Gifted Children and

Their Siblings

Marcella Evan Grenier

Department of Educational Psychology and Counselling

McGill University

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Abstract

This study examined sibling relationships within families where only one of two children had been labeled gifted. Labeling was defined as selection for attendance at a summer school for the gifted and talented. Data were obtained from 27 pairs of gifted and nongifted siblings and their families by means of forced-choice questionnaires which investigated the sibling relationship. Responses were analyzed according to giftedness, siblings' sex, the gifted child's sex, sibling position and the size of the age gap separating the two children.

In the area of competition and comparison, the gifted children, and their unlabeled siblings produced consistently different responses. Competition appeared to be beneficial to the self image of the gifted siblings, encouraging cooperation and communication. For unlabeled children competition had essentially negative effects which inhibited cooperation and damaged the overall tope of sibling interaction.

There was also an interaction of sibling position and giftedness. More friction was perceived by both gifted and nongifted siblings in situations where the labeled member was the older of the two.

Parental questionnaires were designed to assess how well informed parents were of their children's perceptions. A comparison of parent and child responses indicated that parents were generally well aware of how each child felt. The degree of unawareness was the same for both groups of children and mothers were only slightly more aware than fathers.

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RESUME

Cet ouvrage étudie le rapport qui sévit à l'intérieur d'une fratrie où un enfant sur deux a été désigné comme enfant doué. La désignation "enfant doué" provient du fait que l'enfant ait été admis à un cours spécialisé pour enfants doués et talentueux durant la période de vacances scolaires usuelles d'été. Les données ont été tirées d'un questionnaire à choix limité auquel 27 couples d'enfants doués et non doués et leurs parents ont répondu. Ce questionnaire traîtait spécifiquément du rapport entre les membres d'une fratrie. Les réponses ont été analysées selon le degré de talent, le sexe de la fratrie, le sexe de l'enfant doué, son rang dans la famille et la différence d'âge entre les membres de la fratrie.

En ce qui concerne la compétitivité et l'autocomparaison, l'enfant doué et le non doué extériorisaient constamment des réactions divergentes. La compétitivité, notamment, semblait contribuer positivement à l'image propre de l'enfant doué tout en stimulant le dialogue et la collaboration. Or, pour l'enfant non doué, la compétitivité avait plutôt un effet négatif inhibant la collaboration tout en réduisant l'action réciproque entre les deux enfants. En outre, le rang de l'enfant doué dans la famille affectait également l'action réciproque entre les deux

affectait également l'action réciproque entre les deux enfants. Beaucoup plus de désaccord et de tension étaient éprouvés par les deux enfants lorsque l'enfant doué était l'aîné.

Par ailleurs, le questionnaire adressé aux parents avait pour but de mésurer jusqu'à quel point ceux-ci étaient sensibilisés aux perceptions des enfants.

En faisant une comparaison des réponses données par les parents et l'enfant, nous nous sommes rendus compte que généralement les parents comprenaient passablement bien les sentiments de l'enfant. L'ignorance démontrée par les parents envers les sentiments de l'enfant doué ou non doué était semblable dans les deux cas sauf que la mère était habituellement plus sensibilisée que le père.

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Review of the Literature

Chapter 1

This study examines sibling relationships in a family when of the children is labeled gifted. It is the effect of one labeling rather than the gifted child's specific abilities which of interest. Therefore, for the purposes of this, study, are giftedness is defined by the selection of a child for attendance at a summer school for gifted and talented students. Several, variables such as closeness in age, sameness of sex, and sibling position have been shown to influence how siblings interact (Bank & Kahn, 1982; Sutton-Smith & Rosenberg, 1970), however, little is known about how giftedness, interacts with these variables and influences the relationship. The impact of giftedness on family interaction has typically been studied in the context of parent-child relationships. Very few studies have examined sibling interaction, specifically when one child has been labeled "gifted" while others have not. The relationship between a gifted child and 'a parent who, perceives such giftedness is both quantitatively different from qualitatively and other 'parent-child relationships (Cornell, 1981; Fisher, 1978). Since every relationship and each individual affects the entire family system, any differences in parent interaction with the children will in turn, affect the sibling relationship (Kantor & Lehr, 1975). It is important to investigate the individual perceptions of each family member when exploring such family interactions

since these are at the core of any subsequent actions and may vary radically (Blumer, 1969).

In order to distinguish which effects are attributable to the presence of "giftedness" within the family unit, it is first necessary to discover which characteristics are a normal by-product of any sibling relationship. The following review of the literature examines studies on siblings, families of gifted children and, fingelly, findings on the intersibling relationship when one of the members is labeled "gifted."

Siblings

Sibling influence. Two factors affect how close siblings will be and how much influence they will exert over one another. First, children have been shown to attach themselves very early to those people who are responsible for their care and nurfure (Ainsworth, 1979; Bowlby, 1969). However, in the absence of adequate emotional or physical support from parents, the child may attach to an available sibling. Such relationships may be quasiparental, creating a situation where one child possesses more power and plays an authoritative role. Other situations may arise, as in the case of family break-up, where siblings become interdependent and cling to each other for support and comfort. The more available parents are, emotionally and physically, the less intense will be the 'attachment between the siblings (Bank & Kahn, 1982).

The other major factor governing sibling closeness is how much time the children spend in each other's company during their developing years. Proximity in age will encourage what the

"high access" between siblings, literature refers to as and similarity of sex will usually mean similar interests and activities. Such high access siblings have enormous power to influence one another and act as each other's reference point. siblings identify easily with one another and tend to Such perceive more sameness than difference between one another (Bank, Kahn, 1982; Sutton-Smith & Rosenberg, 1970; White, 1975). Along a continuum of access from almost total (identical twins reared together) to __minimal (large age gap, opposite sex, great parental support) siblings will develop attachments and bonds to one another with varying degrees of influence. Such bonds are very influential in the forming of personality last and throughout life.

The degree to which one sibling may influence another is also affected by birth-order position. Younger children are more imitative and more influenced by older siblings who act as role models (Abramovitch, 1979; Santrock, Readdick & Pollard, 1980). Females appear to be more affected by males (Sutton-Smith & Rosenberg, 1970), possibly a culturally induced phenomenon which results from sex stereotyping and historical prizing of males.

<u>Comparison</u>. Comparison will occur naturally between siblings from a very early age. As the young child seeks to establish an identity, he or she will look to close family members for confirmation. A sibling, especially one close in age will become a reference for comparison. These social comparisons are an important means whereby personal performance and behavior can be compared with another's in a very similar context and

position (Bank & Kahn, 1982; Santrock et al., 1980; Sutton-Smith & Rosenberg, 1970). Siblings will especially look for traits in the other which parents might find especially attractive as they compete for parental love and attention. Parents in turn will compare the performance of each sibling in a variety of areas as will people outside the immediate family. circle. These comparisons are natural, inevitable and may be covert or overt, They are the process by which an conscious or unconscious. individual attempts to find a place in the world and difficulties only arise when a sibling is constantly placed in a position of inferiority as a result of such comparisons (Bank & Kahn, 1982; Tesser, 1980).

Competition. Competition naturally evolves as a child is forced to share parental love and attention (Puner, 1952; White, 1975). Closeness .increases opportunities for competition since, high access siblings are drawn into similar fields of endeavor and experience constant comparisons by themsives, their families and outsiders. Three areas have been suggested in which siblings have the most power to hurt one another: achievement and success, physical attractiveness, relations. Endless and social comparisons occur in these areas which are in a state of dynamic Rarely does one sibling outstrip the others in all balance. areas but when this occurs it results in negative self concept, inferiority feelings and underachievement (Ross * Milgram, 1982). A little competition might prove useful as a spur and incentive to improve, but too much accompanied by too little chance of success will paralyze.

Aggression. Competition often leads aggression. ťο Moderate amounts of aggressive contact can often be reassuring, necessary and positive when they are not interfered with by parents (Bank & Kahn, 1982; Puner, 1952; White 1975). The central causes of aggression are desire for parental attention or the establishment and strengthening of the child's position or role within the family (Dreikurs, 1973; Levi, Buskila 🎖 Gerzi, 1977). Overt aggression is more common among males than females and particularly prevalent' where there are two male siblings (Santrock et al., 1980; Sutton-Smith & Rosenberg, 1970). Since older children tend to be larger in size, they have been found to exert more raw, physical power over younger siblings who, in turn, are more manipulative and covert in their struggles (Bank & Kahn, 1982; Sutton-Smith & Rosenberg, 1970). In adolescence the need for superiority over a sibling peaks and is often expressed in sadistic verbal attacks (Bank & Kahn. 1982).

Personality characteristics attributed to sex and birth Several studies have found that males generally appear to order. be more appressive than females (Bank & Kahn, 1982; Santrock et al., 1980; Sutton-Smith & Rosenberg, 1970), while females tend toward nurturant, explicatory behavior restricting aggressive feelings to more covert modes of expression such as tattling, bribery and coercion. Sutton-Smith & Rosenberg (1970) conducted an intensive study into characteristics of sibling dyads according to sex and birth-order position. They found that in families where there were two male siblings, the youngest was in Similarity 'of sex' struggle of all. the most unequal power

encouraged competition but lack of comparative size, weight and age, placed the younger, sibling at a distinct disadvantage. Behavior resulting from such a situation was very aggressive, anxious and depressed. The older male in this dyad was also rated as very quarrelsome, high on anxisty, very conforming and An explanation could be that the aggression competitive instigated by 'the younger male caused a reciprocal effect from the older.

female dyads the younger was less independent, In competitive and domineering than the older sister. She felt closer to her mother and generally achieved less well. The older sister by contrast saw herself as having a good relationship with the younger sibling, assumed very often a caretaker or nurturant role, appeared particularly competent and was the most independent of all girl groups. She felt closer to the father than to the mother.

In opposite sex dyads where the female was the older she scored highest among all groups for ambition and tenacity and had high scores on competitiveness and aggression. This female often related accounts of parental favoritism for her younger brother and expressed her concern in frequent overt aggression. The younger brother in these dyads is the most powerful of all the second sibling groups in that he is the most able in physically overcoming an older sibling. However, these younger brothers appear to be withdrawn and depressive males who confirm that they are favored by the father. They quarrel a great deal and report fewer associations with their older sisters.

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In families where the male is the older with a younger sister, he is characterized as aggressive, self confident, curious and planful. This group is the least threatened by a younger sibling. The younger sister in turn is characterized as very athletic, revengeful, selfish and competitive. She is the least feminine and least anxious of all the groups and her personally characteristics are seen by Sutton-Smith & Rosenberg as an "unmitigated record of the older male sibling's influence on the younget girl" (p. 151).

From their 'results Sutton-Smith & Rosenberg concluded that siblings tended to reinforce their own sex characteristics in their siblings. This reinforcement occurs within the framework of the elder exerting more influence over the younger and bøys influencing girls more than the reverse. Such conclusions have been criticized in several studies (Grotevant, 1978; Schacter, Shore, Feldman-Rotman, Marquis, & Campbell 1976; Tesser, 1980), in favor of a theory of sibling deidentification. "Clearly the •personality profiles should be further elaborated on the basis of familial and cultural background; expectations, socioeconomic" status, parental education and, above all, family dynamics; Little attention has been paid to . How and what particular family interactions had a an effect on which specific personality characteristics. It cannot be inferred that because a group of children exhibit aggressive behavior, all causes for such behavior are of the same nature. It is mot possible to attribute generalized causes or predictions to each, sibling group since behaviors are not necessarily indicative of causes and nor are "

causes predictive of what behaviors they might generate. There has also been no mention of different levels of achievement, success or intellectual ability, how this might affect the different siblings' relationships, or even perhaps result from

it.

Birth order and achievement. In studies of emihence, first borns and oldest children predominate (Bank & kahn, 1982; Marjoribanks, 1978). Various theories have sought to explain. this. One reason could simply be that the class of first borns and only children combined is larger than any class of second or later borns. Other researchers suggest that intelligence of the developing child is enhanced the higher the average mental age of the family members (Berbaum & Moreland, 1980; Falbo, 1980; Zajonc, Markus & Markus, 1979). The oldest child spends an amount of time in the presence of adults whose mental age is higher, presumably, than it would be if it were combined with that of another young sibling. Historically, as well, many advantages of inheritance and family status have accrued to firstborns or firstborn males and cultural remnants of these traditions may remain:

Parents have been shown to give more and undivided attention to the only child; a category into which the oldest child falls until the birth of the second. Parents tend to expect more of the first born (Bank & Kahn, 1982) and these higher parental expectations have been found to have significant correlations with several cognitive measures (Marjoribanks, 1978). It has further been found that ability and achievement scores decrease

as spacing between male siblings decreases, although this trend is reversed in the case of female dyads, where close age spacing. might even prove beneficial.(Cicirelli, 1978). These findings are not incongruent with those of Sutton-Smith & Rosenberg in their personality profiles of sibling sets. In male dyads, where aggression and competition are more overtly expressed, close age spacing would enhance these characteristics, possibly to the detriment of academic or cognitive gains. In the female dyad, where natural competition and aggression appear to be tempered by the stereotypically female qualities of nurturance and caretaking, close age spacing might facilitate mutual help and cooperation.

Parents, particularly mothers, have also been found to be more anxious, demanding and possessive of firstborns (Bank & Kahn, 1982) perhaps explaining why firstborns generally tend toward higher anxiety and conformance. scores than later siblings. (Sutton-Smith & Rosenberg, 1970). It has been suggested that the birth of the second sibling forces the oldest child to grow up more quickly since it propels that child into situations where independence will be reinforced and praised. At this point the first born experiences a decline of affection since the mother is now preoccupied with the younger more dependent child. The oldest can no longer compete in the same arena as the younger sibling and therefore seeks to regain lost parental attention by achieving intellectual success and independence (Helson, 1968).

In contrast, later borns are treated more spontaneously and unconditionally by their mothers and this results in less anxious

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and conforming personalities. Furthermore, the younger sibling tends to be reinforced for dependent behavior. Cultural and traditional expectations for the younger sibling tend to be less demanding than those for the first born and these later children in turn are expected to appreciate the efforts of the oldest (Bank & Kahn, 1982). However, if the younger child feels consistently inferior to an older sibling, there may be a tendency to give up rather than look like a failure by comparison (Snyder, 1980).

Cooperation between siblings. The encouragement, of cooperation ,between siblings is 'often gugted as a means of offsetting sibling rivalry and competition (Puner, 1952). Studies have not yet 'investigated whether competition and cooperation can coexist within the 'same arenas' or whether they have an interactive effect. It might be that they are context-specific, allowing competition in certain areas and cooperation, in situations where competition, is minimal... It has been suggested that the presence of a younger sibling whom one can teach promotes a sense of competence and can boost intellectual devèlopment (Bank & Kahn, 1982; Zajonc et al. 1979). "Older sisters have been found to be better teachers for younger siblings than older males (Cicirelli, 1978) and younger siblings are more likely to accept help from an older sibling if the age interval between them, is large (Cicirelli, 1977). Since a large age interval between siblings reduces closeness, comparison and competition are also reduced. The younger sibling feels less of a threat to self 'esteem and is able to accept held from the older, presumably more able sibling. It might be expected, then, that cooperation would increase as closeness decreases. Also where there was an older female in the sibling dyad, more cooperation might be expected.

<u>Communication</u> between siblings. The depth and degree of communication between siblings will depend on how close they are to one another and how much they perceive themselves as being the same. In the case of close or fused identification (identical twins raised together) an intense and deep communication would be expected. In the case of siblings who feel little in common with each other, little or superficial communication might result.

Bank & Kahn (1982) outline three levels of personality at. which communication - might function: an "identity core, the most basic and deepest level of personality; a subidentity level comprising those aspects of the self which, though not at the core of identity, are important to self definition; and a 'persona" or publicly presented image of the self. Depending on the degree of access, siblings may communicate at all or any subset of these levels. High access might promote chances and depth of communication but it also encourages competition and sibling rivalry which would inhibit communication. Low access situations do not generally elicit intense rivalry and competition, and might allow for greater communication despite the fact that siblings do not identify to the same degree. The area of sibling communication is yet to be investigated in any depth.

Sibling identities. Within the three broad `content areas

outlined by Ross '& Milgram (1982), achievement and success, sexual attractiveness, and social relations, most families are structured so that only one person can occupy a certalin psychological space at any one time (Bank & Kahn, 1982). This space refers to the identity or persona that the family member assumes, and represents within the family unit. If one child becomes the "brain" the other siblings' will elect or be directed into another identity role. Such individual personae serve a familial purpose of portraying a united family identity (Kantor & Lehr, 1975) but for the family member can be confining, Families ,generally, and parental challenging or frightening. attitudes specifically, play a major role in determining the direction each child will take. Clashes between siblings with. too much competition and aggression may occur as a result of both being chosen, for the same role "within the family. Since all achievements will then be directed at the same area of endeavor, constant comparison and competition are inevitable (Bank & Kahn, 1982).

Roles may be largely determined by cultural and traditional values of the family which require the sexes to differentiate in prescribed ways. This often results in males being channeled into academic pursuits while females are encouraged in social or attractiveness domains. Such differentiated channeling allows each child an area of success free from competition with the sibling, which in turn reduces competition, aggression and rivalry since it often results in physical separation for periods of time, different interests and aspirations. Partial separation

or deidentification of identities occurs within most families and is reinforced by both parents and children. Differences between children which might be purely speculative and arbitrary when initially expressed become absorbed into the familial pattern. Siblings become more differentiated from one another as the differences between them are noted and expressed (Bank & Kahn, 1982).

Difficulties arise when identities are rigidly imposed and run counter to the individual needs of the child. When a child becomes fixed into a negative identity and placed in an inferior position to a sibling, the identity can dictate parent-child and sibling-sibling interaction and result in psychological damage (Bank & Kahn, 1982; Kantor & Lehr, 1975). In this type of situation there is a danger that the less favored child will differentiate from the advantaged sibling so as to perceive no commonalities between them at all. This may result in an automatic rejection of any attribute, characteristic or talent exhibited by the more able child and severely decrease the options available to the disadvantaged sibling 'Bank & Kahn, 1982; Tesser, 1980).

<u>Deidentification</u> <u>between</u> <u>siblings</u>. Deidentification is defined as the judgment that a sibling is different from oneself (Schachter et al., 1976; Tesser, 1980), suggesting that deidentification, like closeness, can exist along a continuum. Partial deidentification is appropriate and even beneficial in reducing sibling rivalry and competition. However, total deidentification is the most extreme emotional divorce of one

sibling from another and usually occurs when there are strong splits in the family embraced identities of each sibling (Bank & Kahn, 1982). In families where one sibling is overvalued and perceived as having all the emotional riches of the family, the remaining sibling may totally deidentify. By feeling different and completely rejecting the other sibling, one avoids the intense rivalry and competition which would, by negative comparison, destroy self esteem. Deidentification theory suggests that high access siblings have a greater potential for rivalry and hence may feel the need to deidentify more in order to reduce the intense feelings of competition (Schachter et al., 1976; Tesser, 1980).

Two variables have been found which, interact în the deidentification process: closeness of siblings and relevance ofthe task being performed. In cases where the other's performance is better and siblings are close, the less able sibling may systematically reduce the relevance of the task in order to protect self esteem from unfavorable comparison. By contrast, the more able sibling may show more tenacity to the task and its importance and relevance is raised along with self esteem as a result (Tesser, /1980). Deidentification can work on either or. both variables of closeness or relevance but if it is not appropriate to reduce relevance, as in the case of compulsory school work, closeness can then be decreased by the introduction of friction. It has been found that there is more friction-when siblings are close than distant. Further, when one sibling feels at a disadvantage and outperformed by the other, that person is

likely to instigate aggression and introduce friction. The more successful sibling tends to identify more strongly with the less able since self esteem is raised by such favorable comparison (Tesser, 1980).

Not only do siblings deidentify by themselves but they are encouraged to do so by family manipulation. Mothers were asked to judge the amount of deidentification in pairs of their ÓWN children aged 1 month to 18 years. Judgments showed a linear increment from near chance in the first years of life to near universal levels by age six when values stabilized. Later, on entry to college, the same children were asked to judge their own deidentification from their siblings. It was found that the mothers' early deidentification judgments closely resembled those of the children themselves at the later age, suggesting that mother's judgment may incorporate father's and that deidentification may be to a large extent imposed on the children the parents in order to obviate rivalry and competition by (Schachter, Gilutz, Shore & Adler, 1978).

While deidentification theory provides a framework to explain some observable behaviors, it is upheld almost exclusively by males, and studies of females neither confirm nor disprove the theory. This could be accounted for by the fact that males are more overtly aggressive and that pressures on them to succeed and achieve have tended to be greater. Females have not historically received the same encouragement or pressure to compete and succeed. Female roles have stressed the less aggressive communicatory methods of solving problems and perhaps

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the threat to self esteem by unfavorable comparison is not great enough to combat the nurturant care-giving role they are encouraged to play. Further research on deidentification should be conducted which might examine the effects of sex of sibling on deidentification. Similarly other, variables such as size of sibling constellation, education and values of family might be investigated to show how these interact with the deidentification process.

Families

Studies have generally tended to The family as a system. focus on a subsystem of the family unit, confining data to in marer cases, to intersibling parent-child interaction, or, relationships. Such a focus on a family subsystem may take behavior out-of context since family members work within the total system and their actions are interrelated. Those of one individual will have an effect on every other member in the system. Similarly the values and rules of the family unit will affect each individual (Kantor & Lehr, 1975). It is, therefore, important to look at any individual action as part of the entire system of family interaction since it is this system of social interaction which is at the basis of each subsequent behavior (Blumer, 1969). The family will adopt strategies which regulate the behavior of individuals and these strategies are assumed to be purposive and well intended, withough not always successful. Tension and stress are inevitable and the relationship between family members is one of change, adaptation and growth (Kantor & Lehr, 1975).

The study of sibling relationships must be viewed in the Parents general context of family relations. exert much influence on how siblings interact and on the types of roles and identity each sibling assumes (Bank & Kahn, 1982; Bridges, 1979; Kantor & Lehr, 1975; Sutton-Smith & Rosenberg, 1970). Parents shape a child's behavior by their reactions to it and siblings shape parental behavior causing them to react in different ways to' each child (Sutton-Smith & Rosenberg, 1970)., Family demographics such as cultural orientation, ethnic background, socioeconomic status, parental education are a few of the countless variables which dictate how parental expectations may influence sibling interaction.

