FAMILY PERCEPTIONS OF FATHERS' ROLES IN THE TALENT DEVELOPMENT

OF GIFTED GIRLS

by

SEON-YOUNG LEE

(Under the Direction of Bonnie Cramond)

ABSTRACT

This study examined the family perceptions of the fathers' roles in the academic, creative, and athletic talent development of five elementary school girls on the basis of family case studies. The following was an overarching question addressed in this study: How are the fathers involved in nurturing the talents of their academically, creatively, and/or athletically talented daughters? The basic assumption of this study lay in the developmental perspective of talent and in the importance of paternal nurturance. Data were collected through interviews, documents, and observations (at the interview place). Overall, this study revealed that the fathers were perceived to have contributed to the development of the academic, creative, and athletic talents of their daughters in the following ways: (a) intellectual stimulation, (b) educational philosophy, (c) common interests, (d) sports activities, (e) special aptitudes, (f) accessibility, (g) exposure to various experiences, (h) parenting style, (i) family structure, (j) gender issues, and (k) future career pursuits. This study shed light on the importance of cohesive family environments as well as the emotional closeness between the fathers and the girls and that of family structure in defining the fathers' roles in the family. The fathers' contributions to the girls' future career pursuits were also apparent, while the mothers' current occupational status either as working mothers or as stay-at-home mothers did not have an influence on the girls' considerations of their professions. Also, the results revealed that the fathers valued intellectual endeavors in the nurturing process, but due to job pressure, they were frustrated about their lack of time with their daughters. This study substantiated the idea that children have their own distinctive talents, and they recognize and develop their gifted and creative potential through the help of their fathers in childhood. By selecting, producing, and sharing experiences with their daughters, the fathers as significant initial motivators and supporters might be expected to play more active roles than they did in the girls' talent development in previous decades.

INDEX WORDS: Fathers, Girls, Fathers' Roles, Talent Development, Academic Talents, Creative Talents, Athletic Talents, Family Perceptions, Family Structure, Family Case Studies, Girls' Future Career Pursuits

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DEDICATION

To express my deep love and appreciation to my dedicated parents who have trusted and motivated me with great support and affection throughout my life.

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PREFACE

There are several sources of subjectivity in this study. One of them is my perceptions of the importance of fathers' roles, derived from my personal experiences with my intellectually talented female peers whose fathers were more involved than their mothers in their academic talent development. Another source of subjectivity is my Asian cultural background, in which education is highly valued and respected in the family. In addition, two of the mother participants in this study are my colleagues in the graduate school. This fact might also have encouraged them to express favorable attitudes toward their husbands throughout this study.

In order to prevent my subjectivities from affecting the research findings, the following were considered: First, in order to limit my cultural bias, I did not include Asian families as participants in this study. Second, through triangulation and member checks, I intended to ensure the consistency of the data and enhance their validity. Third, three types of data analysis methods were applied to this study in order to substantiate the findings. Fourth, I created the list of interview questions before the interviews to compare the responses of each of the five families. The preplanned interview questions discouraged me from asking the participants unexpected questions which were based on my personal relationships with them, especially with the two of the mother participants, my past and present colleague. Also, throughout the study, I was always aware of my perceptions of the importance of the fathers' roles, thus, I hope this fact would not play as a significant bias in the present study.

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CHAPTER 1

INTRODUCTION

Children's talents emerge at different times under different circumstances and are influenced by various factors including intelligence, motivation, society, environment, and even chance or luck (Csikszentmihalyi, Rathunde, & Whalen, 1997; Tannenbaum, 1986). That is, unlike general human development, which is characterized by universal, invariant, and hierarchical integration of sequences and stages (Erikson, 1963; Piaget, 1950), the study of talent development needs to consider a wide range of individuals' academic, creative, and athletic talents formulated by multiple influencers (Feldman, 1982; Sosniak, 1985). Nurturing talents from early ages of development leads to great benefits for both talented individuals and society (Csikszentmihalyi, Rathunde, & Whalen, 1997); however, talents require a considerable amount of growth and nurturing (Gruber, 1982), and particularly for gifted children, supportive experiences are necessary to encourage them to develop their gifted potential (Feldman, 1982). One of the significant forces that enable children to recognize and fulfill their potential abilities is family including parents. In Bloom and his colleagues' (1985b) study of talented youth, it was found that before the age of ten, motivational support and encouragement by parents and teachers were more decisive in the children's talent development than were the particular giftedness or talents they indicated. Moreover, it was the parents who introduced and encouraged their children to enter their initial talent fields; thus, parents

played crucial roles in the growth of their children's various talents by serving as significant environmental forces from early childhood¹.

