother/Son Correlations (N=82)

	CHILD'S TRAITS																		
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgeency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-assertive	Self-sufficiency	Internal Tension	Independence	Extraversion	Anxiety
A																			
B	10 ^d						18 ^d		21 ^d	-20 ^d	-25 ^d								-22 ^a
C	20 ^c							20 ^d			23 ^d	-20 ^d			24 ^d	-20 ^d			-20 ^d
E	18 ^d	34 ^b		23 ^c	24 ^f							28 ^c					21 ^d	-23 ^f	-34 ^f
F		26 ^c			22 ^f							19 ^c	-47 ^f					-26 ^c	-26 ^c
G					22 ^f			18 ^d		39 ^b		34 ^c							
H		24 ^c	34 ^b	23 ^c							25 ^c	37 ^c						-27 ^f	-35 ^a
I																		20 ^d	20 ^d
L		28 ^c	46 ^a		26 ^c		25 ^c				-28 ^f	46 ^c						-37 ^a	-39 ^a
M	26 ^c			-23 ^f											-25 ^c				
N															-23 ^c	25 ^c			
O	21 ^d		30 ^b												-30 ^f	30 ^b			
Q ₁																			
Q ₂	42 ^a														18 ^d				
Q ₃		-40 ^a			-37 ^a							48 ^c				-18 ^d	23 ^c	36 ^a	
Q ₄		19 ^d																	
Indepd.	21 ^c	19 ^d	31 ^b	19 ^d	19 ^d		20 ^d				-24 ^f	-34 ^d				22 ^c	-21 ^d	-32 ^b	
Extrav.			31 ^b	22 ^c	21 ^d						-28 ^f	38 ^a					-30 ^b	-30 ^b	
Anxiety															23 ^c				
Cortr.		44 ^a	30 ^b	33 ^b		25 ^c					-30 ^b	51 ^c					-36 ^a	-43 ^a	
Neurot.															20 ^d				

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Matrix 8. Extraversion—Selected Group S: Mother/Son Correlations (N=72)

	CHILD'S TRAITS																			
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Seclusive	Self-sufficiency	Internal Tension	Independence	Extraversion	Anxiety	Cortertia
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄					
	A																			
	B	20 ^d												42 ^d						
	C			.28 ^c		23 ^d														
	E	23 ^d			.28 ^c															
	F		.31 ^b																	
	G	30 ^b					.25 ^c	23 ^d								.29 ^c		28 ^c		
	H	33 ^b		23 ^c				31 ^b										31 ^b		
	I							26 ^c												27 ^c
	L			23 ^d		22 ^d														
	M								24 ^c	28 ^c	25 ^d		40 ^d			20 ^d				
	N			22 ^d												20 ^d				
	O			24 ^c		27 ^c														.25 ^c
	Q ₁									32 ^b						21 ^d				
	Q ₂			24 ^c						24 ^d										
	Q ₃			28 ^c			28 ^c								23 ^c					23 ^d
	Q ₄					20 ^d														
	Indepd.	20 ^d		28 ^c						28 ^c										
	Extrav.												41 ^d			22 ^d				
	Anxiety			27 ^c		26 ^c	28 ^c											21 ^d		20 ^d
	Cortex.												40 ^d							
	Neurot.			28 ^c	31 ^d	28 ^c	29 ^c										21 ^d			27 ^c

Matrix 11: Extraversion--Selected Group M: Father/Son Correlations (N=77)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgeency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-controlled	Internal Tension	Independence
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
	A								23 ^c							
	B	27 ^c										22 ^d				
	C					20 ^d						26 ^c				
	E	28 ^c			33 ^b			42 ^a		23 ^d						32 ^b
	F				23 ^c											
	G	32 ^b									23 ^c		25 ^c	22 ^c		
	H	20 ^d			21 ^d		29 ^c									24 ^f
	I		22 ^d	20 ^d					20 ^d							
	L								34 ^b						20 ^d	
	M	30 ^b	20 ^d	27 ^c			25 ^c	20 ^d	21 ^d		32 ^b		40 ^b	23 ^c		28 ^c
	N					20 ^d		22 ^d			19 ^c		25 ^c	24 ^c		
	O		23 ^c								30 ^b	38 ^d			21 ^c	20 ^d
	Q ₁	30 ^b	19 ^c					33 ^b	21 ^d							28 ^c
	Q ₂	20 ^d		26 ^c	27 ^c	21 ^d			31 ^b				34 ^c	24 ^c		
	Q ₃	20 ^d				19 ^d				26 ^c		26 ^d	24 ^c	26 ^c		
	Q ₄	22 ^d													24 ^c	
	Indepd.	37 ^a		30 ^c	30 ^b			31 ^b						24 ^c		22 ^d
	Extrav.						24 ^c		20 ^d							
	Anxiety		19 ^d								23 ^c			20 ^d		
	Cortex.															
	Neurot.		19 ^d						30 ^b	32 ^b				24 ^c		20 ^d