Several studies have suggested that the mother's influence has a more direct effect on the children but that the presence of the father and the quality of his relationship with her determine how the mother deals with the children (Clarke-Stewart, 1978; In well functioning families, children Lytton, 1979). are different characteristics but no child clearly favored for prevails (Bank & Kahn, 1982). No member or subsystem is repeatedly sacrificed to the needs of the family unit as a whole or any other subsystem or member. Each individual is recognized as different but equal and there is a flexibility to the roles which each family member plays in family interaction. No one person is consistently the instigator of an action, or the follower. Instead, depending on the situation, each person has the opportunity to act as leader, follower or bystander (Kantor k Lehr, 1975). As the family strives to create a unit identity

each member of the system may still grow and develop as an

Disablement in the family system occurs when there is a constant competition between subsystems and an inflexibility of player parts. If one person is allowed to gain power, over all the others an imbalance occurs which might cause repeated sacrifice of another's individual needs. Similarly when an individual identity evolves which is in total opposition to a familial one, that individual member might no longer be able to exist within the family unit:

Knowledge of how the family Perceptions in families. perceives each child is essential to understanding how the family members relate to that individual. Humans act, toward things on the basis of the meanings which those things have for them and this meaning derives from social interaction that one has with one's fellows (Blumer, 1969). Since meaning is subjective it may vary radically from any objective interpretation. In order to understand how and why a person acts in a specific ; way, it must first be established what the individual's perception and interpretation of the situation are. It matters less what has really occurred since it is the subjective interpretation of events which is at the core of any subsequent reaction. Perceptions of familial relationships may vary dramatically among members and parents may often be unaware of tension or lack of communication between siblings or between their children and themselves (Bridges, 1979; Serot & Teevan, 1961). Even if parents-feel they are totally fair in their treatment of

siblings, each child might perceive the parent as favoring one or the other (Bank & Kahn, 1982). When parents interfere in sibling conflict one child is bound to feel the loser who may look for an opportunity for revenge (Levi et al., 1977).

The effects of giftedness on families. This study is concerned with how a child who is labeled "gifted" influences other 'family members, specifically a nongifted sibling. The exact abilities of the labeled child are not so much important as the selective labeling process which has been shown to have a profound effect on childrearing. It appears to act as a signal to parents, to reassess their expectations vis-à-vis the target child and seems to serve as a justification for extra demands made on the labeled child. Increased parental expectations and a raised tolerance of unusual or inappropriate behavior may often result (Fisher, 1978). Four ways have been suggested in which the presence of a designated gifted child may influence the family unit: competition between family members, sibling rivalry, insensitivity to ``individual differences and worth, and vlack of respect for individual opinions and differences (Hackney, 1981).

The recognition of giftedness may not always be a positive experience for the family. A survey of the literature suggests that very often gifted children demand more of family members than other children (Parker, 1975; Povey, 1980; Rowlands, 1974). They may need less sleep, ask more questions, show precocious development, verbal acuity and curiosity. These traits may drain parents of both energy and emotion, leaving them with little resources left over to deal with less demanding siblings.

Giftedness can also become an organizing force within the family, structuring the entire family's lifestyle so that individual needs may be sacrificed to those of the gifted family member (Cornell, 1981; Hackney, 1981). Even when the label is positive and good, it can have an intrusive effect with negative impact. (Fisher, 1978).

Parents often obligation, express feelings of heavy. responsibility, emotional and economic drain (Fisher, 1978: Hackney, 1981; Rowlands, 1974; Strang, 1960), A gifted child may challenge the conventional patterns of family life, threatening self concept and generating feelings of inadequacy, parental inferiority and pressure (Fisher, 1979; Rowlands, 1974; Strang, 1960). Although the gifted child is, still above all a child with the same emotional and social needs as other children, rearing practices may be itensified with an overemphasis on intellectual development (Cornell, 1981; Fisher, 1978; Parker, 1975). 'In families where there is little cultural or educational tradition there may be much disruption as the gifted child's personal needs conflict with those of the family unit (Rowlands, 1974). Traditional family roles may be altered when gifted children are idealized or attributed with more adult maturity and wisdom than is warranted (Fine, 1980; Hackney, 1981; Rowlands, 1974). Such a merging of generation boundaries and lack of differentiation between parent and child roles is dangerous to the maintenance of and democracy within the family unit (Cornell, balance 1981; Fine, 1980).

'Fisher (1978) studied families of gifted children and found

that when children are labeled gifted by a school and placed in a differential program of instruction. The family may disagree with the identification. When parents do not agree with the labeling of ogiftedness they feel. a burden and reponsibility to live up to such an identification. Conversely, parents may consider children gifted who have not been recognized by the school, and `in effect they label the child themselves. These parents and those who agree with an external label that their child is gifted do not feel burdened but rather challenged and The responses of parents who labeled children stimulated: themselves did not differ significantly from those of parents whose children had been labeled by the school and who agreed with such an external designation. The effects of the labeling process appeared to be constant regardless of who did the labeling and the important variable was the recognition and acceptance by the parents of the identification.

· Within the family unit, parents might also disagree, with each other about whether the child is gifted or not. Cornell (1981) studied 22 families where there was identified giftedness. In only 10 families did both parents agree on the question of whether the identification was correct. 'Family agreement and recognition cannot, be assumed and where there is disagreement it may cause familial disharmony and conflict. Alliances may be made between .the gifted child and the parent who perceives the giftedness, and these alliances or subsystems may operate to They might also serve as exclude other family members. preferred union to avoid family conflict (Cornell, 1981). In the

case where both parents perceive one child as gifted and where there are other siblings, the subsystem created might effectively exclude only the unlabeled siblings.

with gifted children. Some characteristics of families Giftedness covers a wide range of abilities and appears in very circumstances and diverse familial backgrounds. It. is. therefore, difficult to make generalizations although a few commonalities appear. A historical survey of personalities who had achieved eminence revealed that they tend to come from families where a great deal of effort was spent seeing that familial aspirations for the child were met. The target child was the focus of intense interest and attention, although such families valso show less harmony than traditional units, with many instances of early parent death, divorce and nontraditional parental unions. Several eminent men appear to have had strong ambivalent ties to their mothers and cold, distant, aloof relationships with highly demanding fathers. It is suggested family situations necessitated that the gifted that these children use their giftedness creatively to adapt and modify living strategies in order to cope and survive. In contrast, competent, high, achievers appeared to come from generally more conventional home environments which were more harmonious, serious, structured and better organized (Albert, 1978).

Cornell (1981) observed families of gifted children during a structured family task, designed to assess interaction and cooperation. He found that they were more eager to articulate views and displayed a more ordered and organized approach to

family interaction than control families with no gifted children. They tended to take turns in speaking and parents used every opportunity to teach and instruct their children. During subsequent interviews, families with gifted children also expressed an emphasis on close family relationships and common activities. They preferred doing things together as a family and activities chosen were culturally or educationally oriented (Cornell, 1981; Fisher, 1978). Fisher (1978) found that in families where giftedness was recognized, parents gave the impression of feeling more pressured, and duty-bound to provide meaningful pastimes for the children. They spent most of their leisure time with the children and enjoyed doing so, there was a sense of pressure always to be doing something, and time was a precious commodity to be used with care. Parents were generally with the child's education, more involved emphasized and encouraged learning and had ambitious goals. They assumed a shared responsibility with the school for the education of their children, especially in the area of motivation.

In a study of creatively gifted female college students and their families, parents were found to be persons of intellectual and moral seriousness who had stronger theoretical values and weaker political values. Emphasis was on moral integrity and achievement was taken for granted. There was a general appreciation for intellectual curiosity above everything else, together with a conspicuous lack of sex stereotyping (Helson, 1968).

Sex differences in parental response to giftedness. Several

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striking differences are apparent in the ways mothers and fathers react to and finteract with the gifted child. Mothers of gifted children are achieving women who tend to have small rather than large families. Fewer are identified as full time housewives and they are better educated than women in general (Groth, 1975). These mothers tend to take a far higher share of responsibility for their gifted child's education than other mothers and gut pressure on these children to achieve (Povey, 1980). Cornell (1981) found that in eleven of the twelve families where there was disagreement between parents about identification, it was the mother who perceived the giftedness. Interviews with parents indicated that even when the father agreed with the label, the mother had usually originated the idea and had convinced the father. These mothers appeared highly involved in the gifted child's education and achievement, expressing feelings of more closeness with that child. They also perceived their families as being more cohesive, however no support for this higher estimate of family cohesion was found in the empirical observations of the family (Cornell, 1981).

In the same study, fathers who perceived giftedness took a more active role in child caring and rearing and were more openly affectionate. They also consistently perceived the gifted firstborn as being more like themselves. Fisher (1978) also found that fathers of acknowledged gifted childrem were more available to them, physically and psychologically than other fathers. However, this study made no other references to differences in, response, according to sex of parent. There appears to be a general tendency for fathers of gifted children to assume a less important role in the planning of the child's education. Fathers often referred to the subject of "giftedness" as the mother's "crusade" or "cause," dispociating themselves from it entirely (Cornell, 1981). Sex differences appeared in how "giftedness" is defined. Mothers tended to opt for a learning ability definition while fathers preferred to espouse a definition of extreme talent or genius. These broad categories of definition according to sex also occurred in families where there was no perceived giftedness. This appears then to be a generalized sex difference in perception rather than a direct result of having a gifted child within the family unit (Cornell, 1981).

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Attitudes regarding the issues of giftedness differed depending on whether parents recognized their child as gifted or 'Parents who perceived giftedness (perceivers) expressed not. either positive or negative attitudes about it. Although the majority considered it a blessing or a gift, others were worried about social issues such as snobbism, elitism or discrimination. These parents were aware of the differences between gifted children and their peers but were willing to risk being different in order to achieve the fulfilment of intellectual or academic potential. Nonperceiving parents expressed either neutral or negative opinions about giftedness. Such negative attitudes related to presumed maladjustment, freakishness or poor mental health that accompanied giftedness. They did not want a child was different and focused efforts in the direction of who
minimizing differences and integrating their child into accepted society (Cornell, 1981; Fisher, 1978).

Power hierarchies in families. In most families there is a power 'hierarchy or "pecking order." The strength of such a hierarchy depends on the tone of family interaction and exists along a continuum from total democracy, where power is equal and flexible, to rigid authoritarianism (Kantor & Lehr, 1975). However, even in homes where there is great democracy, parents, by virtue of their size and experience, will usually assume more power than their children. The children, therefore, grow up in a dominance hierarchy with a prescribed order of importance and there is minimum of conflict as 'long as each member stays within his or her respective powers, (Sutton-Smith & Rosenberg, 1970). However, when a younger sibling aftempts to destroy the system of balance by getting a parental third party involved, the system is temporarily upset. It is, therefore, to the advantage of the oldest subling to enact a power hierarchy since he or she thereby achieves slightly more power than the younger sibling. Similarly the younger sibling gains when the system is upset by parental intervention. Generally, sublings experience a relationship of relative equality vis-a-vis the stronger parental power, with the oldest sibling slightly more dominant than the younger (Bank & Kahn, 1982; Cornell, 1981; Sutton-Smith & Rosenberg, 1970). In families where both siblings are perceived as being of equal ability, whether both gifted, or nongifted, this type of power hierarchy exists and parents assume a more dominant position than either sibling. However, the level of achievement expectation

and types of family interaction may vary (Cornell, 1981; Fisher, 1978). Problems arise when siblings are perceived as being of unequal ability. The power structure in these families is. radically altered since the siblings are now unequally matched. In Cornell's study (1981), families were required to perform task designed to assess family interaction cooperative patterns. An estimate of each individual's relative power within the family unit was made by measuring the language initiated (language initiated measure), and recording by whom and to whom was ¹ directed recognition measuré). 1t (language Such observations were taken to indicate the "relative importance and power of each family member. On the language initiated measure, the gifted child ranked as high as the father and almost as high as the mother, leaving the unlabeled sibling much lower, at the bottom of the group values. Such a finding'suggests that the difted child is assuming almost a third parent role within this context of family interaction. On the recognition measure, the gifted child was the target of most initiated speech, assuming the most important, power position within the family. Father was the least powerful suggesting a total role reversal had occurred between the gifted child and this family member. Again the unlabeled sibling received a much lower score; only the father was lower (Cornell, 1981). If this study can be taken as an indication of relative power within the 'family unit, it can be seen that the relationship between gifted and unlabeled child is no longer one of relative equality... In fact the roles of parent and gifted child appear to have merged and become confused.

Such a fleagure of power need not, however; be indicative of generalized power hierarchy of the family. Situational the family tasks need not represent general family interaction and such power Yconfigurations may be restricted to specific situations which parents feel are learning contexts in front of observer. No mention was made of how perceiving fathers an differed from nonperceiving ones in their interaction with the gifted child and with the unlabeled sibling and instances of father's perceiving while mother did not were top rare to establish whether this might make a difference in the results. Finally, measuring speech initiated and received may not be the best way to measure the relative power of each family member and would depend on general measures of verbal ability of individual family members. However, these results do suggest that parents treat labeled and unlabeled siblings very differently.

Gifted Children and their Siblings

Social and emotional adjustment of gifted children. For the, purposes of this study the actual abilities and characteristics of each child are less important than the process of recognition' and labeling. Therefore, a comprehensive survey of the literature on giftedness and its definitions will not be undertaken. Several good, sources may be consulted, for example Clark, 1983; Freeman, 1979; Gallagher, 1979; Passow, 1979. However, several general comments regarding the gifted child's social and emotional adjustment will be addressed.

Difficulties in social and emotional adjustment seem related to the degree of disparity between the intellectual ability of

the quifted child and that of his or her peers (Chen, 1980). Generalizations are hard to make since the gifted population is so diverse intellectually, creatively, culturally and pyschologically. However, these individuals are in the first place children whose social development progresses in much the same set of stages as children of different ability. Stages may appear earlier than would be expected and be passed through more quickly or conversely the intellectually gifted child may lag behind his or her chronological beers in social and emotional areas of development (Chen, 1980). Discrepancies between social, emotional and intellectual development may not be obvious and may be hidden under a veneer of superior verbal and reasoning ability, lulling parents into the false belief that the gifted child is more mature and able than is really the case (Hackney, 1981). Superior articulation may enable the gifted child to propel all conversations within the family to the exclusion of , less able family members, manipulate parents, criticize and ridicule less able siblings, and generally provoke rejection by peers and siblings. Such rejection may cause gifted children to miss many social experiences, inhibiting or delaying their social and emotional development (Fine, 1980; Fisher, 1978; Hackney, 1981; Rowlands, 1974). Parents may inadvertently exacerbate the situation by emphasizing the intellectual pursuits of gifted children, denying ~ the importance of social interaction and excusing inappropriate behavior on the grounds of superior intellectual ability (Congdon, 1979).

Idealization by parents, unrealistic expectations and

distorted self perceptions may cause the gifted child to set unrealistic targets. This can result in frustration when these are not met. The gifted child may then vent unhappiness and anger onto siblings and may feel that the or she is loved and given attention only because of achievements and successes. This sets up a cycle of additional pressure to succeed again in order to regain parental attention and esteem (Helson, 1968; Strang, 1960).

Several studies suggest that the gifted child is more perceptive and sensitive to the environment and, therefore, more vulnerable to it (Congdon, 1979; Whitmore, 1981). A child who receives too much attention or too many of the "family riches" may feel guilt regarding a less favored sibling and may feel the necessity to hide or downplay achievements for the purpose of preserving a less favored sibling's self esteem (Bank & Kahn, 1982).

<u>The effects of sex stereotyping</u>. Sex role expectations have historically been excellence for men and mediocrity for women (Bank & Kahn, 1982). If a female's achievements outstrip those of a male sibling, she may often feel the need to conceal her ability and greater success. Cultural and traditional expectations may ignore the needs of a bright female and constantly subjugate them to those of the male sibling. Many people still feel that in order to be popular a female must deny her intellectual abilities (Bridges, 1979; Rowlands, 1974).

<u>Sibling position of the gifted child</u>. Several studies have shown that in a population of gifted children, firstborns and

only children are over represented (Marjoribanks, 1976, 1978). However, one simple explanation for this may be that these two classes when combined will exceed any other sibling position population since families are decreasing in size and there are ever more people opting for only one or two children. Cornell (1981) found that in 22 families where there was giftedness, it was always the first born who was recognized as the gifted child by at least one parent. In only 10 of those families, was the second born also identified as gifted and in only 2 of those cases did both parents agree. Lack of recognition of, a second born as gifted increased when the child was of a different sex from the first born gifted child. This study suggests lack of recognition of the second born's giftedness may depend to a large extent on how similar the two children are. Even when the second born was also in a gifted program, the child / was often referred to as less gifted and as having talents in different areas from the first born gifted (Cornell, 1981). An explanation of this might be a-partial deidentification between the siblings to avoid too much sibling rivalry and competition while still allowing the opportunity for equal recognition of ability, talents and achievement.

Personality development of gifted children. All children in Cornell's study completed a Children's Personality Núestionnaire. The responses of the gifted firstborns were compared to those of nongifted firstborns and showed higher, measures on shyness; getting úpset and lower measures on gregariousness. Although a general profile is not given for the personality of the first.

born gifted child, the scores seem to suggest an intensified

Responses of the second born gifteds were compared to those of the first 'born gifted siblings and found ¹⁶ to be generally better adjusted, more easy ooing, less perfectionistic, more sociable and affectionate. This population was not compared to nongifted second born controls and it would be interesting to discover whether their profiles were generally similar but showed more intensification as appears to be the case with firstborns. The results do seem to indicate that the relationship between older and younger gifted siblings follows a similar pattern to the personality profiles outlined by Sutton-Smith & Rosenberg (1970). A further investigation showing the effect of sex differences on sibling personality response would be interesting.

The siblings of gifted children. The gifted child has historically been viewed as being better adjusted and superior in ability largely because of a superior environment and genetic endowment (Cornell, 1981). However, an unlabeled sibling shares both and yet in many cases is not recognized as being gifted by either family or self (Bank & Kahn, 1982; Cornell, 1981; Fisher, 1978).

<u>The effect</u> of giftedness on nongifted siblings related to sibling position. Access, sibling position, age spacing and sex of sibling play a large role in determining what effect giftedness will have on the sibling relationship. When the gifted child is an only child the effect is least disruptive on a family. When the gifted child is oldest and male there may also be less disruption than otherwise (Fisher, 1978). However, when the gifted child is the oldest, a younger sibling might find it an almost impossible act to follow (Peterson, 1977). A successful older sibling may become the only reference point for the younger child which leaves only two choices: either try and catch up and compete, or drop out of the arena, underachieve (Whitmore, 1981) and deidentify (Tesser, 1980). The presence of a gifted oldest child may cause parents to undervalue a younger sibling when there is a great difference between the two children since parents may equate giftedness with the traits of the oldest child (Cornell, 1981; Fisher, 1978).

When the gifted child is the younger sibling, the older nongifted child may perceive this as a threat from below. 01der children become worried when younger siblings skip grades and approach their own level and this pressure from beldw can produce resentment and jealousy (Peterson, 1977). Fisher (1978) found that the worst disruption occurred in families where the gifted, child had an older nongifted sibling. In the two families where parents did not agree with the school identification of the child, the target children were the younges t and both had an older nongifted sibling (one male, one female). Further, in families who had self labeled the children as gifted, despite the lack of school recognition, the target children were the younger siblings of identified older gifted children. In both cases the parental attitude adopted may be viewed as an attempt to perceive and treat the two siblings in the family equally, regardless of external labeling.

The effects of b_{ij} giftedness on nongifted siblings related to sibling sex. A study of female gifted college students found that they did not differ significantly in their personality responses from their brothers even though the males were not identified as gifted. Brothers felt they were taken less seriously, rated themselves as less practical and as having interests which were less strong. However, being the brother of a creatively gifted sister appears to have had several positive correlations with achievement and intellectual efficiency (Helson, 1968). A broad and general explanation of these findings might rest with the fact that these girls were gifted in an area of creativity. This left the area of general academic achievement, a domain that has historically been male, free for the unlabeled brothers. They, therefore, had an arena in which to achieve free from competition with their siblings and which was not in conflict with any stereotypical idea. Unfortunately, no mention was made as to sibling position of the gifted girl nor how close in age she and her brother were, nor what effect this 'had on the responses. Similarly no attempt was made to investigate the areas of interest and achievement of each sibling to see whether the brothers tended to choose different areas of endeavor from their labeled sisters.

Sisters of creatively gifted females showed several differences from their difted siblings and from the control group of sisters of nongifted females. They rated themselves as being more congenial with their mothers, less confident and weaker in personality and they felt they had experienced different parental

treatment and expectations. It seems that the effect of a gifted sibling will vary depending on the sex of the unlabeled child. Unfortunately, since the study was restricted to families of gifted females, no comparisons could be made with femilies of gifted males. It is, however, apparent that for females a same-sex nongifted sibling will be more negatively affected than one of the opposite sex. Such increased influence may be explained as a function of greater closemess (Bank & Kahn, 1982).

The effect of negative comparison. Comparison between siblings by themselves and others is inevitable and natural (Bank & Kahn, 1982; Sutton-Smith & Rosenberg, 1970; White, 1975). When a child receives less social reinforcement than a sibling he or she will generally behave in a disruptive fashion, with boys being most' openly aggressive (Santrock et al., 1980). Such a reaction might be explained as an attempt to gain parental attention (Dreikurs, 1973) or reduce closeness and deidentify ' (Tesser, 1980). . Santrock et al. (1980); found that the sibling position of the favored child did not predict the behavior of the unfavored sibling as well as the information about how the parent interacted with the children. In a study on sibling friction, it was further found that where one sibling felt that he or she was being outperformed by another on a task of relevance to both, the disadvantaged sibling would seek to reduce the amount of closeness by introducing friction. In this way there was an attempt to redeidentify from the more able subling and preserve self esteem from negative comparison. This use of friction to reduce closeness was strongly related to closeness in age between

the children and was intensified when the more able sibling was the younger of the two (Tesser, 1980). These results, like most of the findings for deidentification theory, are upheld by males "while females' neither prove nor disprove the hypotheses. However, no mention was made of how differences in sex between the siblings affected the introduction of friction and how this might interact with sibling position.