In emphasizing the importance of home environments in the development of general human characteristics, Bloom (1964) insisted that the measure of environments is primarily dependent on socio-economic status, social class, and occupational or educational level of parents. However, because it is not sufficient to depict the relationships, especially causal relationships, between environments, children's intellectual growth, and their school accomplishment based solely on the family, particularly the parental background, Bloom suggested qualitative, process-oriented approaches such as case studies in order to investigate more in-depth the effects of environments on the development of human characteristics. He also proposed that home, school, and society should be the center of research concerning long-term effects of environments on the growth of children's learning. Biller (1993) supported the idea that environmental factors are the most crucial element in children's cognitive development by illustrating significant influences of parents, particularly fathers' educational and social status, on their children's IQ scores.

Although Biller (1993) recognized the positive effect of the fathers on their children's cognitive ability, traditionally, mothers have been considered the primary caregivers in stimulating and developing their children's talents, while fathers have been relegated as the breadwinners in the family. For fathers, this tendency is likely to be true even now, but not necessarily true for current mothers. That is, because of the increasing number of women's employment along with smaller family size and longer life

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¹ In this study, age periods were based on Collins and Russell's (1991) classification: (a) early childhood - ages 0 to five; (b) middle childhood - ages six to twelve; and (c) adolescence - ages thirteen to eighteen

expectations, mothers have become more responsible for sharing the breadwinner role primarily held by their spouses in the past, whereas the fathers' roles in childrearing have been relatively neglected and dismissed. This also means that males' shifting roles in parenting children have not been recognized as much as females' shifting roles in the family (Hoffman, 1977). Also, fathers have been found to interact less with their children than mothers have (Russell & Russell, 1987). Although positive father-daughter relationships during childhood have been reported to be conducive to the development of the daughters' competencies (Goertzel & Goertzel, 1962; Piirto, 1998), and many creative persons have been inspired to develop their creative talents with the help of their dedicated fathers (Helson, 1983, 1992; Kerr, 1994; Piirto, 1998), only a few family studies have investigated the effect of the fathers' nurturance on their daughters' talent development. Additionally, it has been found that gifted females are vulnerable to barriers in fulfilling their gifted potential due to the double expectations of being gifted individuals and females in the family. This fact discourages many gifted females from developing their giftedness, talents, and realizing their goals in adulthood (Arnold, 1993, 1995; Kerr, 1994; Noble, 1989a, 1989b; Ochse, 1991; Piirto, 1991; Reis, 1987, 1991, 1995; Silverman, 1995; Subotnik & Arnold, 1995).

Research Questions

The purpose of this study was to examine the family perceptions of the fathers' roles in the talent development of five elementary school girls. Bloom (1985a) proposed that there are critical motivators in children's talent development according to developmental periods, and parents and teachers play crucial roles in the early years

(roughly before age ten) of the learning phase. Adapted from Bloom's assumption on talent development, the following questions were addressed in this study:

- 1. How are the fathers involved in nurturing the talents of their academically, creatively, and/or athletically talented daughters?
- 1-1. What are the paternal roles in recognizing and nurturing the girls' academic, creative, and athletic talents at home?
- 1-2. How can having special activities with the fathers influence their daughters' academic, creative, athletic talent development?
- 1-3. What can we infer from these father-daughter relationships with respect to the daughters' academic, creative, and athletic talent development?

Significance of This Study

This study attempted to explore the family perceptions of the fathers' roles in developing the girls' talents on the basis of five family case studies. The basic assumption of this study lay in the developmental perspective of talent (Bloom, 1964, 1981, 1985a, 1985b; Csikszentmihalyi, Rathunde, & Whalen, 1997; Tannenbaum, 1986) and in the importance of paternal nurturance (Biller, 1993; Biller & Trotter, 1994). Based on the family perspectives, this study investigated how children may have their unique academic, creative, and athletic talents, and they may recognize and develop their gifted and creative potential through the help of their fathers in the family. Considering what has been discovered in the relevant literature and the problems posed through the previous studies on fathering, this study went beyond what has been done before.

First, most of the studies on paternal roles, particularly those investigated prior to 1974, depended exclusively on the responses from mothers and children rather than from

fathers (Radin, 1981). This study involved both parents and their talented daughters in order to compensate for the problems of research that have been derived exclusively from the mothers' or children's opinions, thereby revealing both common and different perspectives of the family.