Matrix 14. Independence—Selected Group F: Father/Daughter Correlations (N=50)

	CHILD'S TRAITS															
	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
P A R E N T S' T R A I T S	A															
	B	28 ^d														
	C		31 ^c													
	E	28 ^c				33 ^c	27 ^d								29 ^c	
	F	28 ^c						24 ^d		31 ^c					30 ^c	
	G	29 ^c					26 ^d			25 ^d						
	H	26 ^d														
	I									29 ^c						
	L		-30 ^c	40 ^b			-25 ^d						-34 ^c	23 ^d	39 ^b	32 ^c
	M		-39 ^b								27 ^d					
	N													24 ^d		
	O	-31 ^c	-24 ^d							31 ^d						
	Q ₁	44 ^a													34 ^c	
	Q ₂			25 ^d							34 ^c		-32 ^c	34 ^c	25 ^d	34 ^c
	Q ₃		24 ^d							-29 ^d						28 ^c
	Q ₄		-30 ^c													
	Indepd.	24 ^d				24 ^d									32 ^c	
	Extrav.	29 ^c							25 ^d							
	Anxiety		-34 ^c		24 ^d					27 ^d						25 ^d
	Cortet.				27 ^d				-24 ^d							
	Neurot.	-26 ^d	-38 ^b							28 ^d						26 ^d

Matrix 15. Independence—Selected Group F: Father/Son Correlations (N=71)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgeency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-sufficiency	Internal Tension	Independence
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
	A						23 ^d					-20 ^d				-22 ^d
	B	39 ^a							-24 ^f			-38 ^a				-31 ^b
	C		22 ^d	-24 ^f				24 ^c								
	E	35 ^b	31 ^b		38 ^a			40 ^a				-32 ^b				-25 ^c
	F	26 ^c				24 ^c						-22 ^d				-38 ^a
	G						27 ^c									-22 ^d
	H	21 ^d			21 ^d											
	I								24 ^c					-20 ^d		
	L	25 ^c												26 ^c		
	M				-32 ^f						22 ^d			-28 ^c		
	N								27 ^c							
	O		-20 ^d	21 ^d												22 ^d
	Q ₁	20 ^d	34 ^b												22 ^d	22 ^d
	Q ₂								26 ^c						-20 ^d	-19 ^d
	Q ₃			-22 ^d									36 ^c			
	Q ₄		-21 ^d				-22 ^d									
	Indepd.	26 ^c	37 ^a	29 ^c	28 ^c		33 ^b				-28 ^c				-22 ^d	-35 ^b
	Extrav.	21 ^d	26 ^c								-28 ^c				-20 ^d	-29 ^c
	Anxiety			-24 ^c	20 ^d		-20 ^d								22 ^d	21 ^d
	Cortet.	29 ^c					20 ^d						27 ^c			
	Neurot.		-27 ^c				-28 ^c					26 ^c			27 ^c	31 ^c

Matrix 18. Independence—Selected Group S: Father/Daughter Correlations (N=58)

	CHILD'S TRAITS																	
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgeency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Self-sufficient	Self-controlled	Internal Tension	Independence	Extraversion	Anxiety
A																		
B				23 ^d												31 ^c		32 ^c
C		30 ^c	-26 ^c															22 ^d
E		23 ^d		26 ^c														
F				25														27 ^c
G								22 ^d		-30 ^c		-56 ^c			22 ^d	22 ^d		
H		23 ^d													32 ^c	36 ^b	23 ^d	24 ^d
I				21 ^d									-55 ^c					26 ^d
L		-25 ^d	32 ^c														-25 ^c	
M				-23 ^d														
N								28 ^c	24 ^d				-27 ^d					24 ^d
O																-27 ^c		
Q1	26 ^c	22 ^d				23 ^d												
Q2		-27 ^c			-24 ^d											-22 ^d		
Q3	31 ^c	26 ^d						35 ^b										-30 ^c
Q4														25 ^d	-26 ^c		-27 ^c	
Indepd.				24 ^d														25 ^d
Extrav.		27 ^c		29 ^c											22 ^d	32 ^c	23 ^d	27 ^c
Anxiety		-23 ^d													-22 ^d	-23 ^d	-30 ^c	
Cortex.														31 ^c				
Neurot.		-31 ^c	26 ^d												-23 ^d	-23 ^d	-33 ^c	