For males, the more able sibling showed greater measures of identification with the less able sibling when performance was unequal. This suggests that the outperforming individual's self esteem is heightened by favorable comparison. The less able sibling in contrast showed strong deidentification since the process of comparison was unfavorable and threatened self esteem. Both less able females and males showed similar trends for deidentification where performance was unequal.

It - appears that it is the comparison process and one's relative performance rather than the level of absolute ability or performance which is important in . maintaining and defining self esteem. A study was conducted where subjects were paired and compared as to performance on a task and both absolute and relative performances were measured. When subjects were negatively compared with their partners; regardless of whether this was in fact true or not, the less achieving partner systematically reduced the relevance of the task. The negative comparison caused the subjects to deidentify from one another in order to preserve their self esteem. The absolute performance had little effect on the deidentification process nor did the

veracity of the comparison statement (Tesser & Campbell, 1980). An unlabeled sibling might choose, then, to deidentify from a sibling who is perceived as being more able, by introducing friction to reduce closeness or by reducing the relevance of the Since comparisons do not task and withdrawing from competition. have to represent the absolute truth to, have an impact, arbitrary parental or self judgments as to the ability of the children are sufficient to créate an effect. Constant negative comparison will result in lowered self esteem and digtate a reaction. If a sibling cannot compete in the same .arena, he or she may withdraw, to another area of endeavor where there is freedom from competition. This explains why many parents describe their offspring as having very different talents and interests even when both are gifted (Cornell, 1981; Fisher, 1978). Findings in the literature support these suggestions. A sibling who feels undervalued may act out (Bridges, 1979), give up or be openly aggréssive (Strang, 1960; Whitmore, 1981). Those whose talents remain unacknowledged will become resentful and jealous (Vail, 1979) and low self esteem affects the child's willingness to take risks and supports, withdrawal from academic challenges (Fine, 1980).

Personality development of the nongifted sibling. Response of children to the Children's Personality Questionnaire in Cornell's (1981) study showed that these children were less well adjusted than nongifted controls, less controlled and less careful about social rules. They felt less valued in the family and had low self esteem. They were shy, frustrated, excitable

and tense, more anxious and neurotic. Generally they gave very poor pictures of mental health. Since many of these children were found to be of superior ability, it suggests support for the idea that constant negative comparison with a superior sibling and the relative lack of recognition were very influential. This study did not examine whether difference in sex between the siblings lessened the effects of having a gifted sibling, or whether the sexes reacted differently to the experience. Further, since there were no cases of second born gifted thildren with, first born nongifted siblings, it was impossible to establish what effect the gifted child's sibling position had on the relationship.

<u>Parental interactions with children of unequal ability</u>. Parents are very aware of issues of equality and endeavor to downplay differences between their children. The parental goal generally is to foster a Loving, noncompetitive relationship between the siblings and the recognition or labeling of one child as gifted strains at the parents' desire to treat both children equally. Parents usually ascribe favorable qualities to both children, stressing that the unlabeled child has different talent areas than the gifted sibling (Cornell, 1981; Fisher, 1978).

Fisher (1978) found that in families where only one of the children is recognized as gifted there is most disruption. All parents in this category reported instances of comparison and discomfort when divergent interests and abilities of the siblings vied for parental attention and approval. Parents tried to give the impression that they treated both children equally and

endeavored to provide separate areas of interest to minimize , comparisons. There were several reports of families engaging in some nonintellectual activities in order to give the unlabeled child an opportunity to succeed.

Parents and the gifted child. There is often an unconscious favoring of the child who brings the most credit to the family. Although parents think they refer equally to both children they generally do not (Bridges, 1979). Very often parents will boast about the gifted child, ignoring the lesser achievements of an unlabeled sibling, which might have been acquired at the cost of greater effort. There is a danger that parents might equate achievement with effort (Strang, 1960). Cornell (1981) found that parents feel more pride for an acknowledged gifted child and feel they have a closer parent-child relationship. He also found that when the gifted children's personality questionnaires were compared with the parental assessments, there was general agreement between the two. However, no mention was made of whether recognition of giftedness by the parents had an effect on" how well parents predicted the gifted child's personality characteristics.

In Fisher's study (1978) parents of perceived gifted children felt that the gifted child often led the parent and that the use of traditional guidelines in child rearing were inadequate. Parents spent unusual amounts of time with the gifted child, saw themselves as stricter and more structured with that individual and encouraged the labeled child to assume the role of teacher to the parent's role of student. The gifted

child and parent often assumed a relationship of playmates or siblings.

Parents and nongifted siblings. Cornell (1981) found that the parent's relationship with the nongifted sibling may involve feelings of parental guilt because of the discrepancy between the . children's abilities. Parents feel less proud of the mongifted sibling and feel pride for different reasons. Many parents perceive the unlabeled sibling as being jealous, easily upset and argumentative but did not accurately winderstand why. They endeavored to reassure the child by downplaying the differences between the siblings. Conversely other parents report a total absence of jealousy which suggested a denial of the problem either by parent or child or both. No overt expression of affect does not assume no underlying feelings (Cornell, 1981). Parents may also reprimand overt negative expressions of affect in their children, especially a nongifted sibling's jealousy. This might in turn engender quilt, depression and feelings of unworthiness in that child (Strang, 1960; Whitmore, 1981). Comparisons between the nongifted siblings' personality questionnaires and their parental assessments showed gross discrepancies suggesting that parents often have little awareness of the unlabeled child's insecurity and troubled feelings (Cornell, 1981). Although parents downplay differences in their feelings toward the children, such differences are somehow apparent. Perception of a child as gifted or not is very influential in shaping parental treatment and attitudes and must, therefore, be apparent to the hildren (Cornell, 1981). Since there were no cases of the

unlabeled child appearing in the first born position in Cornell's study, it is impossible to say what effects sibling position and sibling sex may have had on the sibling relationship.

Research Questions

Although the studies of Cornell (1981) and Fisher (1978) strove to examine the effects of giftedness on families; the of both orlentation was toward parental, attitudes and The sibling relationship between child-rearing differences. gifted and mongifted children was not examined in great detail, although both researchers emphasized the poor mental, health This study seeks to examine. profile of the unlabeled sibling. more precisely how the perceptions of the siblings vary and the extent of parental awareness of each child's perspective. Research Question 1: . Do the gifted and nongifted children's perceptions of the sibling relationship differ?

The emotional adjustment profiles of the gifted and nongifted child have been shown to vary greatly with the unlabeled sibling presenting a poorer and less well adjusted picture (Cornell, 1981; Fisher, 1978). If a child's emotional adjustment is directly related to how he or she perceives familial relationships (Serot & Teevan, 1961) it is reasonable to ask if differences in emotional adjustment are related to underlying differences in perceptions.

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Research Question 2: Are disparities between responses of these two groups generalized throughout all areas of the sibling relationship or confined to specific areas?

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Given the assumption that a discrepancy in perceptions may. lexist, does this permeate the entire sibling interaction? Studies have shown that a more able sibling's self esteem is enhanced by feelings of identification and sameness with a less able sibling. The gifted child therefore would be predicted to welcome chances of comparison and competition. The less able sibling in this situation tends to deidentify and avoid instances of comparison and competition (Tesser, 1980). A prediction could, therefore, be made that this would be an area of perceptual difference. Are/there others? Research Question 3: How are perceptions affected - by variables such as siblings' sex, sex of the gifted child, the gifted

child's sibling position and age gap?

Sex, sibling position and age gap greatly influence sibling interaction (Bank & Kahn, 1982; Sutton-Smith & Rosenberg, 1970; White, 1975). Some studies suggest that giftedness interacts with these variables (Cornell, 1981; Fisher, 1978; Peterson, 1977).

Research Question 4: Are parents equally aware of both children's perceptions of the siblings' relationship?

Since humans act on the basis of their perceptions (Blumer, 1969), parents may be assumed to react to sibling interaction on, the basis of how they interpret the relationship. Parent interaction with siblings is the major influence on how the siblings will behave toward one another (Bank & Kahn, 1982). However, perceptions among family members may vary radically (Serot & Teevan, 1961) and parents may be more in touch with the feelings of the gifted child than with the nongifted sibling (Cornell, 1981).

This study seeks to establish whether there are differences between the perceptions of the gifted and nongifted siblings. From the literature we may then predict how these differences are related to general sibling interaction and then define the specific effect of "giftedness" on the relationship. Chapter 2

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Methodology

• Subjects

Data were obtained from 27 children and their families. The children were attending the McGill Summer School for Gifted and Talented Students during July, 1982. Children who attended this school were from ethnically and socioeconomically diverse backgrounds and had been referred either by their schools, parents or both. Although no formal examination of the children's abilities was undertaken, it was decided that attendance at the school met the necessary criteria for labeling and selection.

Countless variables, will affect the relationship within families and in order to restrict these as much as possible it was decided to concentrate only on families which were intact with both mother and father living full time at home. Similarly, to facilitate interpretation of responses, only families with two siblings were selected. Since it was the aim of this study to examine the effects of giftedness or labeling on nongifted or unlabeled siblings, the families selected also had to meet the criterion of having only one of the children at the summer school. The child who was not attending thereby had not been habeled or selected. Finally, since the information needed was collected by means of a questionnaire, a minimum age for the children was set at 9 years so that comprehension of the questions was ensured.

All children attending the school in Grades 5 to 10 (the oldest group) were given an information sheet to complete (see Appendix 1) and selection of the families was made from these. Of the 107 children polled, only 35 families met the criteria necessary to participate in the study. The return rate was 100% but eight families were subsequently disqualified from the final analysis (1 family split up during the study, 1 family did not speak sufficient English to complete the questionnaire, 1 family had a severely retarded sibling, and 5 families had both children registered at the school). A breakdown of the responding siblings by gifted sibling position, sex of siblings, sex match and age gap between siblings is shown in Table 1.

Breakdown of Gifted and Nongifted Children by Siblings' Sex, Gifted Sibling's Position, Gifted Child's Sex and Age Gap.

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Gifted child's position

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older.	15	15
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younger .	. 12	12
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Gifted sibling's s	ex	ĩ
· ·	,	* * -
male	14	, 14

۰. · 13. female '

Age gap



13

(3 years or more) 14

Instrumentation

A review of the literature indicated several areas where the sibling relationship might experience difficulties. It was decided to explore, six of these with an original questionnaire: comparison and competition. cooperation, identification. perceived parental treatment, self image and friction. A final section explored the overall tone of the sibling relationship. The eight questions in the competition section were designed to discover how much the children competed and how aware they were of their own and any parental comparisons of their efforts. Examples are: "Do you compare the work you do at school with that of your brother or sister?" and "Do you think your parents feel that your work is as good as that of your brother or sister?" The section on cooperation comprised twelve guestion such as; "Do you help your brother or sister with school work or show an interest in what he or she is doing?", which centered on the amount of sharing and mutual help that existed between the The section on perceived parental treatment asked siblings. questions such as: "Do your parents praise you and give you treats , as much as they do your brother or sister?" These were designed to discover whether the target child felt as well treated by the parents as a sibling. Similarly, self image was assessed by 13 questions which examined how the child felt about himself or Herself, for example: "Do you ever feel lonely?" and "Do you ever feel depressed or unhappy?" The communication · section had 10 questions which explored how much the children talked together and the general verbal tone of the "family relationship, Examples

are: "Do you ever feel you have no one to talk to who would understand how you feel?" and "Does" your family generally encourage discussion of problems?" Questions such as: "Do you and your brother or sister fight?" investigated the amount of perceived friction between the siblings and, finally, the overall general relationship was explored by the last four items on the questionnaire ("Do you like your brother or sister?"). A question-by-question analysis and rationale can be found in Appendix 2.

Parental questionnaires were developed directly from those for the children and asked parents how they thought their children felt about a sibling. Questions attempted to discover the same information but from the parental perspective. For example, children were asked "Do you compare the work you do at school with the work your brother or sister does at school?" while the corresponding parental question was phrased: "Does (your child) compete with his or her sibling regarding school work or academic performance?"

Envelopes containing the questionnaires and a covering letter were given to the family member attending the summer school. The children were instructed to tell the other members of their families that completion of the forms should be conducted privately and individually. All families were given one week to complete the questionnaires at which time they should be returned to the school. Each child filled out a similar form about his or her sibling and parents filled out two forms each: one for the gifted child, one for the unlabeled sibling. Six

questionnaires were given by each family partaking in the study.

Each question had four response categories represented by the numbers 1 to 4. The number values of the response categories were: (1) never, (2) rarely, (3) often and (4) always. It was decided to exclude a "sometimes" category of neutral value in favor of a forced choice format which would give some indication of general attitude. Subjects, therefore, had to give a response which was either negative (1 or 2) or positive (3 or 4). Subjects were also instructed to omit none of the questions.

Each area of sibling relationship was examined and criteria for a high score in that category were delineated. For example, in the "competition" and comparison" category, which included questions 1 to 8, a high score indicated "much competition." Interpretations of category scores are presented in Table 2. At this point several questions were recoded since a high score in response to these questions indicated a reverse of the criteria outlined by the category heading. In question 8, for instance ` ("Are your achievements in different areas from those of your brother ° or sister?"), would high score indicate deidentification or differentiation from a sibling and, thus, a predicted avoidance of competition. This question was. therefore, reversed in its coding so that a high score would now be represented by a low value which would contribute little to the overall score for competition. Questions that underwent. recoding are clearly indicated in Appendix 2.

Table 2

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Interpretation of category scores

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Category	Questions	Interpretation of high score	<u>Maximum</u> score
, Competition	1-8	much competition	32
Cooperation	9–20	much cooperation and shared interest	40
Parental Treatment	21-30	good perceived parental treatment	40 \$
Selfconcept	31-43	high positive self concept	52
Communication	44-53	much communi- cation .	40
Friction	54-64	much friction	44
General	65–68 N ,	good overall relationship	16

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Chapter 4

Data Analysis and Results

Preliminary examinations of the data were designed to assure that the seven questionnaire categories were meaningful and that the questions within them were appropriately related to one another and to the category as a whole. Data were analyzed by means of intracategory Pearson correlations for all children in the sample.

<u>Within category correlations - all children</u>. Each item was correlated within its own category and also with its category total score in order to discover whether items could be justifiably grouped within the designated categories and a total category score used for subsequent analyses. The resulting correlations by item by category can be found in Appendix 3. A summary by category is given below.

<u>Competition and comparison</u>. • A total of 36 correlations were calculated for this category. Of the 11 significant values generated only 3 were negative. These negative correlations occurred between items within this category. However, none of the items correlated negatively with the category score. Four items showed moderate to high positive correlations with the total category score (questions 2, 3, 4 and 7) and items 1, 5 and 8 approached significance. Only item 6 failed to show any strong correlation with the total score.

Cooperation. Of the 78 correlations generated within this

category 28 were significant and only one of these was negative. This single negative value occurred between two items (questions 14 and 19) within the category. All questions were positively correlated with the total category score of cooperation. Items 9, 10, 11, 14, 15, 16, 17, 18, 19 and 20 all showed significant positive correlations with the totaled score. Only items 12 and 13 failed to show significant relations but were, nevertheless, positively correlated.

<u>Parental treatment</u>. A total of 55 correlations were calculated for this category. There were 30 significant values all of which were positive. All items correlated positively with their category score. Only item 29 failed to show a significant positive correlation.

<u>Self image</u>. Of the 91 correlations generated within this category, 33 were significant. Of these, 22 were positive. Only question 37 correlated negatively with its category score but the value was not significant. All other questions correlated positively with the totaled score and significant correlations were found for items 32, 33, 34, 35, 36, 39, 40, 41.

<u>Communication</u>. A total of 55 correlations within this category produced 23 significant values. Of these 19 were positive. Only one negative correlation occurred with the category score (item 52) but it was not significant. All other questions were positively correlated with the totaled score, items 44, 45, 46, 47, 48, 49, 50, 53 significantly so.

Friction. Twenty-one significant correlations resulted from , the total 66 generated within this category. Of these 14 were

positive. No item correlated significantly negatively with its category score. Questions 55, 56, 57, 59, 60, 61, 62, 64 showed ³ strong positive correlations with the totaled score.

<u>General relationship</u>. Nine of the 10 correlations generated for this category were significant and positive. All items showed positive correlations with their own category score.

Of the total 396 correlations calculated during the within-category analyses, 129 were significantly positive (32.6%). There were 23 significantly negative correlations (5.8%) which occurred between items within their own categories. There were, however, no instances of any item correlating significantly and negatively with its own totaled category score and this supported the totaling of individual items within each category to produce a general category score.

Between category correlations - all children. Intercategory Pearson correlations were produced from data on all children to investigate how each category related to the others (see Table 3). The resulting correlation matrix demonstrated expected between-category relations in all but two of the twenty-one cases. These two unexpected results involved friction, which appeared to be positively correlated with both parental treatment $(\underline{r}=.33)$ and self image $(\underline{r}=.23)$, a finding that was somewhat unanticipated but which might be explained from the data on the individual groups of children (see below).

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- I x		-		· ' . •		•	•
	Comp titi	e- <u>Coppera</u> on <u>ation</u>	- Parent treat:	• <u>Self</u> image	<u>Commu-</u> nicatio	Fric-	
Come	1 2-	`		, , ,		•	
tion	.06		,	، م			ŧ
Paren treat	t. 11	.32**		• • •	a 		, ъ
self image	.20	.24*	• 62** ·	м.	· .	•	×
. Commun cation	י ו– י , 11	• 50**	. 37**	.22	•	•	•
Fric- tion	.25	* .04	• 33**	.23* .	.14		•
Genera	al08	.55**	. 22	.05	•45**	·.06	r
,	•	* <u>p</u> <.0 ** <u>p</u> <.0	4 , 5 1	•	۴	-	

Intercategory Pearson Correlations for all Children

There is a substantial limitation on the interpretability of these arbitrary categories since a varimax rotated factor analysis yielded 24 underlying factors and seemed not to support the seven discrete divisions of questions. An explanation of these findings might lie in the fact that the categories are not orthogonal. The intercategory correlation matrix in Table 3 shows many strong positive correlations occurring between the

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categories. Also, a correlation matrix generated for each question with every other item showed some significant correlations occurring between items within different categories. These findings suggest that there might be overlap ог nonorthogonality between the designated categories. However, given the paucity of previous research on which to base complex hypotheses in this area, it was decided not to use more complex factor analyses with nonorthogonal axes because of the subsequent difficulty in interpretation. The overriding consideration and goal of this study was the identification of meaningful rather than uncorrelated and independent categories. It is emphasized that ideally the factor analysis should support the categories within the questionnaire and its failure to do so must limit the instrument's validity. $\check{}$ The development of valid. measures for assessing sibling relationships should be the subject of further investigation and research although it is beyond the scope of this study.

Data on the gifted and nongifted groups of children were then examined separately. Intercategory Pearson correlation matrices were produced to investigate whether there were any differences:

Table 4

Intercategory Pearson Correlations for Gifted Children

<u> </u>	. '		đ			
1	Compe tition	Coopera- ation	Parent. treat	Self image	<u>Commu-</u> nication	Fri tio
Coopera- tion	• 35*	-			u L	
Parent. treat.	.14	•28 \	1	2		•
self image	。 23	.31	•67 **			
Communi- cation	• 33*	. 33*	.18	.12	-	۲,
Fric- tion	• 54**	.01	.15	. 34*	.18	ł
General	• 20	.48 **	•46 **	. 28	.27	.13
,	6	`* <u>p</u> <.05 ** <u>p</u> <.01			ţ	~

Intercategory correlations for gifted children. In Table 4 , it can be seen that competition for gifted is positively correlated with cooperation (\underline{r} =.35), communication (\underline{r} =.33) and friction (\underline{r} =.54). These results suggest competition in the sibling relationship is closely tied to the gifted child's willingness to cooperate and communicate with an unlabeled Ð

sibling. The gifted child also perceives a close relationship between such competition and any friction between the siblings.

Self esteem is positively and highly correlated with perceived parental treatment (\underline{r} =.69), indicating how influential is the parental attitude toward the children in defining self image. Self esteem is also positively correlated with friction (\underline{r} =.34) suggesting that a gifted child's positive self image is a function of the friction that occurs with an unlabeled sibling.

Finally, the category of general relationship--scored in such a way as to indicate the overall positive tone of sibling interaction--appeared to be related to cooperation between the siblings($\underline{r}=.48$) and perceived parental treatment ($\underline{r}=.46$).

Intercategory correlations for mongifted children.

An examination of the correlation matrix for this group showed several differences between the groups. Table 5 indicates that for nongifted children, compatition is negatively correlated with cooperation (\mathbf{r} =-,34) and general relationship (\mathbf{r} =-.42) These results suggest that for the unlabeled child, competition between the siblings inhibits the willingness to cooperate and negatively affects the general relationship. Cooperation is well correlated with communication (\mathbf{r} =.57) and general relationship (\mathbf{r} =.57), findings which are not surprising. Parental treatment is again a good predictor of self image (\mathbf{r} =.57), also of communication (\mathbf{r} =.47) and, somewhat surprisingly, friction (\mathbf{r} =.47). These results once more underline the importance of perceived parental treatment in sibling interaction and suggest that for nongifted siblings high friction scores are somehow tied to positive parental treatment. This issue is taken up later in the

discussion chapter.

Table 5

Intercategory Pearson Correlations for Nongifted Children.

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Compe-	Coopera-	Parent.	Self.	Commu-	Fric-
tition	ation	treat.	image	nication	tion

Coopera- tion34*				,	
Parent. treat00	.30	ت ا	· ·	, ,	
self image .12	.15	• 57 **	æ	· ,	
Communi- cation10	• 59**	.47**	.29	х)	
Fric- tion .06	.08	.47**	.15	.12	
General42*	• 57** `	.03	 17	.55**	.04

**p<.05

For unlabeled siblings, the general relationship between the children appears to be positively related to cooperation ($\underline{r}=.57$) and communication ($\underline{r}=.55$) and is negatively correlated with the amount of perceived competition and comparison between them

 $(\underline{r}=-.42).$

An examination of the two matrices shows some similarities specifically in the areas of cooperation and communication, as well as similar effects of parental treatment on self image. However, there are several striking differences most notably in the relations of friction and competition to other variables, which suggest that the perceptions of the two groups may diverge in important ways.