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Matrix 19. Independence—Selected Group S: Father/Son Correlations (N=82)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surrogacy	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Apprehensive	Self-Sufficiency	Internal Tension	Extraversion	Anxiety
A	20 ^d	21 ^d					28 ^c		-20 ^d					-31 ^b		-21 ^d
B			21 ^d									-35 ^a		-23 ^c	22 ^c	
C												-28 ^c				
E									-23 ^c	-19 ^d						
F							19 ^d	-19 ^d				47 ^c		-23 ^c		-23 ^f
G	20 ^d					-20 ^d	22 ^d				-29 ^b		-23 ^c			
H		-20 ^d					24 ^c		-22 ^d					-26 ^c		
I			-22 ^c													
L			25 ^c				-20 ^d	20 ^d								
M	-22 ^c	27 ^c		22 ^d									-23 ^d	18 ^d	-19 ^d	-30 ^b
N				-27 ^c	25 ^c								-22 ^c			
O								19 ^d	24 ^d	22 ^d						
Q1		21 ^d									34 ^d					
Q2	-28 ^c	-22 ^c		30 ^b			-28 ^c	-25 ^c	23 ^c					27 ^c	26 ^c	21 ^d
Q3			-24 ^c			-21 ^d										
Q4	-18 ^d						-28 ^c									
Indepd.				24 ^c				-26 ^c	-18 ^d					-19 ^d		
Extrav.							24 ^c	20 ^d	-27 ^c		-39 ^d			-31 ^b		-25 ^c
Anxiety							-25 ^c		19 ^d							
Cortex.	-21 ^d	-20 ^d						-21 ^d								26 ^c
Neurot.							-25 ^c		24 ^c	21 ^d						

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Matrix 20. Independence—Selected Group S: Mother/Son Correlations (N=82)

	CHILD'S TRAITS															
	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
A		22 ^c						-28 ^c							19 ^d	
B					-20 ^d		26 ^c					-21 ^d		21 ^d		-20 ^d
C					31 ^h											
E				22 ^d												
F					.31 ^h					20 ^d						
G	38 ^a															28 ^c
H		21 ^d			25 ^c											
I	21 ^d															-23 ^c
L																
M					-35 ^a	-23 ^c	19 ^d				-28 ^c	50 ^c			-19 ^d	
N	21 ^d	-20 ^c	23 ^f	-25 ^c				36 ^a				-27 ^c	22 ^d	-36 ^a	20 ^d	-32 ^h
O	-28 ^c			-20 ^c	-20 ^d										-26 ^c	23 ^f
Q ₁			24 ^c					25 ^c	-25 ^c			-31 ^h		-21 ^d		-24 ^c
Q ₂																-33 ^b
Q ₃			-19 ^d													
Q ₄					-33 ^h											-27 ^c
Indepd.		20 ^d		22 ^c						-23 ^c						-21 ^d
Extrav.				19 ^d				-21 ^d						23 ^c		
Anxiety		-20 ^d			-31 ^h											-25 ^c
Cortet.					24 ^c							-36 ^c				21 ^d
Neurot.					-34 ^h										-23 ^c	20 ^d

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Matrix 21. Independence—Selected Group M: Mother/Daughter Correlations (N=54)

	CHILD'S TRAITS															
	A	B	C	D	E	F	G	H	I	J	N	O	Q ₁	Q ₂	Q ₃	Q ₄
A							-23 ^d			35 ^c				51 ^c	-50 ^b	
B			.39 ^b													
C			.31 ^c				-28 ^c			28 ^c						-23 ^d
E					.31 ^f				28 ^c	31 ^d			-54 ^c	-30 ^d		.38 ^b .34 ^c
F																
G			25 ^d													
H							34 ^c									
I			41 ^b													-23 ^d
L			-29 ^c							-27 ^d						
M																
N				-25 ^d		-29 ^c										-28 ^c
O																
Q ₁																
Q ₂														28 ^d		
Q ₃																
Q ₄			-34 ^c				29 ^c									
Independ.					27 ^d	32 ^c			-23 ^d				-62 ^b			29 ^c 24 ^d
Extrav.				24 ^d										-31 ^d		
Anxiety			-29 ^c					27 ^c								
Cortex.			-23 ^d							-32 ^c						36 ^b
Neurot.			-23 ^d				28 ^c									

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Matrix 23. Independence—Selected Group M: Father/Son Correlations (N=73)

CHILD'S TRAITS

	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-assertive	Self-sufficiency	Internal Tension	Independence	Extraversion	Anxiety	Corteria	Neuroticism
A									-27 ^c											31 ^a	20 ^d
B			-20 ^d	22 ^d			-23 ^d							-25 ^d				20 ^d			23 ^d
C									-27 ^c												
E									-41 ^a			-21 ^d								21 ^d	-29 ^c
F					24 ^c							-40 ^d					25 ^c			28 ^c	
G									-31 ^b			-34 ^c				-31 ^b					
H	35 ^b			-26 ^c			30 ^c			-24 ^d			28 ^d	-21 ^d		25 ^c					-27 ^c
I																					
L									23 ^d												
M		31 ^b							27 ^c							26 ^c					
N			39 ^a	-40 ^a			24 ^c	33 ^c	-21 ^d	-32 ^b		-29 ^c	-27 ^c	21 ^d	-41 ^a	-41 ^a					
O										22 ^d	44 ^d				-30 ^c						
Q ₁	-22 ^d				26 ^c			-38 ^a						24 ^c						40 ^a	
Q ₂	-20 ^d	-25 ^c	27 ^c					23 ^d	25 ^c	22 ^d					23 ^d				-25 ^c	30 ^c	
Q ₃						-23 ^c			-26 ^c						-22 ^d						
Q ₄		-22 ^d					-25 ^c								23 ^d						
Indepd.				22 ^d	19 ^d			-27 ^c				-38 ^d								21 ^d	
Extrav.					20 ^d			-27 ^c								26 ^c		26 ^c		-24 ^c	
Anxiety							-23 ^c	25 ^c						20 ^d							
Cort.	27 ^c						-21 ^d		-33 ^c												
Neurot.							-20 ^d	22 ^d	37 ^b						28 ^c				-22 ^d	25 ^c	

PARENTS' TRAITS

Matrix 27. Anxiety—Selected Group F: Father/Son Correlations (N=78)

	CHILD'S TRAITS																		
	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	Indepd.	Extraversion	Anxiety	Cortertia
P A R E N T S' T R A I T S	A	.28 ^c																	
	B		.37 ^a					.22 ^o					-.29 ^b	-.38 ^o					
	C												-.37 ^o						
	E								-.23 ^c	-.24 ^c		-.21 ^o							.18 ^c
	F	.21 ^o																	
	G				-.18 ^o			.24 ^c							-.22 ^o				
	H					-.28 ^c	.20 ^o							.28 ^c	-.19 ^o				
	I																		
	L									.23 ^o				.33 ^o					
	M		-.34 ^b					-.19 ^o				.23 ^c	.44 ^c	-.22 ^o			.22 ^c		.26 ^c
	N			-.19 ^o			.32 ^b		-.25 ^c		-.35 ^b		.29 ^c	-.25 ^c					
	O			.19 ^o				.28 ^c											
	Q ₁	-.22 ^f	.27 ^c																
	Q ₂	-.22 ^f		.23 ^c		.31 ^b				.28 ^c					.30 ^b	.19 ^o			
	Q ₃					-.21 ^o								.23 ^o					
	Q ₄			-.22 ^f	-.24 ^f									.22 ^o	-.20 ^o				
	Indepd.	-.20 ^f	.21 ^o						-.21 ^o				.34 ^o						
	Extrav.	.21 ^o		-.22 ^f	-.27 ^f			.19 ^o				-.19 ^o		-.22 ^f					
	Anxiety							.21 ^o											
	Cortier.	-.26 ^f	.20 ^o																
	Neurot.												.43 ^c						

Matrix 30. Anxiety—Selected Group S: Father/Daughter Correlations (N=63)

	CHILD'S TRAITS															
	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
A																
B		.22 ^c														
C																
E			.28 ^c													
F			.30 ^c													
G			.28 ^c													
H		.35 ^b	-.23 ^f													
I			.20 ^c	-.22 ^f				-.23 ^f	.36 ^b							
L									.22 ^c						.25 ^c	.34 ^b
M	.30 ^c				-.25 ^f	.21 ^c								-.24 ^f		-.25 ^c
N							-.23 ^f	.22 ^c						-.24 ^f	.27 ^c	.24 ^f
O																
Q ₁								-.22 ^f							.23 ^o	
Q ₂	-.29 ^f	.22 ^c														
Q ₃											-.26 ^f		-.29 ^f			
Q ₄						-.29 ^f				.26 ^c						
Indepd.	.31	.24														
Extrav.		.38 ^b														
Anxiety																
Cort.									-.24 ^f							
Neurot.	-.33 ^b															

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Matrix 32. Anxiety—Selected Group S: Mother/Son Correlations (N=87)