In order to establish whether there was a generalized and significant pattern of divergence in responses between the two groups, a series of chi-square analyses was run on the combined data for both groups. An item-by-item analysis at the four different response levels (never, rarely, often, always) provided no more than 3 significant values on the 68 items tested (4.4%) (see Appendix 4). A possible explanation for the lack of significant patterning was considered to be the lack of homogeneity even within the two groups, which might possibly be differences in response patterns related to masking any At this point it was decided to divide the giftedness alone. respondents as follows;

 <u>Siblings'</u> sex - whether siblings were of the same sex or different sex;

2. <u>Gifted sibling position</u> = whether the gifted child was older or younger than the unlabeled sibling;

3. <u>Gifted child's sex</u> - whether the gifted child was female or male;

4. Age gap - whether the age gap between the children was

large or small. For the purposes of this study a small age gap was defined as two years or less while a large age gap was any difference three years or over.

The term "sibling status" was used throughout to refer to the gifted/nongifted classification. Chi-square analyses of these variables were run on each item of the combined data for both groups to establish whether significant differences in response patterns appeared. Results are presented in Appendix 4. Of the total 68 chi-squares calculated a maximum of only 5 significant values was obtained on any one of these analyses (7.5%). The maximum number of discrepancies between responses occurred when siblings were of the same sex, when the gifted child was older or male. These findings cannot be considered sufficient evidence for affirming consistent differences in patterns of response

It was, however, deemed possible to use the chi-square test results as, support for regarding the two respondent groups as statistically unrelated or independent, despite their familial relationships. Given this assumption of independence, analyses of variance could be carried out to establish whether differences in response were related to specific areas of the sibling relationship as represented by the questionnaire categories. For this reason, category rather than individual item scores were used as data for the remaining analyses.

<u>Analyses of variance of category scores</u>. Initially a series of one way analyses of variance was performed for each category by sibling status. This was designed to establish if

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there were any significant differences between the two groups of respondents when only labeling was considered. Following this, a series of two factor analyses of variance was performed for the two levels of sibling status (gifted/nongifted) by each of the variables to examine whether differences in response were related to other areas of the sibling relationship.

It was considered appropriate to examine the data by taking each variable in turn and assessing the significance of its effect on sibling status. Lack of sufficient sample size precluded a more complex $2 \times 2 \times 2 \times 2$ (siblings' sex by gifted position by gifted sibling's sex by age gap) analysis of variance design which might explore higher level interactions and provide a more complete picture of the sibling relationship. Table 6 shows the mean scores generated from the analyses of variance and a summary by variable of the significant findings follows.

One Way Analysis of Sibling Status -

<u>Competition and comparison</u>. A significant effect for giftedness was found in this category, (F(1,50)=5.68, p<.02). The mean score for gifted children was significantly higher (18.96) than that recorded for nongifted siblings (17.37).

There were no significant effects in any of the other

Siblings' Sex by Sibling Status

Of the 27 families sampled, 14 had same sex siblings while 13 pairs were of different sex.

<u>Competition and comparison</u>. A significant main effect for sibling status was indicated (F(1,50)=6.15, p<.017). In this
category where high scores indicated much perceived competition and comparison, gifted children obtained consistently higher averages (18.96). Lower scores, indicating lower perceived competition were produced by nongifted siblings (17.37). The effect of siblings' sex approached significance ($\underline{F}(1,50)=3.898$, $\underline{p}<.054$). The nongifted children in different sex pairs recorded the lowest average scores for competition and comparison (16.38) in comparison with gifted siblings in this dyad (18.62). Same, sex siblings scored similarly with gifted children recording the highest averages (19.29) and their nongifted siblings scoring slightly lower (18.29).

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<u>General relationship</u>. A significant main effect was found in this category for siblings' sex ($\underline{F}(1,50)=5.14$, $\underline{p}<.03$). Siblings of the same sex produced a higher mean score (13.39) than different sex siblings (12.04). This suggests that the additional closeness resulting from similarity of sex somehow benefits the sibling relationship. There appeared to be no significant effect of giftedness for this category.

None of the other categories showed any significant effects.

	- Non-	Sexma	tch	Gifted's Sex		Gifted's	s Position	Age G	ap
	Gifted gifted	same	diff.'	female	male	older	younger	large	small '
Competition	,								
Gifted	18.96*	19,29	18.62	19.08	18.86	19.73	18.00	18.57	19.38
Nongifted	- 17.37*	18.29	16.38	16.54	18.14	17.47 -	.17.25	17.36	17.38
Total	18.17	18.96	17.37	17.81	18,50	18.60	17.63	17.96	18.38
Cooperation	_								
Gifted	31.85 *	32.71	30.92	32.54	31.21	32.33	31.25 /	32.14	31.54
Nongifted	29.93	29.43	30.46	32.62	27.43.	29.87	30.00	32.21	28.54
Total	33.19*	31.07	30.69	32.58**	29.32**	31.10	30.63	31.68	30.04
Parental Treat.									
Gifted-	33.85	34.71.	32.92	34.77	33.00	34-53	33.00	34.21	33.46
Nongifted	32.52	31.57	33.54	33.69	31.43	32.80	32.17	32.64	32.38
' Total	-33.19	33.14	33.23	34.23	32.21	33.67	32.58	33.43	32.92
Self Concept	-		•		-				
Gifted	36.37	36.86	35.85	36.15 .	36.57	36.73	35.92	36.21	36.54
Nongifted	° 35•77	35.86	35.69	36.62	35.00	35.47	36.17	36.43	35.08
Total	36.07	36.36	35.77	36.38	35.79-	36.10	36.04	36.32	35.81
Communication					1				
Gifted	26.11	26.64	25.54	26.08	26.14	27.07	24.02	26.14	26.08
Nongifted	25.41	25.71	25.01	26.62	24.29	25.07	25.83	26.43	24.31
Total	25.76	26.18	25.31	26.35	25.21	26.07	25.38	26.29	25.19
Friction		•							
Gifted	29.07	28.50	29.69	28.77	29.36	30.07*	27.83*	28.79	29.38
Nongifted	29.33	30.00	28.62	28.62.	30.00	28.73*	30.08*	-29.21	29.46
Total	29.20	·29.25	29.15	28.69	29.68	29.40	28.96	29.00	29.42
<u>General</u>	-	-	•				-		•
Gifted	13.19 .	13,79	12.54	13.46	12.93	12.93	13.50	14.07	12.23
Nongifted	. 12.30	13.00	11.54	12.46	12,14	12.27	12.33	13.14	11.38
'fotal	. 12.74	-13.39	12.04*	12,96	12.54	12.60	12.92	13.61**	11.81**

Pooled Means Generated from Analyses of Variance

Differences between means significant at *p < .05 **p < .01

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Table o

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Gifted Child's Sibling Position by Sibling Status.

There were 15 families in which the gifted child was older and 12 cases where younger.

<u>Competition and comparison</u>. A significant main effect for sibling status was found in this category ($\underline{F}(1,50)=5.85$, $\underline{p}<.02$). Gifted children' again reported consistently higher instances of comparison and competition, Highest averages were produced by gifted children who were older (19.73) although the effect of position was not significant.

<u>Friction</u>. No significant main effects were found in this category but there was an interesting two way interaction between giftedness and birth order (F(1,50)=5.596, p<.02). Sibling friction scores were higher for gifted older children (30.07) and nongifted younger siblings (30.08). They were significantly lower for gifted younger children (27.83) and nongifted older children (28.73). This suggests that more sibling aggression is perceived by both children when the gifted child is older. This result would not have been predicted from the literature which suggests that most family disruption occurs when the gifted child is younger (Fisher, 1978).

No significant effects appeared in the other categories.

Sex of Gifted Child by Sibling Status

Grouping of the data according to sex of the gifted child provided 13 instances of gifted females and 14 gifted males.

<u>Competition and comparison</u>. A significant main effect for sibling status was recorded (F(1,50)=5.79, p<.02). Gifted children scored significantly higher than nongifted respondents

(18.96 versus 17.37) with gifted females producing the higher averages than gifted males (19.08 versus 18.86), although the effect of the gifted child's sex was not significant.

<u>Cooperation</u>. A significant main effect was found for gifted sibling's sex in this category of response ($\underline{F}(1,50)=11.023$, $\underline{p}<.001$). When the gifted child was female, scores were consistently higher for both gifted (32.58) and nongifted (32.54) groups. When the gifted child was male, both siblings produced lower scores in this category, gifted (32.62) and nongifted groups (29.32). This supports the prediction that females display more nurturant, cooperative and less openly aggressive behavior than their male counterparts.

Age Gap by Sibling Status

Fourteen of the sibling pairs sampled were more than three years apart in age, while 13 of the pairs were of two years or less.

<u>Competition and comparison</u>. A significant main effect of sibling status appears in this category (F(1,50)=5.54, p<.02). Competition appears to be a function of whether the child is labeled gifted or nongifted rather than how far apart the children are in age. However, the effect of age gap did approach significance (F(1,50)=0.386, p<.053). Highest scores for competition were produced by gifted children when they were close in age to a nongifted sibling (19.38). Nongifted children who were close in age scored similarly to nongifted siblings in the large age gap dyads (17.38 and 17.36, respectively).

General relationship. When the age gap was large, means

were consistently higher for both gifted and nongifted respondents ($\underline{F}(1,50)=9.83$, $\underline{p}<.003$). When the age gap was large, means were consistently higher for both gifted and nongifted respondents (14.07 and 13.14 respectively, versus 12.33 and 11.38). This suggests that the relationship between the children improves as the age gap widens.

Analysis of Parental Questionnaires.

From the preliminary intercategory correlation matrices, it was seen how influential was the perceived parental treatment on the sibling relationship. The following analyses were designed to explore how aware the parents were of each child's perceptions.

Parents had each completed two questionnaires, one for the gifted child and one for the nongifted sibling. The appropriate parental questionnaire was paired to that of its related child and a series of chi-square, item-by-item.analyses were run. The purpose of these computations was to establish whether there were significant patterns of divergence or convergence in response frequencies. From the literature the prediction was made that parents are more "in <u>tune</u>" with the gifted child's needs and perceptions than with those of the nongifted sibling (Cornell, 1981). Such a prediction would suggest that more significant chi-square values (indicating divergence of responses). would occur when a parent was responding for the nongifted child. table of the resulting significant values is presented in Appendix 5. Surprisingly, there were similar numbers of. significant values for both status groups for mothers (11 for

gifted, or 16.2%; 10 for nongifted or 14.71%) and fathers (9 for both groups or 13.23%). These results suggest no apparent difference in the amount of parental awareness depending on giftedness and, at the most, only minor differences related to the sex of the parent.

Two questions received unanimously significant chi-square values from both parents and sibling groups: question 4, on competition, and question 60 on friction. A discussion of these findings will be given below, however, neither item was correlated significantly with its own category in the preliminary analyses reported earlier.

Six of the significant values derived from the comparison of maternal questionnaires with the related children were common to both gifted and nongifted groups and were scattered throughout the categories. The remaining significant values displayed no specific category patterning or distribution. The father and child comparison showed three common significant values common to both gifted and nongifted children. There was a similar lack of patterning for the remaining values scattered with no apparent clustering in any one category.

It was not possible to perform a category-by-category analysis of the pairs of parent and child questionnaires since there were necessarily slight differences in the numbers and types of questions we had asked parent and child. An analysis by category would, therefore, not have compared exactly the same data and this would have somewhat lessened the interpretability of the results. Certainly a task for future research would be to

develop a valid instrument for assessing how aware parents were $\mathcal{I}_{\mathcal{I}}^{\mathcal{O}}$ of their children's perceptions and feelings. These very preliminary analyses of parental awareness were considered sufficient for the purposes of this study.

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Chapter 5

Discussion of the Findings

Research Question 1: Do the gifted and nongifted children's perceptions of the siblings relationship differ?

A review of the intercategory , response correlations for the two groups of children shows several different relationships. Gifted children react positively to the competitive aspeat of the sibling relationship and are thereby encouraged to cooperate and communicate more with their unlabeled sibling. Gifted children scored consistently higher average scores in the category of competition and comparison regardless of how the data were This suggests that this component of the sibling grouped. relationship is very much a function of how the child is labeled. A gifted child, no matter what the siblings' sex, gifted childes position, gifted sibling's sex or age gap, appears always to perceive more instances of competition and comparison. An explanation for this may be that such constant relative positive comparison is 'self enhancing to the gifted child (Schachter et 1976; Tesser, 1980). That such competition is tied to al.. perceptions by the gifted child of friction between the siblings is not surprising. The literature would have predicted that a might introduce friction when placed in a less able sibling position of negative comparison and thereby reduce the element of. closeness between the children (Tesser, 1980).

The effect of competition is very different for the

nongifted sibling, and is distinctly negative in its impact. As would be predicted, a less able child avoids situations of cooperation when there is much competition. Such situations may place the less advantaged child in a position where there may be chances for negative comparison with a sibling and this is damaging to self esteem (Schachter et al., 1976; Tesser, 1980). Similarly, since competition for the nongifted child results in negative comparison, this sibling will seek to reduce instances of closeness and deidentify. Such behavior is manifest in the fact that competition is closely related to low scores in the general relationship category, indicating poor overall sibling relations.

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Unlike the perceptions of the gifted sibling, the nongifted correlation matrix shows no relationship between friction and competition. This is somewhat surprising since it suggests that the high friction observed by the gifted partner is somehow not perceived by the unlabeled sibling in the same way. However, the analysis by gifted child's sibling position shows that instances of friction are significantly higher when the gifted child is the older. Lack of a positive correlation might, therefore, be an artifact of some additional within-group characteristic which is unaccounted for , Friction, however shows other different Since[#] friction is closely relationships for the two groups. linked with self image for gifted children, this suggests that any aggressive encounter -- which in turn is linked to competition between the children--is reinforcing. Friction for the unlabeled siblings, on the other hand, is related closely to perental

treatment. It may be that perceived positive treatment by the parents encourages the disadvantaged child to disrupt the existing power-hierarchy within the family by eliciting parental intervention. Further, since children have been found to react aggressively when they receive less social reinforcement than a sibling, this introduction of aggression might elicit the parental attention desired.

The one strong similarity between the two correlation[®] matrices is the effect of parental treatment on self image. How the parents are perceived to feel about the children is dery important in defining how the children feel about themselves. This influence appears not be be associated with the labeling of a child as gifted or nongifted.

These initial examinations of the children's responses suggest that the perceptions of the two sibling groups differ in several ways.

Research Question 2: Are the discrepancies in response generalized or confined to specific areas of the sibling relationship?

No generalized pattern of discrepancy could be found between gifted and nongifted children's responses. None of the chi-square analyses suggested that there was any significant divergence in response, regardless of how the children were grouped. However, since no examination was made of higher level interactions, it cannot be said with any certainty that such a pattern does not exist. It may very well be that the variables on which differences were examined may in some way interact with

one another to produce significant discrepancies. Further investigation, using larger numbers of participants and more complex analyses should be the subject of future research.

Competition and comparison showed consistent differences for gifted and nongifted children. It appears, then that this result solely dependent on the giftedness difference. Further. is selection to the summer school, rather than the gifted child's particular ability, defined a child as "gifted" in this study. This would suggest that selection or labeling may be sufficient to produce this effect rather than the specific abilities of the All gifted children produced higher scores than gifted child. nongifted siblings supporting the prediction that this facet of the relationship is one upon which they thrive and which raises their self image. Nongifted children in all groupings produced the lowest scores, suggesting an avoidance of competition and comparison which is predicted to be potentially damaging to their self image.

No significant differences in scores on the self image category could be found between gifted and nongifted children, despite predictions from the literature. Self image appears to be a function of different parts of the sibling relationship for each group. Parental treatment is the most influential predictor of high self esteem for both groups of children, and for the gifted sibling, competition is also self enhancing.

Research Question 3: How are perceptions affected by siblings' sex, sex of the gifted child, gifted child's sibling position and age gap?

The literature would have predicted that Siblings' sex. same-sex siblings might exhibit more instances of competition in turn, might damage the sibling relationship. The which, effect of siblings' sex on competition did indeed approach significance. Same sex siblings, regardless of the giftedness status of the respondent, produced higher scores on the general relationship variable. This suggests that the additional closeness produced by similarity of sex might be beneficial to the siblina relationship perbáps because increased of identification and mutual interests.

Contrary Gifted child's sibling position. to añy predictions, most friction and aggression were reported by both gifted and nongifted siblings when the gifted child was older. Not only did both gifted and nongifted child report more friction, but they reported similar amounts. This was also true for the "gifted younger" condition. These results indicate that both gifted and nongifted groups are perceiving their situations. similarly and realistically. This does not support Fisher's (1978) findings. She found that when the gifted child was younger, there was more familial disruption and this would have led to a prediction opposite from our results. An explanation for our findings might lie in a series of higher level interactions between various variables such as age gap and siblings'sex. Another explanation might lie in the fact that a

less able younger sibling is even more at a disadvantage than one equally matched as to ability. Therefore, efforts to disrupt the power hierarchy, thereby eliciting the desired parental intervention, might need to be intensified. Exploration of this finding should be the subject of further research.

Gifted child's sex. Predictably, more cooperation was found when the gifted child was female than male. Sutton-Smith and Rosenberg (1970) suggested that females generally showed more cooperative and nurturant * behavior than boys. In situations where there are two female siblings and one is labeled as gifted, one might predict more cooperation, with the gifted sibling perhaps playing a teacher or surrogate parenting [role. In conditions where the siblings are of different sex but where the female is the gifted child one might still expect more nurturant and cooperative behavior from the gifted child vis-a-vis the unlabeled sibling. There appears to be little effect of giftedness on these relationships.

A large age gap between the siblings is beneficial Age gap. to a good relationship. Scores from children who were two years or less apart were consistently lower on the measure of general relationship. Although age gap appeared to have no effect on measures of competition and comparison, the reduction of . increased difference in age seems closeness due to to be beneficial to a good sibling relationship. This result is consistent with predictions from the literature (White, 1975).

Summary of the findings

The areas of discrepancy in perceptions between the two

groups of children seem largely confined to specific areas of the relationship rather than a generalized difference. These areas are, in turn, often dependent factors of the sibling relationship other than the giftedness issue. As such they can often be predicted from the general literature on siblings regardless of any labeling. There are two exceptions, however, which are worthy of note and further research.

First in the area of competition and comparison, the gifted child consistently perceives the sibling relationship differently from the nongifted sibling. Since this finding defies any of the groupings by variables studied, it is suggested that this might be a quality of the sibling relationship when only one of the children is labeled gifted. This aspect of the relationship between the children is strongly tied to self concept, friction, and general tone of the sibling interaction and has very differential effects on the two groups of children. Generally. competition between the children is beneficial to the self image of the gifted child and encourages cooperation and communication. For the nongifted child, competition has primarily negative It appears to inhibit cooperation and damages the effects. overall general relationship. This finding implies that the use of cooperation as a means of attenuating competition might be Cooperation increases instances of potential ineffective. competition, favorable to the gifted sibling but potentially damaging to the nongifted child.

The second anomaly is the two-way interaction of gifted sibling position and friction. Results from this study appear to

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indicate that there is considerably more perceived friction by both children when the gifted child is older. This is a somewhat unexpected finding and deserves further consideration. It might be seen as an intensification of disruption to the familial power hierarchy. The nongifted younger sibling is doubly disadvantaged, both by age and ability and seeks to gain all the more by eliciting parental intervention, possiby one of the only ways of obtaining desired attention.

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Research Question 4: Are parents equally aware of both children's perceptions?

Parental assessments of the children's perceptions revealed several instances of divergence, however, there were similar numbers of statistically significant discrepancies for both gifted and nongifted groups. The relative lack of significant values attests to the fact that parents were generally well in touch with how their children perceived the sibling relationship. The degree to which they were not aware was the same no matter whether the child was labeled gifted or not. Further, mothers were, at most, only slightly more aware of their children's needs fathers. An explanation for these findings might be than the that the children who attended the McGill Summer School for the Gifted had parents who had shown themselves to be aware and eager to serve their children's needs. They had made a specific effort to enrol their children and inform themselves of their children's progress. The school also reported actively to the parents even during the four week program. For this reason, these parents may not be totally representative of all parents who have children of

differently perceived abilities and might be somewhat better informed as to their children's needs.

Two sets of questions showed consistent divergence in patterns of response between parent and child: "Generally, does (your child) feel that you think his or her work is as good as his or her sibling?" (adult) and "Generally do you think that your parents feel you do as well at school as your brother or sister?" (child).

The responses to these questions showed consistent and similar patterns of divergence for both gifted and nongifted children from both sets of parents. Both groups of children showed more instances of feeling that their work was perceived by the parents as being not as good as that of their sibling. Parents, by contrast, responded more frequently that their children would feel that they were perceived as being as good as their brother or sister. There appeared to be very little effect of labeling and parental responses showed similar patterns whether they were referring to the labeled "gifted" child or the unlabeled sibling. These findings suggest that neither child feels perceived as superior to a sibling by the parents. One possible explanation for this finding might be that there is always pressure on the children to do better so that the emphasis is constantly on what has still to be achieved rather than what has been accomplished 👫 Conversely, parents may be generally successful in hiding any differences in ability between the siblings. This is, however, less likely in view of the previous findings of this study which show how competitive the gifted children are and how aware they are of any comparisons made between them and a less able sibling.

Both mothers and fathers appeared to perceive their children's responses inaccurately for this question and perhaps a further investigation would produce more answers. It should be noted, however, that during the preliminary intracategory correlation analyses, this question did not correlate significantly within its own category of competition.

The only other questions which received unanimously significant chi-square values were: "Do you discuss with your children the reasons for their fighting?" (adult), and: "Do your parents discuss with you and your brother or sister the reasons why you were fighting?" (child). Both groups of children responded similarly and showed more instances of negative response. Parents, conversely, gave more instances of positive responses and showed little difference whether answering for the gifted or nongifted child. Both mothers and fathers responded similarly. This item once again did not correlate significantly with its own category of friction but does seem to indicate that what might be viewed as adequate explanation by a parent is not similarly perceived by the children.