	CHILD'S TRAITS																		
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surge	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Seclusive	Self-sufficiency	Internal Tension	Independence	Extraversion	Anxiety	Cortertia
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄				
	A	.23 ^c																	
	B																		
	C	.18 ^o	.18 ^o		.26 ^o						.27 ^o							-.21 ^o	-.19 ^o
	E				.30 ^b									.26 ^c				.22 ^o	-.17 ^o
	F				.30 ^b	.19 ^o			-.26 ^c			-.24 ^c				.25 ^c		.18 ^o	-.33 ^b
	G			-.26 ^c									-.27 ^f					-.19 ^o	
	H		.18 ^o		.34 ^b	.26 ^c										.19 ^o			-.28 ^b
	I	.18 ^o	-.28 ^b								.37 ^b	.28 ^o				-.17 ^o			.22 ^o
	L						.25 ^c					-.23 ^f							-.23 ^f
	M	.25 ^c						.23 ^o				.29 ^o							
	N	-.18 ^o		-.23 ^f				-.19 ^o				-.23 ^f	.23 ^c		-.18 ^o				
	O			.24 ^c			-.19 ^o										.21 ^o		
	Q ₁						.27 ^c	.19 ^o	.28 ^o										
	Q ₂					-.18 ^o										-.18 ^o			
	Q ₃	.21 ^o										.38 ^c							
	Q ₄	.22 ^o			-.17 ^f														
	Indepd.						.24 ^c							.24 ^c					
	Extrav.	.18 ^o			.23 ^o				-.19 ^o							.20 ^o			-.24 ^f
	Anxiety				-.22 ^f					-.22 ^f									
	Cortex.		.18 ^o	.28 ^a	.21 ^o		.24 ^c	-.19 ^o			-.24 ^c	-.34 ^f			.20 ^o	-.18 ^o			-.37 ^f
	Neurot.		-.20 ^o	-.33 ^b	-.22 ^f										-.19 ^o				.22 ^c

Matrix 35. Anxiety—Selected Group M: Father/Son Correlations (N=64)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surge	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Comprehensiveness	Self-sufficiency	Internal Tension	Independence	Extraversion
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₁	Q ₂	Q ₃	Q ₄
			.23 ^c					-.39 ^a			-.35 ^b					
	B	.26 ^c	.21 ^c										-.22 ^f			
	C				.22 ^c			-.30 ^f								.25 ^c
	E				.27 ^c	.22 ^c		-.27 ^f					.21 ^c			.23 ^c -.23 ^c
	F			-.24 ^f												-.23 ^f
	G							-.23 ^f	-.34 ^b				-.26 ^c	-.28 ^c		
	H	.31 ^c		-.21 ^f	-.27 ^f		.33 ^b				-.38 ^b					-.22 ^f -.22 ^f
	I				-.22 ^f			.24 ^c								
	L		.30 ^c		.23 ^c							-.27 ^f				-.27 ^f
	M		.22 ^c					-.24 ^f				-.77 ^f		-.21 ^c		
	N						.22 ^c				-.22 ^f					
	O					-.22 ^f	-.28 ^f	.22 ^c		.32 ^b			.22 ^c	-.26 ^c	.23 ^c	.37 ^f
	Q ₁	.21 ^c	.29 ^c	.21 ^c				-.31 ^f	-.21 ^f							.31 ^c
	Q ₂		.22 ^c	.26 ^c							.22 ^c	.65 ^c		.34 ^b	.21 ^c	
	Q ₃	.21 ^c												-.30 ^f	-.20 ^c	
	Q ₄												.30 ^c			
	Indepd.		.30 ^b		.26 ^c			-.27 ^f			-.26 ^c				.21 ^c	-.32 ^f
	Extrav.			-.22 ^f		.26 ^c		-.27 ^f	-.26 ^c	-.25 ^c						-.30 ^f
	Anxiety						-.27 ^f	.25 ^c	.25 ^c							
	Cortet.		-.22 ^f	.30 ^c												.27 ^c
	Neurot.							.32 ^c	.29 ^c	.21 ^c						.28 ^c

Matrix 36. Anxiety—Selected Group M: Mother/Son Correlations (N=64)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Seclusive	Self-sufficiency	Internal Tension	Independence
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	Extraversion
	A										.27 ^a	-.20 ^a				
	B	.31 ^a		.23 ^a						-.23 ^a			.71 ^a			
	C								.24 ^a	.25 ^a		-.20 ^a				
	E	.25 ^a	.25 ^a					.20 ^a	.25 ^a			-.32 ^b				.22 ^a
	F	-.22 ^a											-.63 ^a	-.27 ^a		.32 ^b
	G							.23 ^a								
	H		.26 ^a									-.26 ^a				.27 ^a
	I	.21 ^a	.23 ^a	.23 ^a					.25 ^a			-.22 ^a				
	L		-.21 ^a	-.27 ^a					.27 ^a	.22 ^a						
	M				-.22 ^a								-.74 ^a			
	N										-.36 ^b		.31 ^a			
	O	-.21 ^a	-.23 ^a				-.27 ^a		.24 ^a	.24 ^a	.34 ^b		.30 ^a	.27 ^a		.31 ^a
	Q ₁		.24 ^a						-.24 ^a				-.62 ^a			
	Q ₂		.33 ^b	.24 ^a	.25 ^a				-.27 ^a				.63 ^a	.39 ^a	.27 ^a	.29 ^a
	Q ₃							.21 ^a								
	Q ₄							.21 ^a	.21 ^a	.25 ^a						
	Indepd.		.33 ^b									-.26 ^a	-.68 ^a		.21 ^a	-.26 ^a
	Extrav.		.21 ^a									-.25 ^a				-.24 ^a
	Anxiety								.27 ^a	.28 ^a	.22 ^a	.25 ^a			.22 ^a	.29 ^a
	Cortex.			-.28 ^a					.23 ^a							-.25 ^a
	Neurot.							-.21 ^a				.32 ^a			.23 ^a	.26 ^a

Matrix 37. Cortertia--Selected Group F: Mother/Daughter Correlations (N=54)

	CHILD'S TRAITS															
	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
A														-.36 ^c	-.24 ^d	
B																.23 ^c
C		.29 ^c							.27 ^c				.52 ^o			
E		.24 ^o								.31 ^c				-.48 ^b		
F									.24 ^o							.39 ^b
G																
H													.69 ^c			
I		.33 ^f		-.28 ^f												
L		-.24 ^d	-.23 ^d		.26 ^o									-.50 ^d		
M														.60 ^c		
N														.55 ^o		
O		-.34 ^f			.22 ^o									-.70 ^f		
Q ₁														.52 ^o		
Q ₂		.23 ^o												.68 ^c		
Q ₃																
Q ₄		-.29 ^f												-.66 ^c	-.24 ^d	
Indepd.															-.36 ^f	
Extrav.															-.33 ^f	
Anxiety		-.32 ^f												-.72 ^b		
Cortet.														-.53 ^d		
Neurot.		+.27 ^o												+.61 ^c		
																.30 ^f

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Matrix 40. Cortertia—Selected Group F: Mother/Son Correlations (N=71)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surge	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-sufficiency	Internal Tension	Independence
	A	B	C	D	E	F	G	H	I	J	N	O	Q1	Q2	Q3	Q4
A																
B	.26 ^C							.38 ^a								
C		.25 ^C						.21 ^O	.26 ^F							
E	.19 ^O															
F					.23 ^O				.23 ^O			.23 ^F				
G				.26 ^F			.30 ^C	.25 ^C				.22 ^O	.28 ^C			
H		.29 ^C		.28 ^C	.25 ^C		.23 ^O	.23 ^F			.30 ^F				.25 ^C	
I		.25 ^C		.19 ^O							.26 ^O					
L									.26 ^C	.34 ^F						
M	.22 ^O				.28 ^F									.27 ^F		
N				.29 ^F				.30 ^C								
O				.31 ^b				.37 ^b								
Q1											.26 ^O					
Q2		.29 ^C	.21 ^F			.34 ^b						.24 ^C			.19 ^F	
Q3							.25 ^C	.22 ^F			.33 ^b				.32 ^b	
Q4	.21 ^O					.19 ^O										
Indepd.			.27 ^C													
Extrav.						.25 ^C					.30 ^F				.22 ^O	
Anxiety				.22 ^O				.25 ^F	.20 ^O			.22 ^O				
Cortetia							.23 ^C				.25 ^F				.21 ^O	
Neurot.			.20 ^F	.26 ^F			.30 ^F	.24 ^C			.33 ^b				.22 ^F	.25 ^C
															.22 ^F	.31 ^b

Matrix 41. Cortertia--Selected Group S: Mother/Daughter Correlations (N=51)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surgency	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-sufficiency	Internal Tension	Independence
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₁	Q ₂	Q ₃	Q ₄
	A								.36 ^c							
	B	.46 ^a		.27 ^c												.35 ^c
	C															
	E	.41 ^b			.30 ^c	.29 ^c										
	F	.32 ^c				.24 ^c		.26 ^c			.27 ^c		.43 ^b		.33 ^c	
	G															
	H	.33 ^c														
	I	.23 ^c												.26 ^c		
	L				.24 ^c										.26 ^c	
	M						.39 ^b	.29 ^c								.29 ^c
	N		.24 ^c			.26 ^c	.24 ^c		.27 ^c						.25 ^c	
	O															
	Q ₁				.25 ^c			.28 ^c								
	Q ₂	.23 ^c														
	Q ₃				.23 ^c	.33 ^c							.23 ^c	.27 ^c		
	Q ₄											.60 ^c				
Indepd.		.36 ^b			.27 ^c			.37 ^b							.26 ^c	.25 ^c
Extrav.	.36 ^b										.26 ^c	.33 ^c				.27 ^c
Anxiety																
Cortex.																
Neurot.												.29 ^c				