Limitations of this study.

One of the primary limitations of this study is the questionnnaire teveloped for both children and adults and used to gather the information about the sibling relationship. Clearly the preliminary statistical analyses indicate that there may be overlap between the categories and there were some instances of negative correlation between individual items within categories. Subsequent research should include the further development of a reliable and valid instrument to measure family relationships and specifically sibling interaction. Even with the imperfections of the present questionnaire differences in perceptions between the labeled and unlabeled siblings are apparent and deserve further attention. Possibly other differences may be revealed as the instrument is improved.

The number of children in our sample precluded a more complex analysis-of-variance design. It was not possible to evaluate any higher level interactions, although it is entirely possible that such interactions might exist and indicate other effects of labeling a child as gifted. Furthermore, in order to establish more stringently that effects may be attributed to the labeling of giftedness, further investigations should include control pairs of siblings where both are gifted and where neither child is gifted. This design would allow for more direct comparison of intersibling relationships where children are seen as being of equal and unequal ability.

This study did not investigate the perceived abilities of the unlabeled sibling by the family. It might have been that the child not attending the McGill Summer School for Gifted and Talented was otherwise occupied or chose for some other reason not to attend. The nonattendance of the sibling need not be attributed to a perceived lesser ability. Further studies should perhaps take into account the actual abilities of the children by means of standardized tests and attempt to establish whether

"gifted" is an accurate label. Parents should also be asked whether they consider either or both of their children as gifted and how they would define the concept of "giftedness." These additional responses would allow for a better investigation of familial perceptions and expectations. It might also aid in discovering how each child's abilities are judged and viewed within the family unit.

Finally, although everyone was asked to complete the questionnaire privately and not compare them with the responses from other members of the family, this was difficult to monitor. , Questionnaires were sent home with the children and returned one week later. There was no assurance that privacy was respected Similarly there was no guarantee that all questions were answered accurately or truthfully. Further investigations should perhaps allow for children to answer the questionnaires in front of an observer so that individuality of response could be insured. Ideally, interviews should perhaps supplement questionnaire information in order to ascertain whether such responses are accurate. an in-home observation of the sibling Perhaps relationship and parent-child interaction might be included as a means of establishing familial perceptions.

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Questionnaires for Children and Adults and Information Sheet *

* Questionnaires have been photoreduced for inclusion in this thesis.

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Faculty of Education Department of Educational Psychology & Counselling

. McGill University Summer' School for Gifted and Talented Students

July 5, 1982

To Parents of Children in the 1982 McGill University Summer School for Gifted and Talented Students

Grades 6, 7, 8, 9, 10

In accord with the promise to inform you of all research to be undertaken in the school this summer, this note describes one of the studies to be undertaken with students in our grades 6 to 10.

The major purpose of this study is to gain an insight into the interactions between gifted students and their families, specifically their brothers and sisters. This study is being conducted at McGill under the supervision – of Dr. Bruce Shore. We intend to collect information by means of questionnaires sent home with the children.

Enclosed please find six questionnaires:

2 questionnaires for the father (one for each child) 2 questionnaires for the mother (one for each child) 1 questionnaire for the oldest child 1 questionnaire for the youngest child

Please fill these questionnaires out <u>separately</u> without consultation with your husband or wife or any other member of your family. Although answers can be compared at the end, we urge you not to change any of your answers.

Please make sure your name appears at the top of the questionnaire as well as on the cover sheet in case the pages become separated.

Please return the questionnaires with your child no /later than July 14, 1982.

Thank you very much for your cooperation. We look forward to sharing a summary of this study with you later in the year.

Postal address: 3700 McTavish Street, Montreal, PQ, Canada H3A 1Y2

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Questionnaires for Children

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DIRECTIONS:

On the following pages are a wertes of questions. Please read each question carefully and circle the number under the response that applies to you. Do not leave out any questions and circle only one number for each question.

THIS IS NOT A TEST and so everyone should give his or her own opinion for each question. Since everyone is expected to think differently, there are no right or wrong answers. Therefore, please respond to each question as honestly as you can.

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3.	Generally, do you think you do better at school . than your brother or sister?	1,	2	3	4					\ \	
4.	Do you think your parents teel you do better at school than you brother or sister?	1	2	٤	. 4				·		
5.	bo you ever feel you have to play down your good work at school so you don't make your brother or sister feel bad?	• 1	2	· 3	4		r				
٤.	Do you ever fuel that you have to do better in order to catch up to your brother or sister?	L	2	£	4	•		•	,		,
7.	Is there something you do better than your brother or bister?	. 1	2	+ 3 _.	4		,	•	۰,		
δ.	Are your wonievements in wonool in different areas from your brother or sister?	1	2	3	4		۲			•	
9.	Does your brother or sister help you with school work or show an interest in what you are doing?	1	2	3	4		•	•		1	
10 . 1	bo you help your brother or mister with school work or show an interest in what he or she is doing?	1	, 2	· 3	4		-			• •	
ır.	Do you do things together with your brother of sister (play, work, hobbies, etc.) because you really want to?	1	2	ڊر	4			,		ē	
12.	Do you do things together because you are made to (by teachers, parents, etc.)?	1	2	- 3	4	r	X .			· · ·	
13.	No you do things together as a whole family (camping, chores, pichics, weekends, etc.)?	1	/ 2	3	4	-	I	,			-
14.	Do you tell your brother or sister secrets or problems that you have?	, í ľ	, 2	3	4		-/			14 ×	
15.	'Does your brother or sister tell you secrets or problems?	1	2	٤	4		·/		3 ¥		
16.	Do you have the same kinds of interests, hobbies, or like doing the same kinds of things as your brother or sister	r? 1	,2	3	4		. 1	•		.*	
17.	be you share things with your brother or sister without being asked and because you really want to?	1	2	3	4				-	,	į
. 18.	Are you made to share things with your brother or sister even when you do not want to?	1	2	3	4				,		•
19.	when you are doing things together with your brother or Hister, do you make all the decisions and lead the activity?	1	2	3	4					*	•
20.	When you do things together with your brother or Sister does he or she make all the decisions and lead the activity?	1	2	3 '	4			-	۰ <i>۲</i> ~		
21.	bo your paments praise you and give you treats as much as they do your brother or sister?	1	2	3	4,	, ,	, -	·	م	ر ۳ ۱ ۶۵	۱
22.	Do your parents spend as much time alone with you as they spend alone with your brother or sister?	1	, 2	, 3 <u>,</u>	4	4		-	, ,	م ن م	• • 2 •
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S2-02 NAKE: (Choose ONLY one) 3 500 No your purents love you as much as they nove your brother or sister (even if in 23. 2 a different ways)? ' 10 2. he your parents help you with nomework or school 24. problems as much as they help your brothen or sister? 2 When you both bring report cards nome, do your parents 25. praise your efforts as much as they praise the efforts of your brother or sister? 1 ¥26. Do you think your parents would love you less if you failed in school? Do you think your parents would love you more if you 27. did better in school? When your parents talk about you and your brother or 26. mister with their iriends, do they mention you as often as they mention your brother or sinter (in a good way, of course!) . Do you think your parents prefer to spend time with you 29. than with your brother or sister? 30. Do your parents think your successes at school are as important as those of your brother or sister - even though they may be in different areas? 1 **'2** . 3 Do you feel more successful as a person than your 31. brother or alstar? 1 Do you feel you are less successful as a person than 32. your brotner or sister? ١. Is there something you do Which makes you very proud of 33,yourselt? 2 34.-- Do you ever feel lonely? Do you ever feel depresend or unhappy? 2 . 35. Do you ever feel different from other kids your age .6د or that they don't understand you? Do you prefer to play with kids who are older than you? 37. 38. Do you prefer to play with kids your age or younger? 2 39. Do you have more friends than your brother or sister? 3 Do you think your brother or sister is more popular than 40. you? Do you ever feel that you are not as good at things as your , 41. brother or sister is? Do you think you have enough opportunity to be private and 42. alone wnenever you need 1t? Do you like to be private and alone? 43. When something is bothering you do you find it easy to 44. to talk to someone about 11? Do you ever talk to your brother br sister about problems 45. and listen to his or her advice? 46. Does your brother or sister ever talk to you about problems and listen to your advice?

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3	5-02		•	NAME:							
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		* ***	,	G	leve	5)f ter	Iva		,	
47	. Does your problems?	family generally encour	age discussion of		- "	۲ ۲	2	• ·		•	
	he was all	a feel that you have a	one to talk to know	iould 1	· •	-	ر	4	٠		
40	. Do you eve understand	how you feel?	Sone to talk to who .		1.	2	3	• 4		-	
49	. When there family (an is your op	are decisions to be as nual holidays, summer v pinion asked for and con	wie which concern the Acations, trips, etc. midered?	whole .)	1	2	3	4			
50 ,	. when you a table) do bacause yo noone 18 j	we sitting as a family yourever feel you canno our,brother or sister ho interested in what you h	(say, around the dir of get a word in edge get the Conversation have to say?	ner Wise And	. 1	2	، ع	4	`	o ^{ft}	/
51	. When you a table) do	are sitting as family (s you talk more than your	ay, around the dinne brother or sister?	r	1	2	3	4			
52	. Do you ave sarcastic are better	and which hurt his or h with words than he or	rother or Bister which Her feelings because Bhe 187	h are you		<u>`</u> 2	` ٤	-			9-
53	. Does your the things with words	brother or sister over that he or she says be than you are?	hurt your feelings a cause he or she is c	ith leverer	1	2	ž	- 4 [°]			•
• 54	. Do you and	your brother or alsten	fignt?		1	2	3	4 = -	0		
55	• When your start the	brother or sister and y fighting?	ou fight, do you		1	2	3	4		Ŀ	• •
56	. When you f	ight with your brother	or sister, do you wi	n?	ı,	2	3	4			
57	. When you f win?	ight with your brother	or sister, does he o	r she	1	2	3	4		r.	
58.	. When you I start the	ight with your brother fight?'	or sister, does he c	r she	,1 • • •	2	з.	· ` .` 4	-		۴ ۱
59	Do your pa or sister?	arents get angry when yo	u fight with your br	other,	- 1	2	٤	4			ł
£0.	. Doiyour pa the reason	arents discuss with you so why you were fighting	and_your brother or ?	eister ,	1	ړ 2	3 .	4	,		•;
61.	. Do your pa La peaceful	white encourage you to solution to the proble	talk to one another m?	and find	1	2	3_	-4	-		、 ·
62. ;	. Do your pa Bister for	rents blame you more of the fighting between y	'ten than your brothe ou?	r or	1	2	3°	4			
63.	• Do your pa than you f	orents blame your brothe or the fighting between	r or minister more off you?	en 1	1	2	3	- 4			
64.	. Do you thi is to blam	nk your parents are fai tor fighting between	r when they try to you?	decide who	1	2	3	4		Ð	
65.	. Would you brother or	say you generally had a saster?	.good relationship wi	th your	1	2	3	4 .		,	1
ί υ.	. Do you lik	e your brother or siste	r?		* 1	2	3	4			ن د
•7•	. Do you eve	r wish, you had no broth	ers or sluters?		ູ 1	2	3	4	o e		· .
6δ.	. Do you eve	r wish your brother or	eleter were of the	x ,	•	1		-			-
	opposite s	•x?	,		1	2	ζ,	4		,.	•
		1 ⁸ J4					`			· '	-

questionnaires for Parents



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DIRECTIONS:

On the following pages are a series of questions sometimes used to assoribe brothers and sisters. Please read each question carefully and circle the number under the response that most closely describes the behaviour of your child. <u>Circle only one number for each question</u> and do not leave out any questions.

We have enclosed two questionnelies for each parent (one for each child) and we have inserted the name of the child in each case to avoid confusion.

Please complete the questionnaires <u>separately</u> without consultation with your humband or wife. You can, of course, compare your answers at the end <u>but please do not change any answers</u>. We do not expect both parents to give the same answers.

ThIS IS NOT A TEST so everyone should give his or her ofinion for each question. Since everyone is expected to think differently, there are no right or wrong answers. We encourage you, therefore, to respond to each question as honestly as you can.

Finally, we have used the term "<u>SIBLING</u>" to refer to "brother or sister" since it is shorter and less cumbersome.

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L	· ·	6 , 1	(Choo	*• <u>Q</u>	<u>vly</u> o	ne)		ъ
	4	PLEASE CIRCLE THE NUMBER UNDER THE RESPONSE THAT APPLIES TO YOU. DO NOT LEAVE OUT ANY QUESTIONS.	3	Neveł	Rarely	° Often,	Always		
1.	Does ach8ol work o	compete with his or her sibling regardin r scademic performance?	К.	1	2	3.	4	£	•
2.	How often do ; or her siblin	you compare work with the of his	ı	1	2	3	4	• * * *	•
3.	Is	aware of your comparison of his or her work his or her sibling?	ĩ	1	2	ŝ	4	* [*]	
4.	Generally, do hér work 18 a	es feel that you think his or s good as his or her sibling?	•	1	2	3	, 4		· 7 .
5• [°]	Do you ever e in order to s	ncourage to downplay his or her wo pare the feelings of his or her sibling?	ork	ì	2	3	1 4	· · · · · · ·	
6.	Do you ever a to match the	ncourageto improve his or her wo performance of his or her sibling?	ork .	1	2	3	4	-	• • •
7.	Is there some his or her si	thing can do better than bling?		1	2	Ś	4	ء ۵	, '
в. Т	Are of his	dohievements in different arous from.		1	2	3.	э 4	• • •	· · ·
9.	Does work or show	ever help his or her sibling with school an interest in what he or she is doing?		1	2	ូ3	4.	ې د ۰ ،	، م ۱، م ن م
10.	Does with his or h	do things of his or her own free will er sibling (play, work, hobbies, etc.)?		1.	2	3,	4	•	8
11.	Do you make even when he	do things with his or her sibling or she really does not want to?		1	- 2	,' 3	- 4	* *	, , , , , , , , , , , , , , , , , , ,
12.	· Do' you as a w chores, picni	whols family do things together (camping,	,	1 ,	, 2	3	- 4	• •	
-13.	Does	appear to confide in his or her sibling?		1	2	3	• 4		
14.	Does	like to do the same kinds of things and . kinds of interests as his or her solling?	,	1	2	3	, 4	e , s	ن بن ال ^{الم}
15.	Does of his or her	1 share things with his or her sibling own free will?		1	2	3	4'	ni e nin) [/] · ·
16.	Do you make	share things, with his or her " when he or she does not want to?		1	2	رع	4	•	۰ ۱ ۱
17.	When the chil	dren do something together, how often does take the lead in the activity and sions?		1	2	3	۰ 4	.	۵ () ۱۹۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۱۹۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰
18.	Do you think as his or her things)?	you praise and reward as much sibling (even if for completely different		1	2	3	4		D;
19,	Do you spend do with him c	as much time alone with as you or her sibling?		1	ሌ	3	• 4	л,	
20.	Do you help problems as a	with homework or school nuch as you help his or her sibling?		1	4	3.	4	·	•
21.	Do you think much as you 1 different way	you show that you love as ove his of her sibling (even if in very a)?	·~ .	1	2	3	° 4	5ª	ج ب ب
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		(ie ve	Pare	UI ter	Alva			
22.	When report cards are brought home, do you praise the efforts and achievements of as much as those of his or her sibling?	1	₹ 2	د	6a 4			
23.	Are you as proud ofas you append of his or her sibling?	1	2	3	4			
2 4 - .	Are you ambitious for to succeed in school?	1	2	3	4		r	
25.	When you are 'talking about your children's achievements to friends or relatives, do you mention name as much as that of his or her sibling?	1	. 2	3	4			
26	Dr. was and the second the second of	-			•			
20.	nore than in the company of his or her sibling?	1	. 2	3	-4			
27.	Do you think efforts and achievements are as important as those of his or her subling?	1	. 2	٤	4			
28.	Do you think fuels more successful as a person than his or her sibling?	1	. 2	3	4			
29.	Do you think feels less successful as a person than his or her sibling?	1	. 2	3	4			
30.	Is there something can do which makes him or her feel very proud?	1	. 2	3	4			
31.	Do you thinkever feels lonely or left out?	1	. 2	3	4			
32.	Do you think ever feels depressed or unhappy?	1	. 2	3	4			
33.	Does feel different from other kids the same age or that they do not understand him or her?	1	. 2	3	4	ì		
34.	Does prefer to spend time in the company of children who are older?	د	2	3	4			
35.	Does prefer to spend time in the company of children who are the same age or who are younger?	-]	1 2	3	4			
30.	Is more popular among other youngsters than his or her sibling?] •••	. 2	3	4			
37.	Doesfeel inferior to his or her sibling?	E	2	3	4			
38.	Doesfeel superior to his or her sibling?	•]	L 2	3	4			
39.	Does have enough opportunity to be private and alone when he or she expresses the desire?	1	L 2	3	4			
40.	Doeslike to be private and alons?	• 1	L 2	3	4			•
41.	besfind it easy to talk to someone when he ` or she has something which is bothering him or her?	1	L 2	3	4	5		
42.	Does ever talk to his or her sibling about problems and listen to his or her advice?	I	L 2	3	4		×	
43.	As a family generally, is there open discussion of problems	7	1 2	3	4			
44.	Boes ever feel that he or she has noone to	1	L 2	3	4	•		
45.	When there are decisions to be made which concern the family as a whole (annual holidays, summer vacations, etc.) do you ask for opinion and is it considered?		L 2	3	4		•	\$
46.	When you are sitting together as a fumily (say, around the dinner table) does get as such opportunity to express his or her opinion as his or her sibling?	1	. 2		. 4			

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	•		(Che	ose <u>0</u>	NLY o	ne)	
47.	Dossever use sarcasm or say harsh things		Never	Rarely	Often	. Always	
• ٢	at hurting his other feelings?		1	2	3	4	
48.	Does ever fight with his or her brother or sister?		1	2	3	4	
49.	Does ever start the fight with his or her brother Or sister?		1	2	3	4	
50.	Does ever win the fight with his or her brother or sister?		1	2 •	3	4	
51.	Is your reaction to fighting between the children an angry one?	د م	1	17 2	`د	4	4
52.	Do you discuss with both children the reasons for their fighting?		1	2.	3	4	
53.	Do yoù encourageto talk to his or her brother or sister and find a peaceful solution to the problem?	r	ı	2	3	4	
54.	Do you tend to blame more than his or her brother or sister for any fighting between them?		_1	2	د	4	
55.	Does perceive you as fair in your judgement of who was to blame for any fighting between the children?	۲)	1	2	í 3	4	
56.	Would you say generally that likes his or her brother or sister?		ہ ۱	2	3	4	
57.	Doesfeel the equal of his or her brother or sister?	r	1	2	3	4	
58.	Would you characterize the relationship between the children as good?		ı	,		٨	

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ITEN-BY - ITEN HATIONALE CO QUESTIONNAIRE

Competition and Comparison - Questions 1 to 8

Competition occurs naturally as children vie for parental attention (Puner, 1952). Closeness between siblings fosters competition because of shared interents (Bank & Kahn, 1982). Ponitive comparison and competition which results in superior performance enhances self esteem. Negative comparison results in lowered self esteem and possible deidentification (Tesser, 1980) and underachievement (Whitmore, 1981).

Criterion for high score: much competition and comparison with perceived better performance.

Question (child)	Question (adult)	r Rationale
 Do you compare the work you do at school with the work your brother or sister does at school? 	 Does (your child) compete with his or her sibling regarding school work or academic performance? 	Comparison occurs naturally and inevitably but in varying degrees. Closeness increases opportunities for comparison (Bank & Kahn, 1982). A more able sibling will have self esteem enhanced by positive comparison and will welcome opportunities for it (Tesser, 1980).
No you think your parents compare the work you and your brother or sister do at school?	(How often do you compute (your child)'s work with that of his or her sibling?	Parenth met the tone for competition and comparison (Puner, 1952). They are often unaware that children realize their comparisons (Bridges, 1979; Rowlands, 1974).
3. Generally, do you think you do better at school than your brother or" sister?	J. Jr (your child) aware of your comparison of his or her work with that of his or her nibling?	Children will naturally compare themselves to a mibling in order to establish identity and self worth (Bank & Kahn, 1982; Sutton-Smith & Rosenberg, 1970). Problems arise when comparison in constantly negative (Bank & Kahn, 1982; Gantrock et al, 1980).
1. Do you think your parents feel you do better at school than your brother or sister?	4. Generally, does (your child) feel that you think his or her work as good as his or her sibling?	Parents may perceive themselves us fair in their treatment of sublings when in fact this is not so (Bridger, 1979). Parental estaem and valueing is an important predictor of how children feel ; about themselves (Santrock et al, 1980).
b) Do you ever feel you have to play down your good work at school so you don't make your brother or sister feel bad?	b) Do you ever encoury;e (your child) to downplay his or her work in order to `spare the feelings of his or her sibling? '	An advantaged mibling may feel guilty vis-A-vis a less able one and hide achievements in order to preserve that child's self esteem (Bank & Kahn, 1982). Parents are aware of issues of equality and may encourage the gifted child to downplay achievements in order to equalize the discrepancies between the children (Cornell, 1981; Fisher, 1978).
. Do you ever feel that you have to do better in order to catch up to your brother or sister? *	.0. Do you ever encourage (your shild) to improve hill or her work to match the performance of him or her sibling? •	A journyer child may feel the need to catch up to in older sibling (Puner, 1952). An able sibling clone in age may act as a feference point to one who is less able (Bank & Kahn, 1982).
Is there something you do better than your brother or sister?	7. Is there something (your child) can do better thin his or her sibling?	In a well functioning framily no one sibling will contperform the other in all arons (Ross & Milgram, 1984). Each child should have an area in which he or she excells (Bank & Kahn, 1982; Lehr & Kantor, 1975). When one sibling is always outperformed by wither, this may lead to excessive friction and deidentification (Tesser, 1980).

This item underwart a reversal in coding in the statistical analysis.

(Competition and comparison, contid)

Question (Child)	- Question (adult)	Nationale
8. Are your achievements in school in different äreas from your brother or sister? *	8. Are (your child)'s achievements in different areas from those of his or her sibling? *	Partial differentiation or deidentification will lead sublings to different areas of interest in order to avoid competition and subling rivalry (Bank & Kahn, 1982).