Matrix 42. Cortertia--Selected Group S: Father/Daughter Correlations (N=51)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Dominance	Surge	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-sufficiency	Internal Tension	Independence	Extraversion
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₁	Q ₂	Q ₃	Q ₄
	A										-.30 ^a	-.57 ^c	-.36 ^b			-.24 ^a
	B	.26 ^a			.24 ^a						-.24 ^a					-.29 ^c
	C															
	E		.23 ^a												.25 ^a	
	F															
	G					-.24 ^a	.43 ^b									
	H														-.35 ^c	-.30 ^b
	I															
	L		.36 ^b			-.28 ^a		.32 ^c								-.29 ^c
	M											-.58 ^c				
	N				-.31 ^a		-.39 ^b	.23 ^c	.29 ^c	.24 ^c					-.32 ^c	-.33 ^c
	O															
	Q ₁	.34 ^c														
	Q ₂				.23 ^c					.39 ^c			.23 ^c			
	Q ₃								.24 ^c							-.37 ^b
	Q ₄												.28 ^c			.35 ^c
	Indepd.															
	Extrav.													-.31 ^a		
	Anxiety													.33 ^c		.30 ^c
	Cortet.				.26 ^a					.32 ^c						.29 ^c
	Neurot.						-.28 ^c							.31 ^c		.25 ^c

Matrix 43. Cortertia--Selected Group S: Father/Son Correlations (N=82)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Divercity	Dominance	Surgeny	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Apprehensive	Self-sufficient	Internal Tension	Independence	Extraversion
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
	A	.18 ^o					.22 ^c			.58 ^b						
	B	.25 ^c	.24 ^c									-.26 ^c				
	C	-.26 ^c														
	E							.24 ^c		-.25 ^c			.22 ^o			
	F				.22 ^c											-.21 ^f
	G					-.24 ^f				-.22 ^o					-.21 ^o	
	H															
	I	-.20 ^f					-.20 ^f									.18 ^o
	L					.24 ^c				-.24 ^f				.23 ^c		
	M	-.18 ^f		.22 ^c			-.25 ^c				.20 ^c					.19 ^f
	N	.27 ^c					.19 ^o			-.25 ^c		.22 ^c				.23 ^c
	O							.20 ^c	.22 ^c				-.21 ^f			
	Q ₁		.21 ^c													
	Q ₂	-.30 ^b				.35 ^d			.20 ^c			-.44 ^f				
	Q ₃					-.20 ^f										
	Q ₄															
	Indepd.					.18 ^o				-.27 ^f		.22 ^c	.21 ^o			
	Extrav.				.19 ^f											
	Anxiety															
	Cortex.	-.22 ^f			.20 ^f	.24 ^c		-.18 ^f			-.46 ^c					.20 ^o
	Neurot.							-.18 ^f	.18 ^f							

Matrix 44. Cortertia—Selected Group S: Mother/Son Correlations (N=82)

[illegible]

Matrix 47. Cortertia--Selected Group M: Father/Son Correlations (N=78)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surge	Super Ego	Socially Bold	Sensitivity	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-sufficiency	Internal Tension	Independence
P A R E N T S' T R A I T S	A	B	C	D	E	F	G	H	I	J	N	O	Q ₂	Q ₃	Q ₄	
A						.19 ^c	.22 ^c		-.30 ^b	-.28 ^f						
B														-.25 ^c		
C							.36 ^a					-.20 ^f		-.26 ^c		-.19 ^f
E			.22 ^c	.19 ^c				.24 ^c	-.36 ^a	-.27 ^f		-.34 ^b				-.22 ^f
F	.33 ^b	.21 ^c	.26 ^c	-.26 ^f	.19 ^c				-.21 ^f	-.27 ^f					-.34 ^b	-.30 ^b
G		.26 ^c				.20 ^c									-.35 ^b	
H		.21 ^c			.18 ^c	.24 ^c			-.29 ^b							
I									.20 ^c							-.25 ^c
L		-.20 ^f					-.20 ^f									
M	-.25 ^c	.25 ^c										.22 ^c	-.24 ^f	.20 ^c	.21 ⁰	-.19 ^f
N					-.26 ^f	.25 ^c				-.35 ^b				-.19 ^f		
O			-.19 ^f	.25 ^c			-.35 ^b	-.19 ^f	.21 ^c	.23 ^c	.28 ^c	.35 ^c		.35 ^b		.26 ^c
Q ₁									-.21 ^f							.24 ^f
Q ₂	-.21 ^f	-.36 ^a	.33 ^b		-.20 ^f	.33 ^b	-.27 ^f	.19 ^c	.38 ^a		.40 ^a	.36 ^c	-.27 ^f	.28 ^c	.30 ^b	.35 ^b
Q ₃													.26 ^c			
Q ₄		-.27 ^f					-.21 ^f									.21 ⁰
Indepd.								-.30 ^b	-.27 ^f		-.22 ^f	-.27 ^f	.22 ^c			-.28 ^c
Extrav.	.23 ^c	.23 ^c	.26 ^c	-.26 ^f	.25 ^c	.27 ^c	.20 ^c	-.27 ^f	-.38 ^a		-.30 ^b		-.33 ^b	-.26 ^c	-.31 ^b	-.48 ^b
Anxiety			-.28 ^f			-.36 ^a						.34 ^c	-.27 ^f	.22 ^c	.26 ^c	.25 ^c
Cortet.		.30 ^b														
Neurot.	-.20 ^f	-.31 ^b	.24 ^c			-.39 ^b	-.20 ^f		.31 ^b		.31 ^b	.37 ^c	.30 ^b		.32 ^b	.40 ^b