Cooperation - Questions 9 to 20

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Cooperation may imply lack of hostility and competition (Puner, 1952) and identification with shared mutual interests. Such identification indicates perceived sameness (Schachter et al, 1976; Tesser, 1980). <u>Criteria for high score</u>: much cooperation and perceived mutual interests.

Sugation (Child)	Question (Adult)	Rationale
	0 Deep (usual shild) sugar hele	Turching a near on aibling may be beneficial
 9. Does your brother or sister help you with school work or show an interest in what you are doing? 10. Do, you help your brother or sister with school work or show an interest in what he or she is 	9. Does (your child) ever help his or her sibling with school work or show an interest in what he or she is doing? (question answered for each child separately).	Tenching a peer of dibling may be beneficial to intellectual growth (Zajonc & Markus, 1979). A younger or less able sibling is more ready to accept help from an older one when the age gap is large (Cicirelli, 1975).
doing?		ŕ
 Do you do things together with your brother or sister because you really want to? Do you do things together because you are made to?* 	 10. Doeg (your child) do things of his or her own free will with his or her sibling? 11. Do you make (your child) do things with his or her sibling even when he or she does not really want to?* 	Willingly shared interests imply identification in those areas (Bank & Kahn, 1982, Schachter et al, 1977; Tesser, 1980). If siblings are made to spend time together against their will, they may feel resent- ful and become more aggressive (Bank & Kahn, 1982; Sutton-Smith & Rosenberg, 1970)
13. Do you do things together as a whole family?	12. Do you, as a whole family, do things together?	Gifted families tend to emphasize shared activition and pastimes (Cornell, 1982; Fisher, 1978).
14. Do you tell your brother or sister secrets or problems that you have?	l]. Does (your child) appear to confide in his or her sibling?	Shared confidences imply perceived sameness and identification, mutual respect for each other's opinions (Bank & Kahn, 1982).
or sister tell you secrets or problems?	, , ,	
16. Do you have the same kinds of interests, hobbles, or like doing the same kinds of things as your brother or sister?	14. Does (your child) like to do the same kinds of, things and have the same kinds of interests as his or her sibling?	Shared interests imply identification (Dank & Kahn, 1982).
 17. Do you share things with your brother or sister without being asked because you really want to? 18. Are you made to share things with your brother or sister even when you do not want to? * 	 15. Does (your child) share things with his or her sibling of his or her own free will? 10. Do you make (your child) whare things with his or her sibling, even when he or she does not want to? 	Sharing of one's own free will implies lack of hostility and competition in that area. Parents may often be unaware of the necessity for each child to have pouneenions which are exclusively his or her own (Parker, 1975; Strang, 1960).

 This item underwent a reversal in coding in the statistical analysis 0

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(Cooperation, Cont'd)

Question (Child)	Question (Adult)	Rationale
 19. When you are doing things together with your brother or sister, do you make all the decisions and lead the activity? 20. When you do things together with your brother or sister, does he or she make all the decisions and lead the decisions are shown as the decisions are decisions and lead the decisions are decisions and lead the decisions are decisions	17. When the children do something together, how often does (your child) take the lead in the activity and make the decisione?	Well functioning siblings are equal within the power hierarchy with respect to parental authority and allow a flexibility of player parts (Bank &Kahn, 1982; Kantor & Lehr, 1975). Gifted children may be manipulative and organize less able siblings (Fine, 1980; Rowlands, 1974).

Perceived Parental Treatment - Questions 21 to 30

Parental relations with a gifted child may be qualitatively different (Cornell, 1981; Fisher, 1978) and parent-child interaction with siblings will influence how the children view and interact with each other (Dank & Kahn, 1982; Kantor & Lehr, 1975).

Question (Child)	Question (Adult)	Rationale
21. Do your parents praise you and give you treats as much as they do your brother or sister?	18. Do you think you praise and reward (Your child) as much as his or her sibling?	It is easier to praise and reward the child who brings most credit to the family (Bridges, 1979). Parents may often be unaware of the inequality of their treat-' ment of siblings (Bridges, 1979).
22. Do your parents spend as much time alone with you as they spend alone with your brother or sister?	19. Do you spend as much time alone with (your child) as you do with his or her sibling?	Parents of gifted children express feelings of special closeness and affection for their gifted child (Cornell, 1981; Fisher, 1978). Also gifted children may be more demanding of parental time (Rowlands, 1974).
23. Do your parents love you as much as they love your brother or sister? '	21. Do you think you show that f you love (your child) as much as you love his or her sibling?	Love may become synonymous with achievement so that a less able sibling may feel less loved (Povey, 1980; Strang, 1960).
24. Do your parents help you with homework or school problems as much as they help your brother or gister?	20. Do you help (your child) with homework or school problems as much as you help his or her sibling?	Parents may become overinvolved in the gifted child's education and needs (Povey, 1980; Strang, 1960).
25. When you both bring report cards home, do your parents praise your efforts as much as they praise the efforts of your brother or sister?	22. When reports are brought home, do you praise the efforts and achievements of (your child) as much as those of his or her sibling?	Parents find it naturally easier to praise and boast of a child who achieves most (Povey, 1980). Danger of equating effort with achievement may occur (Rowlands, 1974).

Criteria for high score: equal or better perceived parental treatment vis-a-vis a sibling.

 * This item underwent a reversal in coding in the statistical analysis.

(Perceived Parental Treatment - Cont'd)

	uestion (Child)	4	uestion (Adult)	Rationale
				Children mad we man the permental effection
20.	Do you think your	1 ²³ • ·	Are you as prous of your	the barn tight to perceive parental allection
	parents would love		child) as jou are of his	as being tied to school achievement and
1	you less if you		or her/sibling?	success (Povey, 1980; Strang, 1960).
	failed in school?*	1	,	Paren's also express more pride and
27.	Do you think your	24-	Are you ambitious for '	ambition for gifted children (Fisher, 1978).
	parents would love you		(your child) to succeed	
	more if you did	l,	in school?	· .
	better in school?*	1		
28.	When your parents talk	25.	When you are talking about	Parents often boast and mention more
	about you and your		Jour childign'u achievementu	often the child who achieves the most - **
	brother or ter with		to friends or relatives, do	(Rowlands, 1974; Strang, 1960).
	their friends, do they		you mention (your child)'s	1
	mention you/as often as		name as much as that of	, /
	they mention your		his or her sibling? -	
ł	brother or sister ?	1		á l
29.	Do you think your	26.	Do you prefer to spend time in	Parents of gifted children profess to
	parents prefer to spend	1	the company of (your child)	injoy clover and more intimute parent-child
	time with you than with		more than in the company of	relationshive (Cornell, 1981; Figher, 1978).
	your brother or suster?		his or her sibling?	
30.	Do your parents think	127	Do you think (your child)'s	, Parents may equate effort and achievement ,
1	Your successes at studol	1	efforts and achievements	and concentrate only on the highest
]	Survey and the second second			1 1 1 1090)
Sel.	important as those of your brother or sister? f Image - Questions 31 to Negative comparison with	4 <u>3</u>	are as important as those of his or her-sibling?	or self concept (Tesser, 1980). Differences
Sel.	important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high score</u> :	43 1 a be 1 abel : post	are as important as those of his or her-sibling? 	achievements (Povey, 1980).
Sel.	important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high scores</u>	43 h a be lubel : post	are as important as those of his or her-sibling? stter able sibling may lead to po thed gitted children and unlabell tive self image.	achievements (Povey, 1980).
<u>Sel</u> bet	important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high acores</u> Do you feel more success-	43 h m be lubel : post - 28.	are as important as those of his or her-sibling? stter able sibling may lead to po iled gitted children and unlabell itive self image. No you think (your child)	achievements (Povey, 1980).
<u>Sel</u> . bet	important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high scores</u> Do you feel more success- ful as a person than your brother or success	43 h a be label : post - 28.	are as important as those of his or her-sibling? stter able sibling may lead to po iled gifted children and unlabell itive self image. No you think (your chilů) feels more successful as a	achievements (Povey, 1980).
<u>Sel</u> bet	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high scores</u> Do you feel more success- ful as a person than your brother or sister?	43 h a be label post	are as important as those of his or her-sibling? etter able sibling may lead to po thed gitted children and unlabell ative self image. Do you think (your child) feels more successful as a person than his or her sibling?	comparison with a sibling will affect a
<u>Sel</u> betr	<pre>important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high score:</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less</pre>	43 h a be lubel post - 28. 29.	are as important as those of his or her-sibling? etter able sibling may lead to po thed gitted children and unlabell ative self image. No you think (your chilů) feels more successful as a person than his or her sibling? No you think (your child)	comparison with a sibling will affect a child's self image. When comparison
<u>Sel</u> betr 31.	<pre>important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high score</u>: Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person</pre>	43 h a be lubel post - 28. 29.	are as important as those of his or her sibling? stter able sibling may lead to po thed gifted children and unlabell stive self image. No you think (your chilů) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a	comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered
<u>Sel</u> bett	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high score</u> : Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or	43 h a be lubel post - 28. 29.	are as important as those of his or her-sibling? etter able sibling may lead to po filed gifted children and unlabell ative self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a person than his or her	achievements (Povey, 1980).
<u>Sel</u> betr 31.	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high score</u> : Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?*	43 n a be lubel post - 28. 29.	are as important as those of his or her-sibling? Stter able sibling may lead to po- thed gitted children and unlabell stive self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a person than his or her sibling?*	achievements (Povey, 1980).
<u>Sel</u> . betr 31. 32.	important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high scores</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you	43 n a be lubel : po81 2%. 2%.	are as important as those of his or her-sibling? stter able sibling may lead to po filed gitted children and unlabell stive self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a person than his or her sibling?* Is there something (your	achievements (Povey, 1980).
<u>Sel</u> betr 31. 32.	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high acores</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very	43 1 a be 1 label 28. 29. 30.	are as important as those of his or her-sibling? stter able sibling may lead to po iled gifted children and unlabell itive self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a person than his or her sibling?* Is there something (your child) can do which makes	achievements (Povey, 1980).
<u>Sel</u> betr 31. 32.	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high acores</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself?	43 1 a be 1 a be 28. 29. 30.	are as important as those of his or her-sibling? Atter able sibling may lead to po- tiled gifted children and unlabell attive self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (jour child) feels less successful as a person than his or her sibling?* 1s there something (your child) can do which makes him or her feel very proud?	achievements (Povey, 1980).
<u>Sel</u> .	important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high score</u> : Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? bo you ever feel	43 a b be lubel 28. 29. 30.	are as important as those of his or her-sibling? etter able sibling may lead to po- tiled gitted children and unlabell tive self image. Bo you think (your child) feels more successful as a person than his or her sibling? Bo you think (your child) feels less successful as a person than his or her sibling?* 1s there something (your child) can do which makes him or her feel very proud? bo you think (your child)	achievements (Povey, 1980). or self concept (Tesser, 1980). Differences ea siblings have been noted (Cornell, 1981). Comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered (Santrock et al, 1980, Tesser, 1980). Every child needs an area of achievement free from competition in which he or ohe can excell (Ross & Milgram, 1982).
<u>Sel</u> betr 31. 32. 1 33.	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high score</u> : Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? Do you ever feel lonely?*	43 n a be lubel : posn 28. 29. 30.	are as important as those of his or her-sibling? etter able sibling may lead to po- tiled gitted children and unlabell itive self image. Ho you think (your chilů) feels more successful as a person than his or her sibling? Ho you think (your child) feels less successful as a person than his or her sibling?* 1s there something (your child) can do which makes him or her feel very proud? bo you think (your child) sver feels lonely or left	comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered (Santrock et al, 1980, Tesser, 1980).
31. 32. 33.	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high score</u> : Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? Do you ever feel lonely?*	43 n a be lubel : posn 28. 29. 30.	are as important as those of his or her sibling? etter able sibling may lead to po thed gifted children and unlabell ative self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a person than his or her sibling?* Is there something (your child) can do which makes his or her feel very proud? No you think (your child) ever feels lonely or left out?*	comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered (Santrock et al, 1980, Tesser, 1980). Every child needs an area of achievement free from competition in which he or she can excell (Ross & Milgram, 1982). Loneliness implies feelings of alienation. Gifted children may feel alienated because of discrementing between their intele
31. 33. 34.	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high scores</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? Do you ever feel lonely?*	43 n a be lube) : pos 28. 29. 30. 31.	are as important as those of his or her-sibling? etter able sibling may lead to po filed gifted children and unlabell ative self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a person than his or her sibling?* Is there something (your child) can do which makes him or her feel very proud? Do you think (your child) ever feels lonely or left out?*	achievements (Povey, 1980). or self concept (Tesser, 1980). Differences ed siblings have been noted (Cornell, 1981). Comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered (Santrock et al, 1980, Tesser, 1980). Every child needs an area of achievement free from competition in which he or she can excell (Ross & Milgram, 1982). Loneliness implies feelings of alienation. Gifted children may feel alienated because of discrepuncies between their intel-
<u>Sel</u> j]1. 32. 1 33.	important as those of your brother or sister? <u>f Image - Questions 31 to</u> Negative comparison with ween the self concepts of <u>Criteria for high acores</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? Do you ever feel lonely?*	43 1 a be 1 lubel 28. 29. 30. 31.	are as important as those of his or her-sibling? Atter able sibling may lead to po filed gifted children and unlabell ative self image. No you think (your child) feels more successful as a person than his or her sibling? No you think (your child) feels less successful as a person than his or her aibling?* 1s there something (your child) can do which makes him or her feel very proud? No you think (your child) ever feels lonely or left out?*	achievements (Povey, 1980).
31. 32. 33.	<pre>important as those of your brother or sister? f Image - Questions 31 to Negative comparison with ween the self concepts of <u>Criteria for high scores</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? Do you ever feel lonely?*</pre>	43 a be lubel 28. 29. 30. 31.	are as important as those of his or her-sibling? etter able sibling may lead to po- tiled gitted children and unlabell tive self image. Do you think (your child) feels more successful as a person than his or her sibling? Do you think (your child) feels less successful as a person than his or her sibling? ls there something (your child) can do which makes him or her feel very proud? Do you think (your child) ever feels lonely or left out?	achievements (Povey, 1980). or self concept (Tesser, 1980). Differences ea siblings have been noted (Cornell, 1981). Comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered (Santrock et al, 1980, Tesser, 1980). Every child meeds an area of achievement free from competition in which he or she can excell (Ross & Milgram, 1982). Loneliness implies feelings of alienation. Gifted children may feel alienated because of discrepuncies between their intel- lectual capacities and those of their peers (Chen, 1980).
31. 32. 33. 34.	<pre>important as those of your brother or sister? f Image - Questions]1 to Negative comparison with ween the self concepts of <u>Criteria for high score:</u> Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? Do you ever feel lonely?* Do you ever feel depressed or unbaces?*</pre>	43 a b be lubel 28. 29. 30. 31. 32.	are as important as those of his or her-sibling? etter able sibling may lead to po- tiled gitted children and unlabell tive self image. Ho you think (your child) feels more successful as a person than his or her sibling? Ho you think (your child) feels less successful as a person than his or her sibling?* 1s there something (your child) can do which makes his or her feel very proud? Ho you think (your child) ever feels lonely or left out?* 4 Ho you think (your child) ever feels lonely or left out?*	<pre>achievements (Povey, 1980). or self concept (Tesser, 1980). Differences ea siblings have been noted (Cornell, 1981). Comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered (Santrock et al, 1980, Tesser, 1980). Every child needs an area of achievement free from competition in which he or ohe can excell (Ross & Milgram, 1982). Loneliness implies feelings of alienation. Gifted children may feel alienated because of discrepuncies between their intel- lectual capacities and those of their peers (Chen, 1980). Alienation may become internalised to self</pre>
<u>Sel</u> betr 31. 32. 1 33. 34.	<pre>important as those of your brother or sister? f Image - Questions]1 to Negative comparison with ween the self concepts of <u>Criteria for high score</u>: Do you feel more success- ful as a person than your brother or sister? Do you feel you are less successful as a person than your brother or sister?* Is there something you do which makes you very proud of yourself? Do you ever feel lonely?*</pre>	43 a b be lubel 28. 29. 30. 31. 32.	are as important as those of his or her-sibling? etter able sibling may lead to po- tiled gitted children and unlabell itive self image. Ho you think (your chilů) feels more successful as a person than his or her sibling? Ho you think (your child) feels less successful as a person than his or her sibling?* 1s there something (your child) can do which makes his or her feel very proud? bo you think (your child) ever feels lonely or left out?*	 achievements (Povey, 1980). achievements (Povey, 1980). or self concept (Tesser, 1980). Differences end siblings have been noted (Cornell, 1981). Comparison with a sibling will affect a child's self image. When comparison is negative, self esteem is lowered (Santrock et al, 1980, Tesser, 1980). Every child needs an area of achievement free from competition in which he or one can excell (Ross & Milgram, 1982). Loneliness implies feelings of alienation. Gifted children may feel alienated because of discrepuncies between their intellectual capacities and those of their peers (Chen, 1980). Alienation may become internalised to self valuenation accompanied by feelings of worth-leave (W estimation is the set of the

This item underwent a reversal in coding in the statistical analysis.

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(Self Image - Cont'd)	• <i>q</i>	* /
•Question (Child)	Question (Adult)	Rationale
36. Do you ever feel different from other kidssyour age or that they don't understand you?*	33. Does (your child) ever feel different from other kids the same age or that they do not understand him or her?*	Gifted children might feel different and allenated from their peers (Meckstroth & Webb, 1982). Parents might perceive differences even when children do not.
 37. Do you prefer to play with kids who are older than you?* 38. Do you prefer to play with kids your age or younger? 	 34. Does (your child) prefer to spend time in the company of children who are older?* 35. Does (your child) prefer to spend time in the company of children who are the same age or younger? 	Gifted children may gravitate toward mental or intellectual peers who are chronologically older them and feel alienated from children the same age (Rowlands, 1974; Strang, 1960).
 39. Do you have more friends than your brother or sister? 40. Do you think your brother or sister is more popular than you?* 	<pre>36. Is (your child) more popular among other youngstere than his or her sibling?</pre>	The area of popularity and social ability is one where siblings have the power to hurt one another and experience negative comparison. It is also an area where partial differentiation may occur (Ross & Milgram, 1982).
41. Do you ever feel that you are not as good- at things as your brother or sister is?*	37. Does (your child) ever feel inferior to his or her sibling?*	Negative comparison results in poor self concept (Santrock et al, 1980; Teaser, 1980).
42. Do you think you have enough opportunity to be private and alone whenever you need it?	39. Does (your child) have enough opportunity to be private and alone when he or she expresses the desire?	Every child needs an opportunity for privacy and protection from intrusions (Parker, 1975).
43. Do you like to be private and alone?	40. Does (your child) like to be private and alone?	Cifted children often select solitary pursuits (Rowlands, 1974; Strang, 1960).

Communication - Questions 44 to53

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Communication between family members is the basis for healthy interaction (Bridges, 1979; Kantor & Lehr, 1975). Shared communication between sublings implies respect and mutual trunt (Bank & Kahn, 1982). However, gifted children may monopolize verbal interaction leaving little opportunity for an unlabelled sibling to express views and opinions (Bank & Kahn, 1982; Fine, 1980).

Criteria for high score: equal or better perceived opportunities to voice ideas and opinions. ,

 44. When something is 41. Does (your child) find it easy to talk to someone find it easy to talk when he or she has something to someone about it? 45. Do you ever talk to 42. Does (your child) ever talk to his or her siblin/; about problems or listen to his or her advice? 46. Does your sibling ever talk to you about 	Question (Child)	Question (Adult)	Rationale		
 45. Do you ever talk to 42. Does (your child) ever your brother or sinter about problems or listen to his or her advice? 46. Does your sibling ever talk to you about 	44. When pomething is bothering you do you find it easy to talk to someone about it?	41. Does (your child) find it easy to talk to someone when he or she has something bothering him or her?	A general indication of how much a child may vocalize thoughts and feelings (no reference).		
advice? 46. Does your sibling ever	45. Do you ever talk to your brother or sister about problems or	42. Does (your child) ever talk to his or her sibling about problems and	Confidence in one's sibling implies respect, trust and partial identification (Bank & Kahn, 1982).		
problems and listen to	46. Does your sibling ever talk to you about problems and listen to	listen to his or her advicer			

This item underwent reversal in coding in the statistical analysis.

(Communication - Cont'd)

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Question (Child)	Question (Adult)	Rationale
47. Does your family generally encourage discussion of problems?	43. As a family generally, is there open discussion of problems?	Communication and open discussion is at the heart of good family interaction (Bridges, 1979; Freeman, 1979).
49. When there are decisions to be made which concern the whole family, is your opinion asked for and considered?	45. When there are decisions to be made which concern the family as a whole, do you ask for (your child)'s opinion and is it considered?	Children need to feel they have some input and effect on the organization of their lives (Kantor & Lehr, 1975).
50. When you are sitting as a family do you ever feel you cannot get a word in edgewise bacauge your brother or sister hogs the conversation and noone is interested in what you have to say?*	46. When you are sitting together as a family, does (your child) get as much opportunity to express his or her opinion as his or her sibling? >	Gifted children may monopolise conversa- tions because of higher verbal ability (Rowlands, 1974).
51. When you are sitting as a family do you talk more than your brother or sister?		
48. Do you ever feel that you have noone to talk to who would understand how you feel?*	44. Does (Your child)/ever feel that he or the has noone to talk to who would understand- how he or she feelo?*	Lack of positive self concept which derives Trom feelings of differentness or deidenti- fication (Tesser, 1980) or negative comparison may result in isolation or alienation (Meckstroth & Webb, 1982).
52. Do you ever say things to your brother or sister which are sar- castic and which hurt his or her feelings because you are better with words than he or she is?	 47. Does (your child) ever use barcasm or say harsh things to his or her sibling; which are aimed at hurting his or her feelings? 	Gifted children may use their superior verbal powers to put down less able siblings (Fine 1980).
53. Does your brother or sister ever hurt your feelings with the things he or she says because he or she is cleverer with words than you are?*		

* This item underwent reversal in coding in the statistical analysis.

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Friction - Questions 54 to 64

Moderate amounts of friction are inevitable and beneficial to a subling relationship (Puner, 1952, White, 1975). However excessive aggression between the sublings may indicate unequal power struggles, deidentification or an attempt to gain purchtal attention (Bank's kahn, 1982; Teuser, 1980).

Criteria for high score: much perceived friction and or positive outcomes

Question (Child)	Question (Adult)	Kationale
54. Do you and your brother or sister fight?	48. Does (your child) ' ever fight with his or her brother or dister?	Aggression between siblings is normal and can be positive (Puner, 1952; White, 1975)
5. When your brother or sister and you fight, do you start the fighting? *	49. Does (your child) ever start the fight with his or her brother or sister? *	Children whose self image is threatened by negative comparison may introduce friction to reduce closeness (Tesser, 1980).
by. When you fight with your brother or sister does he or she start the fighting?		
56. When you fight with * your brother or sister do you win?	50, Does (your child) ever win the fight with his or "her brother or sister?	When siblings have a healthy and equal relationship, no one child clearly prevail: (Bank & Kahn, 1982, Kantor
57. When you fight with your brother or sister, does h or she win?*		& Lehr, 1975).
59. Do your parents get 'angry when you fight ' with your brother or wister?	51. Is your reaction to the fighting between the children an angry one?	Anger by parents for negative feelings expressed by siblings may engender guilt and feelings of worthlessness in the children (Cornell, 1981; Fine, 1980).
60. Do your parents discuss with you and your brother or sister the reasons why you were fighting?	52. Do you discuss with both children the reasons for their fighting?	Parents should attempt to accept bad icelings and help children understand and respect seach other's differences (Chen, 1982).
(1., Do your parents encourage you to talk to one anothe and find a peaceful solution to the problem?	bs. Do you encourage (your child) to talk to his or her sibling and find a peaceful solution to the problem?	ر (عبع above)
62. Do your parents blame you more often than they blame your brother or sister for the fighting between you? *	54. Do you tend to blame (your' child) more than his or her sibling for any fighting	In well functioning families no child clearly prevails over the other (Kentor & Lehr, 1975).
63. Do your parents blame your brother or elster more often than you for the fighting between you?	between them?	-
64. Do you think your parents are fair when they decide who is to blame for fighting betwee you?	55. Does (your child) perceive you as fair in your judgement of who was to blame for any fighting between them?	Although children will perceive unfairness in individual instances, parents can attempt an overall fairness in treatment (Levi, 1977)-

* This item underwent a reversal in coding in the statictical analysis.

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General Relationship - Questions 65 to 68

This category was designed to assess the overall tone of the sibling relationship. <u>Criteris for high score</u>: overall positive response

[Question, (Child)	Question (Adult)	Rationale
65.	Would you say you generally had a good relationship with your brother or sister?	58. Would you characterize the relationship between the children as good?	General assessment of sibling interaction (no reference).
66.	Do you like your brother or Bister?	56. Would you say generally that (your child) likes his or her brother or sister?	Implies a closeness and identification to- gether with overall positive feeling. However parents and children may differ in their perceptions (Fisher, 1978).
67.	Do you ever wish you had no brothers or sisters?*	none	Response to this implies a poor relationship and tendency to deidentify (no reference).
68.	Do you ever wish your brother or sister were of the opposite sex?*	none	Opposite sex reduces closeness and chances of competition. Sameness of sex enhances competition and also common interests (Bank &Kahn, 1982; Sutton-Smith & Rosenberg, 1970).
	, , , , , , , , , , , , , , , , , , ,	57. Does (your child) feel the equal of his or her brother or sister?	The gifted child may assume a more powerful role than a mongifted sibling (Cornell, 1981).

This item underwent reversal in coding in the statistical analysis.

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NOTE: ~

Question 38 on the parental questionnaire was dropped from any statistical analysis, since no appropriate corresponding item was found in the children's questionnaire.

119 Appendix 3 Within-Category Pearson Correlations - All Children

					Competi	tion		*		
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-	Qu. 'No.	, 1	<u></u> 2	عر	4	、	6	7	8	· .
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د	ʻ5`	0.27*	-0.19	0.04	0.07	ξ. (<i>}</i>			
	6	-0. 33**	-0, 20	0.11	-0.04	-0.25*	ç ,			u v
٥	7	0.0	0.20	0.23	0.05	0.04	-0.02		A	
	8	-0.17	0.11	0.12	0.25*	-0.14	-0.30*			· ·
Compet:	ition	0.22	0.5**	0.7**	.0 . 65**	, 0.21 [,]	0.08	0.44**	0.22	o
•	•	•	ेन् <i>य</i> ५	•	° ج					

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Intracategory Correlations -. all children

* <u>p</u> < .05 ** <u>p</u> < .01

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			/	*	,		Cooperati	ion						
;	Qu. No.	9.	10	11	12	·13 ⁻	14	15 `	16	17	18	19	20	
	· , 10	•31*							1	•	-			
•	11	,i7 '	•26*							,	•			1
r J	12	•17	•17	01	• -							F	-	
•	13	12	•06	05	08		,							
	14	•35**	.21	•33**	19	•03 ⁸							۵ -	
	15	•26*	•46**	•46* *	•09	.07	•42**	•		з ,	•		-	
	16	05	•11	•32**	02	•67**	20	•08				×	û	۰
/	17	•33**	•13	•48 **	21	11	•42**	•08	•19		ø			
	18	.09	•24*	•06	•23*	•06	 03	•05	08	•28*	,			₽
~ 0	19	- .12	•25* _.	09	11	•13	26*	•14	03 .	16	•16			
	20	08	.21	.10	.07	4. 17	 13	•35**	.03	14	•07 .	•56**		
Coopera	tion	•46**	•66** [.]	. 6**	.20	•20	•48**	•68**	•38**	•45**	44**	•28 *	•35**	

p < .01

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			,	,	Perceived	l Parenta	1 Treatmen	<u>nt</u>		o -	٢
ι.	Qu. † No.	, 51	22	23	24	25°	26	27	28 ·	29	30 /
ı	22	•29*	······		,				-		
-	23	•25* [']	•55**	•			, .				
~ .	24	•35**	•49**	• 39**		y 1					
٩	25	.18	• 19	•32**	•36** .			, `		,	
	26	 13	•01	01.°	08	•14 ´					
	.27	.12	10 _\ .	.11	17	•45**	•42**	ŗ		·	-
۲ ۹	28	.11	• 37**	•34**	•41**	•51**	•26*	•40**	J		
· · • .	29	22	•05	21	01	•03	13	05	08		
	30	•08	, .17	•39**	.21	.•36**	26*	•33**	•55**	15	
Parenta	al ment	•43**	•55**	•6**	•67**	•68**	• 32**	•58**	,> •75**	.10	•56**
		• • • • • • • • • • • • • • • • • • •	·		* p <	•05	•	c ,			
•					** <u>p</u> <	.01					
•		-		! ·	 - `						

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					د ۲	Self	f Concept		1			,		
•	Qu. No.	31 .	32 ·	33	34.	35	36°	37 .	38	39	40	/41	42	43
	32	•06	Q	-	•				,	3			•	
,	33	0.0	•03				٥			•	1		-	
	34	•05	•27*	•02 •	,	,	ſ			÷		•		-
	35	05	•15	•07	•52**				٠		e •			
	36	07	.21	•08	•41**	•47**		,			۰. ب			
	37	•13	09	08	- •25*	29*	34**	2				¢		~
	38	03	- •04	•11	18	11	<u>م</u> رو07	26*				,		
	-39	•06	.17	05	.18	•26*-	17	15	0.0	,	r i	ł	-	
,	40	•05	•30*	.20	04	•15	•18	-•14	08	•24*		:		
• •	41	•14	•36**	 04 ·	.17	•02	· •29*	24*		•19	•35**			
	42	24*	•14	•03	.03	24*	•25*	07	.05	19	02	- •19		
*	43	28*	21	•25* /	24*	-•34*	35**	•04	•25*	14	14	19	•33*	
Sel once	lf ept	•18	•56**	•39**	•37**	• 32**	•38**	 17 、	•20	•44**	•54**	•55**.	•22	

* <u>p</u> < •05 ** <u>p</u> < •01

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•				<u>C</u>	ommunicat	ion	د	ţ.	1	
۰ ب ۱										
· Qu. No.	44	45	46	47	48	49	50	51	52	53
. 44			-		•				Ì	
45	•40**			¥ .					Ŷ	
4 <u>6</u>	•22	•60**			`					
47	•12	•28*	.18	~				-		
48	_•08	06	•06	.10					-	
49	•18 ·	•26*	•31*	•41**	•30*					4
50°	•19 [°]	.01	•09	•09	•34**	• 34**				
51 -	10	11	19	•36**	•08	06	.16	-	0	
52 ··	25*	- <u>.</u> 05	•01	05	07-	21	-•37**	•11		
53	22	-•45**	14	•03	•32*	÷11	.16	•25*	09	
Communication	•42**	•46**	•53**	•43**	•54 ^{**}	• 66**	•55**	•19	04	•26 *

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₽**<**.01 **

e,	Qu. No.	. 54 .	55	56	57	58	59	60	61	62	63	64
	55	•03	د م	•	<i>.</i>			·	-		•	
	56	- . 03	•12 [,]			-		•		_		-
	57	18	•06	•62 ^{***}		ũ	-					
	58	35**	•36**	- •24*	 04 .				,		-	
5	59	•42 **	•09	.18	. 13	17						
	60	.10	•19	•17	09	16	•29*		-			
	61	15	•12 ·	•04	09	.10	•14	•52**				-
1	62	 32**	•14	-10	08	•16	• 45**	 •24*	•08			
•	63	•19	•¥3	08	14	17	•09	11	31*	13		•
	64 ·	22	•34**	•08	•06	•02	- • [°] 20	•02	•22	. 67 * *	•11	
tic	on	•09	•47**	•53**·	•38**	08	•4* *	•5**	•5 **	•24* [,]	.02	•55**

Friction

* <u>p</u>**< .**05 ** <u>p</u>**< .**01

General Relationship



<u>p</u> **< .**05 <u>p</u>, .01

Appendix 4

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Significant Values Generated from Chi-Square Analyses of Children's Responses by Group

,	1	1. (Sibling	s sex	Gift Pos	ition	Gifted!	8 80Y	1 1 1	4 /
Category-	Qu.	A11	Same	Diff	Younger	Older .	Female	Malo	Age A	(ap
Competition	1	4.8	3.8	2.1	3.1	1.8	2.5) 1		Large
	2	1.5	1.5	2.8	J•4 1 1			1.C	2.2	3.0
,	3	6.8	2.1	6.8		·2•) 4 8		•2	•8	•7
	4	4.2	2.0	7.0	4.9	4.0 .	7.8*	2.0	8.0*	1.3
• -	5.	4.8	7 8*		4.0		1.0^		3•4	6.5
	6	8.3*	6.1	1.0	4.0	3.0	3.0	7.6*	2.3	3.4
	7	1 1	0.1	2.0		7.8	3.9	8.3*	4.3	7.7
	R		•2	1.3	1.3	1.3	•.3	1.8	3.6	.6
Cooperates		<u> </u>	2.0	2.0	1.5	1.9	1.6	3.1	1.0	3.6
cooperation	1 2	•4	2.3	8.	2.1	1.5	2.0	2.8	1.3	1.5
		•0	1.4	0.0	2.4	4.6	3.8	5.1	2.1	1.1
		0.1	4•9	3.5	4.8	3.0	4.1	4.3	2.7	4.9
	12	8.2*	6.9	•5	1.4	10.4**	3.7	4.9	3.5	5.1
-	13	2.3	3.4	3.7	•5	2.2	2.2	•5	1.7	1.5
	14	2.3	1.3	2.5	•3	4.2	2.8	1.5	2.8	2.1
	15	3.0	6.6	4.7	1.5	2.1	3.8	2.2	1.5	2.0
	16	2.6	2.4	1.5	2.5	1.3	.3	5-2		56
, in .	17	1.7	•2	2.8	1.4	3.6	1.0	1.1	4.9	
	18	4.2	3.7	7•4*	3.3	1.4	3	4.2	6.8	3.1
	19	3.2	2.2	2.0	5.3	9.0*	2.3	3.5	5 5	7
	20	11.6**	8.3*	3.5	3.6	8.3*	5.0	8-8*	6.3	
Parenta/1	21	1.5	1.7	2.3	3.4	5.4	4.4	1.3	3.7	8
Treatment	22	5.5	8.2*	2.0	3.3	2.7	2.2	4.1	18	
	- 23	1.3	0.0	2.0	3.0	1.0	0.0		4.0	5.4
	24	1.3	δ.2*	5.0	1.4	-4	.9	1.5	1.7	2.0
	25	1.8	2.2	1.2	2.3		0.0	1.5		3.4
	26	5.2	3.4	2.0	3.0	21	2.2 -		••	1 1.1
1	. 27	1.0	.5	1.1.	9.2	3 1	2.6	3.0	3.0	2.2
	28	1.9	4.2	2.4	1.6	3.1	1.9	27	2.1	0.0
	29	•9	.4	1.1	1.1		J 7	2.01	1.0	
	30	5.1	2	3.0	+ • +	•4	•	1.0	2.	2.3
ومودان والمناور الشروان المراجع المحاج	<u> </u>		· • L	J.U.	•4	1 2.2	1 1	.4		ברו

Significant Values Generated from Chi-Square Analyses - Children

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Chi-Square Analyses - Children (Cont'd.)

		1	Sibling	Sex	Gift. Pos	ation	Gifted's	Sex	Age G	ap
Category	Qu.	<u>A11</u>	Same	Diff	Younger	Older	Female	Male	Small	Large .
Self Image	31	5.8	2.7	3.2	2.5	3•4	6.2	2.2	2.5	3.5
	32	2.4	1.4	1.1	1.4	5.5	2.3	2.2	2.5	2.2
-	33	3.6	3•4	•9	1.1	2.6	1.4	6.0*	2.7 -	2.2
	34	2.6	3.1	•4	•8	.1.9	2.2	3.8	1.5	2.9
	35	4.3	3.7	1.4	2.1	2.4	•4	8.2* -	2.0	2.6
	36 °	0.0	•9	1.4	2.7	1.4	2.4	4.2	6.6	7.3
'	37 '	7•4	4•7、	4.6	9.6*	1.1	1.3	6.9	2.7	5.8
1	38,	3.5	5.3	1.0 ,	·7•6*	3.1	2.5	_2.5	2.8	4.0
	39 *	2.8	1.8	2.2	4.6 -	2.0	2.0	4.6	1.4	4.0
N 1	40	3.2 .	•8	2.9	1.9	2.3	•9	2.5	1.8	2.6
~	41	•5	2.8	5.2	1.4	1.5	•4	·•9	4.7	5.7
	42	3•5	3.0	2.9	1.1	4.0	•7	3.5	2.2	2.1
	43	3.3	1.7	2.3	1.8	7.9*	3•7	.6	2.0	5.0
Communication	44	.8.	1.1	2.0	3.8	1.3	1.7	1.3	1.3	3.6
	45	1.0	•2	` 3∙5⁼	* 3.6	1.4	••5	•8	3.0	•6
	46	1.1	1.8	•3	2.4	3.4	•3	1.7	1.6	1.4
-	47	3.1	1.1	4.2	4.3	1.4	3.9	2.2	3.3	•9
	48 ·	3.3	1.1	3.0	5.0	6.0	3.6	•9	7•7*	3.1
Ð	49	1.4	1.4	•9	•8	1.3	1.4	•2	1.6	2.0
	50	•7	1.8	•8	•9	3.4	5.6	5.4	1.3 ·	•9
	· 51	2.1	2.2	•7	2•4	•9	1.4	3.5	3.3.	2.7
	52	1.5	1.3	1.5	6.4	3.1	4.6	1.1	3.9	4.8
	53 •	4.0	7.4	1.3	1.6	5.1	4•4	3.4	2.5	1.9
Friction	54	•5	•3	•4	1.1	0.0	•7	•4	•4	•6 •
	55	3.2	2•7	3.2.	2.3	1.9	1.5	3.7	3.6	1.3
·	50	1.1	•4	3.1	7.1	5.2	2.8	2.7.	•4	3.8
	57	•5	2.3	3.1	. 0.9	7.2	_ 8	1.1	2.6	4.7
•	58	1.4	1.5	- 0.0	3.6	.8	0.0	1.5	2.2	2.2
-	<u> </u>	3.0	1.4	3.5	·5•€	5.5	2.3	3.6	2.2	1.4

	-T	1	Sibling	Sex	Gift. Po	sition	Gifted's	s Sex	Age	Gap
Category	Qu.	A11	Same	Diff	Younger	Older	Female	Male	Small	Large
Friction	60	4.9	4.7	4.9	3•4	2.2	2.4	3.5	1.1	4.3-
(Cont'd.)	61	5.7	4.3	4.1	4.3	4.8	2.3	4.7	3.3	6.1
	62	1.9	1.7	3.9	1.8	2.3	2.1	2.8	5.1	· 4.0
,	63	3.4	•3	9•5**	•7	2.9	2.1	2.2	2.4	3.7
	64	4.4	2.9	1.8	2.3	2.3	7.5*	•3	1.8	3.1
General	65	4.2	1.4	3.9	2.4	4.0	•4	4.7	2.5	2.3
٥	66	•9	2.0	0.0	•9	•1	•7	•4	1.5	0.0
'	67	•6	•3	•3	4.2	2.3	3.7	2.6	1.1	2.3
r -	68	4.1	2.3	2.0	5.1	1.4	2.3	6.6	1.0	5.5

<u> Chi-Square Analyses - Children (Cont'd)</u>

* p < .05

** <u>p</u> < .01

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<u>Appendix 5</u> Significant Values Generated from Chi-square Analyses of Parental Responses with the Children's Analyses of Parental Responses and their

Chil	ldren	່ຮ
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Question			Fioth	iers ,	Fathers		
Category	c+	P++	Gifted	Nongifted	Gifted	Nongifted	
Competition	1	1	3.4	7.6*	5.2	•5	
- /	2	3	1.5	6.3	00	6.5	
	3	2 '	3.7	1.2 ·	5.8	3.9 ' 🍬	
	4	4	23.0**	24 • 5**	12.7**	14.6**	
	5	5	3.9	•5 ,.	5.2	6.9	
1	6	6	2.7	3.1	1.9	1.0	
	1.7.	7	₀5•8	1.7	5.3	• • 3	
	8	8	1.0	3.1	2.1	0.5	
Cooperation	1 2	-	Īa	8	1:1	1.6	
	10		25	•0 5 5	4	4.0	
	12	10	6.1	10-7**	3-6	2.8 -	
•	13	12	4.0	1.2	-2.1	1.8	
	14	13	3.7	.6	8.1*	3.5	
	15		_	_	-	-	
, ,	16	14	1.5	1.5	· 1.4	5.6	
- ,	17	15	2.6	1.6	•7	•1	
	18	16	5:4	•3	•4	3.2	
• •	19	17	8.7*	6.5*	5.1	· 14•0 **	
	20	-			<u> </u>		
Parental	21	18	6.4	3.5	3•4	3.5	
Treatment	22	19	5.6*	6.6*	12.0**	6.3	
	23	21	•2	4.9	3.8	7.0*	
	24	20	4.1	•ð	.0.2	2.5	
	25	22	4.0	2•2 4 2	•1	191 8 0 4	
	20	23	⊥•⊥ 2 K	4• <i>5</i> , 4 1/4	2.0	0.0^	
· ·	- 38	24	27	4•4 21	4.5	4.5	
	29.	26	9,1*	2.6	3.1	· 2.0	
	30	27	4.2	8.8*	.4	2.9 +	
Self Image	31	28	11.7**	1.1	. 2.5	2.1	
1	32	29	6.2	4.3	3.8	2.7	
	33	30 -	2.9	•3	2.6	•3	
	34	31	•3	1.6	5.1	، 00	
	35	32 -	2.8	1.4	8.8 *	2.3	
	36	33	1.4	4.5	5.0	6.9	
	37	34	2.7	3.8	•4	3.4	
	38	35	4•7	5.1	1•4.	4.0	
· · ·	29	.30	•4 `	4.0	- 2.0	4.0	
-	40	27	- 21 0**	. -	8 4	–	
·	34 ▲ 10		22.94	0•0 7-7 ★	2.0	0•) 7.8 *	
·	42	40	נ•נ כג	1•1" 8-3 *	8.7	7.6*	

+ Children's Questionnaire ++ Parental Questionnaire

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Significant	chi-squares -	parents	and children	1 (cont'd.)
				a second se

1	Que	stions	Mot.	hers	Fath	ers
Category	c+	, P ⁺⁺ ,	Gifted	Nongifted	Gifted	Nongifted
Communication		2		3		η
·	44	41	5.6	· 7.7*	4.1	4.2
, v	45	42	1.6	.1	.1	1.1
	46	_	-	•	_	_
-	47	43	13.00**	6.3*	4.0	2.0
	48	44	1.0	2.5	4.7	2.1
	49	45	3.5	1.4 -	•6	2.2
	50	46	_8•9*	9•9 *	7•4	8.3*
-	51	-	, -	-	-	-
	52	47	1.1	1.6	2.4	· 1.0
Fraction	54	18	3 7	1 2	73	- 7 5 *
F11001011	55	40 /19	1.9	2.7	1.5	3.7
_	56	+2 50	1.5	2.6	3.8	4.4
· · ·	57	-	-	-	_	-
	58		_	-		- 、
	59	51	4.0	5.2	8.1*	5.6 -
ν	60	52	18.5**	_. 12.2**	15.1**	9.2*
	61	53	11.1**	6.7	6.0	2.3
	62	54	6.69	7.3	4•9	4.8
	63		2.7	-	N_{-}	-
, Conorol	65	<u>25</u> 58	<u> </u>	2.1	¥•4	<u></u>
Acuelar	66	56° '	1 •7	4•0 5.1		V• <i>l</i> - 7
u	67	_	•	J•4	, <u>e</u>	• 1
	68	_	_	-)	_
·	-	57	-	-		

*<u>p</u><.05 **<u>p</u><.01 .