Matrix 48. Cortertia—Selected Group M: Mother/Son Correlations (N=78)

	CHILD'S TRAITS															
	Warmth	Intelligence	Ego Strength	Overactivity	Dominance	Surrogency	Super Ego	Socially Bold	Guarded	Individualism	Socially Shrewd	Apprehensive	Self-sufficiency	Internal Tension	Extraversion	Anxiety
A																
B																
C	.25 ^c				.21 ^c									.23 ^c		
E	.21 ^o				.19 ^c											
F					.28 ^c	.22 ^c									.25 ^c	.19 ^o
G	.23 ^c													.19 ^o		
H																
I																.20 ^c
L																
M												.22 ^o			.20 ^c	
N								.21 ^c				.34 ^b	.24 ^c			
O	.24 ^c	.23 ^c			.20 ^c							.26 ^c		.19 ^o		
Q ₁	.22 ^c	.22 ^c	.22 ^c				.28 ^c				.27 ^c	.24 ^c	.21 ^c		.26 ^c	.27 ^c
Q ₂			.20 ^o				.26 ^c		.20 ^c							
Q ₃									.22 ^c	.27 ^c			.20 ^c			
Q ₄				.23 ^c	.18 ^c					.23 ^c			.21 ^c			
Indepd.							.22 ^c			.23 ^c						
Extrav.							.22 ^c									
Anxiety	.22 ^c				.21 ^c									.21 ^c		
Cortex.	.19 ^o											.24 ^o				
Neurot.	.28 ^c				.23 ^c										.20 ^c	

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APPENDIX D

Matrices of Statistically significant Parent/Child 16PF Correlations for each of the four parent/child dyads, within each of the three groups F, S, and M, on each of the four second-order dimensions of Extraversion, Independence, Anxiety, and Cortertia.^{1,2}

<u>Extraversion</u>	<u>Matrix</u>	<u>Anxiety</u>	<u>Matrix</u>
Group F: Mother/Daughter	1	Group F: Mother/Daughter	25
Group F: Father/Daughter	2	Group F: Father/Daughter	26
Group F: Father/Son	3	Group F: Father/Son	27
Group F: Mother/Son	4	Group F: Mother/Son	28
Group S: Mother/Daughter	5	Group S: Mother/Daughter	29
Group S: Father/Daughter	6	Group S: Father/Daughter	30
Group S: Father/Son	7	Group S: Father/Son	31
Group S: Mother/Son	8	Group S: Mother/Son	32
Group M: Mother/Daughter	9	Group M: Mother/Daughter	33
Group M: Father/Daughter	10	Group M: Father/Daughter	34
Group M: Father/Son	11	Group M: Father/Son	35
Group M: Mother/Son	12	Group M: Mother/Son	36
<u>Independence</u>		<u>Cortertia</u>	
Group F: Mother/Daughter	13	Group F: Mother/Daughter	37
Group F: Father/Daughter	14	Group F: Father/Daughter	38
Group F: Father/Son	15	Group F: Father/Son	39
Group F: Mother/Son	16	Group F: Mother/Son	40
Group S: Mother/Daughter	17	Group S: Mother/Daughter	41
Group S: Father/Daughter	18	Group S: Father/Daughter	42
Group S: Father/Son	19	Group S: Father/Son	43
Group S: Mother/Son	20	Group S: Mother/Son	44
Group M: Mother/Daughter	21	Group M: Mother/Daughter	45
Group M: Father/Daughter	22	Group M: Father/Daughter	46
Group M: Father/Son	23	Group M: Father/Son	47
Group M: Mother/Son	24	Group M: Mother/Son	48

¹a = p < .001
b = p < .01
c = p < .05
d = p < .10

²M/D = Mother/Daughter
F/D = Father/Daughter
F/S = Father/Son
M/S = Mother/Son

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