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Appendix 6

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Tables of Significant F-Values

1.5

Generated from Analyses of Warlance

Significant Values Generated from One Way Analysis of Variance

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COUDE OT CTON		

. Source	Sums of Squares,	Degrees of Freedom	Mean Square	<u> </u>	Significance
Between groups	34.241	, 1	34.241	5.684 '	0.021
Within groups	31.3 • 259	52	6.024		
, `					
Total	347.50	53	•	5	
l		L	······		

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Two Way Analysis of Variance Siblings' Sex by Sibling Status

Competition and comparison

Source ·	Sums of Squares	Degrees of Freedom	Mean Square'/	, F	Significance
Sibling status	35.179	, 1	35.179	6.153	0.017
Sibling sex	22.286	1	22.286	3.898	0'•05
Status by sex	5.105	1	5.105	0.893	0.349
Explained	61.632	3	20.544	3•593	0.02
Residual	285.866	50	5.717	•	, ,
Total [,]	347.498	53	6.557		, ,

General relationship

	11.1	1		· · ·	
Source	Sums of Squares	Degrees of Freedom	Mean Square	F	Significance
Sibling ståtus	10.747	1	10.747	2.231	0.142 ·
Sibling sex -	24.730	1 1	24.730	5 . 135	0.028
Status by sex	0.155	, \ ,	0.155	0.032	0.858
Explained	35.552	`3 [°]	11.851	2.460	. 0.073
Residual	,240.81,7	50	4.816	~	
Total	276.369	53	5.215	, t 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	· · · · · · · · · · · · · · · · · · ·
2					· · · · · · · · · · · · · · · · · · ·

Two Way Analysis of Variance Cifted's Sex by Sibling Status

Competition and comparison

Source	Sums of Squares	Degrees of Freedom	Mean Square	<u>ب</u>	Significance
Sibling status	.35.660	1	35.660	6.032	0.018
Gifted's sex	6.462	· 1	6.462	1. 093	0.301
Status by gifted's sex	11.215	· 1	11.215	1.897	0.175
Explained '	- 51.918	3 -	17.306	2.927	0.043
Residual	295.580	50	5.912	· .	
Total	347•498	53 [,]	6.557		· · ·
			;		-

<u>Cooperation</u>

. r.

Source	Sums of . Squares	Degrees of Freedom	Méan Square	F	Significance
Sibling status	46.360	1	46.360	3.577	0.064
Gifted's sex	1,42.880		142.880	·11.023	0.002
Status by Gifted's sex	50,286	1	50 . 286	3.880 -	0.054
Explained :	243.240	3	81.08	6 . 255	0.001 ·
Residual .	- 648.089	50	42.96		• • •
Total	891.329	53 ·	<mark>, 16.818</mark>	,	· · · · · · · · · · · · · · · · · · ·

Two Way Analysis of Variance

Position by Sibling Status

Competition and comparison

Source	Sums of Squares	Degrees of Freedom	Mean Square	F	Significance
Sibling status	‴30•334	·1 .	30.334	5.178	0.027
Position	12.675	\ 1	. 12.675	2.164	0.148
Status by Position	7.668	1	7.668	1.309	0.258
Explained	54.583	3	18,194	3.106	0.035
Residual	292.915	50 -	5.858	1 × 1 *	
Total	347•498	53	. 6.557.		•
	, 44	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	·	

Friction

<u></u>					
Source	Sums of Squares	Degrees of Freedom	' Mean Square	• ۲	Significance
Sibling status	- 2.801	1	2.801	0.366	0.55
Position	, 2.601	1	2.601	0,34	0.56
Status by Position	42.801	1	42.801	5•596	0.022
Explained .	+ 46.309	_ 3	15.436	2.018	0.123
Residual	382.448	50	7.649		
Tótal	428.757	53	8.09		•
P	-	* · · · ·	`		•

Two Way Analysis of Variance

Age Gap by Sibling Status

Competition and comparison

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т. Д.,

					·
Source	Sums of Squares	Degrees of Freedom	Mean ' Square	<u>F</u> `	Significance
Sibling status	34.821	l .	34.821	5.64	0.021
Age gap	2.382	1 ,	2•382	0•39	0.537
Status by age gap	· 2.081	1.	2.081 ·	0•337	0.564
Explained	1 38.703	3.	12.901	2.089	0.113
Residual	308.795	50	6.176	~	, <u>,</u>
Total	347•498	[*] 53	^۱ 6•557		
		·/	<u></u>		L,

General relationship

Source	Sums of jquares	Degrees of Freedom	Mean Square	<u>F</u> ``	Significance
Sibling status	. 10.715	1	10.615	2.391	Q.128
Age gap	42.653	1	43.653	9.831 :	0.003
Status by age £ap	0.023	۰ ۲	'0 . 023	0.005	0.943
Explained	54.343	<u>з</u> .	18.114	4.079.	0.011
Residual	222.026	50	4.441		,
Tótal, .	276.369	53	. 5.215 . '		

Appendix 7

Raw Score Responses from Children and Adults and Coding Information Sheet

(O)

CODING INFORMATION SHEET

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5

Adult responses

Column	Description of data
1	respondent (3 - mother for gifted child 4 - mother for nongifted child 5 - father for gifted child 6 - father for nongifted child)
2-3	siblings' sex (1 - female, 2 - male)
4	gifted subling's position ("+", older, "-" younger)
5	age gap in years
6 - 75	questionnaire item responses:
	6 - 13 Competition
,	14 - 25 Cooperation .
3 7 7	*26 - 35 Parental treatment
· · · · ·	. 36 - 48 Self image
* * *	49 - 58 Communication
4	59 - 69 Friction
· · · · · · · · · · · · · · · · · · ·	70 - 74 General

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Raw Score Responses - Parents

522+11422421332	23332	2323	474444444334332321	3/1322	3234	ኣ	322	***	ح	3/1	٦
				74766	7674	,	122	JJLJ).	/4	,
622+11422441441	13333	3332	4442444224214223334	24232	3233	3	322	3322	2	24	2 ື
311-21532241332	23342	2223	4442444414343432322	44232	4341	3	223	2333 `	30	43 -	4
411-21522231332	23342	2223	444444424222434233	44222	3343	2	232	2333	30	44	4
511-21523222334	33332	2233	33333332333323232232	33332	3333	3	323	2332	2	33	3
611-21522231432	24332	2223	444444144413333243	33332	3333	2	222	3322	3	33	3
422-21641132431	22332	2333	3333444424444333323	4 331	3334	4	423	3332	2	33	4
522-21622322332	23332	2232	2342234234323333232	23222	2323	3	322	3222	2	33	2
622-21633343332	22332	2233	2342234234444333323	43322	2333	3	323	3322	2	33	3
312+21712141432	24343	3423	444444414143444233	44232	4334	2	332	4343	3	44	4
412+21712141432	24343	3422	4443444414143444233	44242	4334	2	332	4343	3	44	4
512+21711143412	24343	2333	4442444414243344232	43222	4434	2	323	3434	4	44	4
612+21711141432	23342	3333	4424444414343444333	44242	4434	2	333	2334	3	44	4
312-61811141422	13332.	2333	4443444414143333231	44222	4424	2	322	3223	3	43 -	4
412-61811141432	23331	2333	4342444414143444331	44332	4324	2	323	3223	. 3	34 🖧	4
512-61812241442	33433	2343	444444414444434231	44222	3144	2	323	4343	2	44	4
612-61812241442	31232	3124	4444441444444434231	44332	3444	2	323	4343	2	44	4
321-21911141341	72332	2332	3442343434334343323	44131	2333	3	232	3224	3	33	4
421-21912141341	23332	2333	3344443324224334212	44321	2333	3	322	3333	2	22	3
521-21912322422	23331	2242	4341444434233333333333	33231	1433	2	322	2223	2	32	3
621-21911131241	13431	2243	3241444424333332233	33221	1233	3	322	2223	2	32	3
411-22021141432	13332	3442	43444433343333333333333333	33242	4342	2	332	4433	3	24	2
511+22021141492	23331	3732	3344444414222232323	24321	3334	3	323	3322	3	22	2
611+22022131423	23332;	3343	444444444444444444444444444444444444444	24331	3234	2	332	3324	3	23	ī
322+22133422131	33332	2334	444444444444444444444444444444444444444	43222	3334	3	374	3332	2	33	3
422+22133342331	33342	2332	4442444434333222322	33322	3334	2	332	3333	3	34	4
522+22123321232	23322	2334	4443333423333234323	33322	3334	3	323	3332	3	33	3
622+22122341432	33323	2332	3342444423333234233	.33223	4424	2	322	3323	3	33	. 3
312+12232242423	33432	3332	4444444424223233231	34232	3344	2	232	3334	3	33	3
412+12232242423	22432	3232	43444444243333333233	34322	3344	3	222	3333	3	33	4
512+12241141432	33333	3432	3243444424223232323232	33233	3333	3	323	3323	1	33	3
612+12222341432	23333	3223	3344444434223333233	34322	3334	ź	333	3323	ī	33	4
322-32332441432	24242	2412	444444424443333323	44342	4344	2	322	3443	4	33	4
422-32312441432	23242	2213	434444414243334122	44341	4444	3	322	3342	3	32	4
522-32312141432	13331	1342	43333443233333333233	33232	3424	2	322	3333	2	33	3
622-32322231432	12231	2223	3333444314333223132	33331	4324	3	323	3332	3	33	ź
312-22422242232	23343	3323	444244441433333333323	34242	4344	3	323	3333	2	43	á
412-22422232332	23343	3323	44443444143333333232	34422	4444	ź	323	3333	3	43	4
512-22422341432	23323	3333	4342443414333334233	34322	2334	2	323	3333	3	44	4
612-22432321232	23222	3223	443444414223323232	34322	2234	3	323	3334	3	44	3
322-92523221432	12333	2233	4443444424232333222	34242	3344	2	232	3443	2	44	4
422-92511141431	22332	2233	2131444424242444321	34342	4444	2	242	2443	· 2	44	4
522-92511112321	22332	2233	4441444424142444233	42322	4444	1	144	3443	2	42	4
622-92523221231	12333	2333	44434444242323332222	44241	4344	1	232	3443	2	44	4
321-62612221431	22322	1233	3332444424444333233	44332	3324	2	233	1444	4	44	4
421-62612221431	22322	1233	3332444424444333233	44332	3324	2	233	1444	4	44	4
521-62612111421	11323	2232	3342444432243333243	44233	3334	2	232	2334	3	44	4
6262622111422	32323	2233	3242444434343333323	44332	3333	2	232	2332	2	43	3
312+52712141432	44343	3433	444444414243333233	44323	4444	1	242	2444	4	44	4
412+52722341321	24343	3233	444444414233333422	44234	4444	2	323	2443	3	44	4
512+52712221422	23333	2333	444444414233333242	43232	2334	2	333	3232	3	44	4
612+52722231332	13343	2333	3343444414333234232	33223	3334	2	322	3233	3	43	3
	311-21532241332 411-21522231332 511-21522231432 422-21641132431 522-21622322332 622-21633343332 312+21712141432 412+21712141432 512+21711141432 512+21711141432 512-61811141422 412-61811141422 412-61811141432 512-61812241442 612-61812241442 612-61812241442 612-61812241442 612-61812241442 512-21912322422 621-21911131241 411+22021141341 521-21912322422 621-21911131241 411+2202131423 322+22133422131 422+22133422131 422+2213342231 522+2212331232 622+22123342331 522-32312441432 612+1222341432 612+22232312441432 612+222323232 612+22232312441422 612+22232312442 612+22232312442 612+222323133 612+222323133 612+22232313 612+2223422342 612+222342342 612+22234234 612+222234234 612+2222342234 612+2	311-2153224133223342411-2152223133223342511-2152223143224332422-2164113243122332522-2162232233223323622-216333433222332312+2171214143224343412+2171214143224343612+2171114341224343612+2171114341223342312-6181114142233433612-6181224144231232321-2191114134122332421-6181124144231332512-6181224144231232521-2191232242223331621-219113124113431411+220213142323322522+2213342213133322622+221334233133342522+221334233133342522+221334233133342522+2212334233133342522+221233123223323312+12232424232442422-3231244143223333612+122234143223333612+122234143223333612+122234143223333612+122234143223333612+2223231244143223323612-2243231244143223323612-2243231244143223323612-2243231244143223323612-2243231244143223323612-2243231244143223323612-2243232223433512-2242234143223323612-224323123223222522-9251111232122322522-925111423122322522-925232123122333512-5271214143244343412+527234	311-21532241532253422223411-21522231332233422223511-2152322334333222233611-21522231432243322233522-21622322332233322233622-21633343332223322233612+21712141432243433423412+21712141432243433422512+21711143412243432333612+21711141432233423333612+21711141422133222333612-61811241422314332343612-61812241442314322333512-61812241442312323124321-21912141341233222333521-219123242223312242621-21911131241134312243411+22021141432133322334322+2213342311333222334322+2213342313333422332512+122314232233222334612+2022131423233232332512+122314132233333432612+22234143223333323612+122234143223333323612+122234143223333323612+1222341432233433323612-2422332223343323612-24323223223343323612-243232232233433323612-243232232233433323612-243232232233433323612-243232232233433233612-24323223223333233612-2432322322333	311-215522413322334222234444444424242434233411-2152223132233322233333353233532233522233611-2152223143224332223333335444244443333243422-21641132431223322333233444244443333233522-2162322332223322342234234434333233612-2171214143224343342344444414143444233412+21712141432243433423444444141434444233512+21711143412233423333442444414444443333512+2171114341223342333344244441444444344333512-618112414221333223334424444144444434231512-61812241423312322343444444444444434231512-618122414243123223233442444414444434231512-6181224142331232233334444444443423333333512-61812241424313222333344444444434233333333621-21911141341233223333444444443433333333621-219112413411332223444444444333333333621-21911312233113222344444444433333223323511+220213142323322234244444444433333223323622+221233414323332233244444444444433333233622+221234143233323342244444444444444433333233622+22123414322332233244444444444433332233622+2223414322334222133344444444443333223622+2212341432233223334444444444443333223622+22234143223342	311-21532241332 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4444444222243423 4422 444444444222243423 3332 3333 323 611-215223132 24332 2233 33333332233322323 3333 323 3433 422 34312 23332 2333 3333 422 4333444444444444444333322 4332 3333 323 512-2162232232 23332 23332 2333 4424444444444333322 4332 4334 2332 612-2171114132 24343 3422 44444444144333444233 4422 4344444444444333 4422 44444444444333 4422 444444444444333 4422 44444444444333 4422 444444444444444333 4422 44444444444444333 4422 444444444444444444444444444444444444</td> <td>311-21522241352 23342 2223 44444444143332224 44222 34422 3432 2333 3333 3233 3333 3333 3233 3333 3233 3333 3233 33333 33333 33333 33333 33333 33333 33333 33333 33333 3332 33333 3333 3333 3333 3333 3333 3333 3333 3333 3333 33333 3322 3333 3422444444443333444333 44224 4334 3333 3442 3433 34422 444344444444444333444333 44222 444444444444444444444444444444444444</td> <td>311-21522241352 2324 2422 444244441434323222 2223 3333 322 233 3333 3333 222 23332 2332 223 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 222 2332 2332 222 2332 2332 222 2332 2332 222 2333 3222 232 3344444444444444444444444444444444444</td> <td>311-2152221322 23342 2223 444444444243234323 242-24441 3333 232 2333 344 511-2152223132 2333 2333 3333 2322 3333 3333 232 2333 344 511-2152223132 2333 2333 333344442444444333223 3333 232 2332 2333 2322 3333 222 3333 222 2333 3332 2322 2333 3332 2322 2333 3322 233 2322 2333 3222 2333 3222 2333 344 622-21633343312 2333 2434444414433444233 44234 4334 2434 2332 4343 444 444444144433344231 4322 4434 4334 434 4444 444444444444444444444444444444444444</td>	311-21552241332 23342 2223 44444444433322242444223 44222 311-21522231332 2333 23333333223233 23333 511-21522223143 24332 2233 33333332243 333322 2333 611-2152223132 2332 2333 233332243 3333 2322 2333 23322 2332 2333 23322 2333 23322 2333 2322 2322 2322 2322 2322 2322 2323 2333 234234234234234333322 2332 2333 242444441443333322 2332 2333 4424444414434444233 44232 4434 412+171141432 23433 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4333444444444444444333322 4332 3333 323 512-2162232232 23332 23332 2333 4424444444444333322 4332 4334 2332 612-2171114132 24343 3422 44444444144333444233 4422 4344444444444333 4422 44444444444333 4422 444444444444333 4422 44444444444333 4422 444444444444444333 4422 44444444444444333 4422 444444444444444444444444444444444444	311-21522241352 23342 2223 44444444143332224 44222 34422 3432 2333 3333 3233 3333 3333 3233 3333 3233 3333 3233 33333 33333 33333 33333 33333 33333 33333 33333 33333 3332 33333 3333 3333 3333 3333 3333 3333 3333 3333 3333 33333 3322 3333 3422444444443333444333 44224 4334 3333 3442 3433 34422 444344444444444333444333 44222 444444444444444444444444444444444444	311-21522241352 2324 2422 444244441434323222 2223 3333 322 233 3333 3333 222 23332 2332 223 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 2332 222 2332 2332 222 2332 2332 222 2332 2332 222 2333 3222 232 3344444444444444444444444444444444444	311-2152221322 23342 2223 444444444243234323 242-24441 3333 232 2333 344 511-2152223132 2333 2333 3333 2322 3333 3333 232 2333 344 511-2152223132 2333 2333 333344442444444333223 3333 232 2332 2333 2322 3333 222 3333 222 2333 3332 2322 2333 3332 2322 2333 3322 233 2322 2333 3222 2333 3222 2333 344 622-21633343312 2333 2434444414433444233 44234 4334 2434 2332 4343 444 444444144433344231 4322 4434 4334 434 4444 444444444444444444444444444444444444

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322/+40132231223	312 42	3224	3233144214141344322	42232	3343	3	423	4333	344	4
422+40122231223	13343	3321	3332144214141243322	43223	3344	3	422	4333	244	4
522+40122223423	32242	3223	4223144214142344322	42232	3े344	3	423	3343	344	4
622+40122231223	13343	3322	4323144214142243322	43223	3344	2	422	3343	244	4
311+50223441122	32444	3423	4444444414143344242	34233	4344	1	232	2444	444	4
411+50233334443	33344	3313	3344444414122431222	13342	4344	1	232	2444	444	4
511+50223441122	32444	3423	4444444414143234232	42221	4344	1	232	2444	444	4
611+50223441122	32444	3423	4444444414143344242	24233	4344	1	232	2444	444	4
321-60311131331	23433	2343	4344444424343334233	44343	4444	2	233	3344	334	3
421-60311141432	43431	2343	43444444244433333222	34342	4444	2	233	3344	334	3
521-60311111411	13444	3441	1442444414144444243	44243	4434	1	232	3444	444	4
621-60311211411	34442	3433	1321441414144444211	44444	4424	1	232	4444	444	4
321+30422241442	33333	2333	3333444324233332332	33232	3333	2	323	3333	344	4
421+30422231342	33333	2332	333334432423333333332	33333	3333	2	323	3333	344_	_3
521+30422241432	33333	2333	3333444324233332332	23232	3333	2	323	3332	344	4
621+30422231332	33333	2332	33334443242333333332	33333	3333	23	3323	3333	344	3
322+20513341431	33442	3344	4344434433344334112	44442	4434	2 ′	233	1332	333	3
422+20512311231	33341	2442	3232444324224332113	24442	4334	1	.232	1443	344	<u>4</u>
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622+20523421132	33443	3343	4444444414234444113	44333	4444	2	233	4444	344	4
311-80614431422	44244	4322	4443444414144332232	42144	4344	2	232	2444	344	4
411-80614141422	44434	4443	4444444441243321343	42324	4343	2	232	2444	344	<u>4</u>
511-80611141433	34444	4443	4444444434244433332	44234	4434	1	232	1443	• 344	4
611-80611141443	44444	4443	4433444324344332443	44232	4344	2	234	1444	344	4
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512+10734431321	23434	2223	4424444414343343231	44241	4314	2	332	2344	344	4
612+10743431133	21234	2233	4442444431441133123	44241	3424	4	333	4442	144 ′	3
322-70822341431	32422	2432	3442444424343332232	44322	4244	1	241	2444	344	4
422-70811241431	32422	2442	4241444114443333332	44431	4134	1	241	2444	444	4
522-70833331432	32323	3332	3343444324233233232	33233	3333	2	232	2332	244	3
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311-50922241432	23243	3322	3344444434343333333	44244	4434	2	322	3442	244	4
411-50912221442	33243	2525	4444444444243444234	44343	4444	2	>>>	3443	444	4
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## CODING INFORMATION SHEET

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Children's responses

/ <u>Column</u>	Description of data sibling status (1 - gifted, 2 - nongifted) siblings' sex (1 - female, 2 - male)								
, <b>1</b>									
2-3									
4	gifted sibling's position ('+' older, '-' younger)								
5	age gap in years								
, 6 <b>-</b> 74	quéstionnaire item responses:								
	6 - 13 competition and comparison								
	14 - 25 cooperation								
· · · · ·	26 — 35 parental treatment								
	36 - 48 self image								
•	49 - 58 communication								
•	70 - 74 general								

-143

	122+	40122	32132	31233	223422	342342	444314	411333	33223	222323	333333	2442332	422222	3344
	222+	40122	33113	32222	341343	113242	444344	424234	33223	432333	1334432	2243222	434222	3344
	111+	502342	24133	244334	4233333	321444	444444	424334	32433	322323	343442	1423332	234414/	4433
	211+	502343	11113	332324	432133	321444	443414	423344	42432	321332	2434332	2322223	244414/	4423
	121-	603212	23133	33334	322323	244444	444414	424433	33423	243432	2233322	2333223	333324/	4444
	221-	60321	31143	17444	323234	734444	444414	133322	24211	24322	323443	3233233	444223	3433
	121	30/1331	2213/1	22233	322333	334444	34431/	123333	37777	333322	7333227	337337	433223	~~~~ 3330
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	112+	110214	43243	134442	224122	331441	241223	321222	22332	333232	2333232	23333322	3332222	3413
	-212+	110111	2223	122423	3423422	233444	421142	234232	32421	332332	2323342	2232222	3143120	4434
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