Second, the results have varied according to the participants involved. For instance, in regard to the paternal roles, different findings have been reported when research studies focused primarily on the comparison between sons and daughters (see Lynn, 1974; Siegal, 1987; Ziegler, 1979), or when both parents were involved in the studies as the participants (see Radin & Epstein, 1975; Reis & Gold, 1977). The results have also been different when they specifically addressed *creative* children (see Helson, 1971, 1983, 1992). In addition, fathers' behaviors have been observed differently in relation to both general human development and specific talent development, and girls more than boys have often been perceived to be vulnerable to this paternal differentiated treatment (Hoffman, 1977). Although the findings have been inconsistent, it has been recently reported that females are still struggling with the burdens of combining their family and career and even more hampered by the double duties: sharing the breadwinner roles with their spouses and their traditional parenting roles. Therefore, this study selected five gifted girls as the child participants to examine the prevalent gender issues.

Third, Tannenbaum (1986) emphasized the coincidence in the emergence of children's giftedness and talent. That is, he addressed several components including environments and innate abilities as the influential forces to make children gifted and talented. This view is comparable to Feldman's (1982) notion of the necessity of inborn ability, general environments, and luck on the basis of his developmental perspective of

talent development. It implies that inborn factors cannot be differentiated from postnatal ones; thus, both need to be considered simultaneously in children's talent development. In addition, Bloom (1964) stressed the crucial effects of environments on children's academic and affective growth more in the early stages of human development than in the later stages. Taken together, this study considered the fathers as significant agents in the home environments in nurturing their daughters' wide-ranging academic, creative, and athletic talents especially in middle childhood. In this sense, the fathers' engagements with their children were regarded as critical postnatal factors that motivate and enhance the girls' talent development, while the girls' excellent performances in different fields were considered as inborn and/or postnatal talents.

In addition to encouraging the girls and their parents to recognize paternal contributions in developing the girls' talents, this study explored the controversial issue of fathers' differential expectations and behaviors toward their children according to gender and the importance of fathers in relation to their daughters' future career pursuits. Also, this study investigated that children's talents are continuously developing with the help of significant persons, particularly the father in the family, from early childhood.

Definition of Terms

The reason for examining the development of talent instead of giftedness came from the definitions of talent conceptualized by several scholars in gifted education. First, MacKinnon (1978) proposed that talent involves a multiplicity of traits that result in individuals' superior performances in specific professional areas. His definition assumed both an ongoing development of talents and a necessity for nurturance; thus, it reinforced the need of educational experiences for individuals' talent development. Second,

MacKinnon's perception of talent is in line with Gagné's (1985) idea, which differentiated the concept of giftedness from that of talent. In Gagné's understanding of giftedness and talent, both concepts were differentiated by linking the former with domains of ability and the latter with fields of performance. According to Gagné, "Giftedness corresponds to competence which is distinctly above average in one or more domains of ability, while talent refers to performance which is distinctly above average in one or more fields of human performance" (p. 108). Also, he clarified that motivation intensifies individuals' talents in conjunction with their abilities, while personality characteristics, interests, and environments gear individuals towards their specific talent fields. Accordingly, environmental forces, personal characteristics such as interests or attitudes, and motivation serve as catalysts in actualizing individuals' gifted potential to reach distinctive performances in their talent fields. Gagné's reexamination of talent seems to be comparable to Bloom and his colleagues' (1985b) understanding of talent. In their study of talented youth, they considered parents as the critical catalysts in introducing and intensifying their children's talents during the early phase of learning.

In this study, the five girls' talents were initially examined on the basis of their performances in academic, creative, and athletic fields. Also, this study investigated the premise that the fathers are the significant, initial facilitators in realizing their daughters' talents, which might emerge throughout life. In this sense, talent rather than giftedness seemed to be more appropriate; thus, it was chosen for this study.

CHAPTER 2

REVIEW OF LITERATURE

Overall, parental roles have been emphasized in child rearing, and it is evident that family has been in the center of the development of children's talents. Piirto (1998) reported that the creative atmosphere of the family was observed in several distinguished artistic families, including the families of Renoir, Picasso, and Georgia O'Keefe. In her biographical studies of creative writers, Piirto (1998) noticed a common, significant stimulation--emphasis on reading--found among some families of famous writers (e.g. Jane Austen, Virginia Woolf, the Bronte family). Among eminent authors, parents' contributions, either the fathers' or the mothers', to the development of their children's creative careers were also manifested in the cases of George Eliot, Thomas Wolfe, Virginia Woolf, Tennessee Williams, and Stephen Crane; the fathers were all very passionate, stimulating, encouraging, and supportive of their children's reading and writing performances. In McGrayne's (1993) study of Nobel Prize women in science, there were sympathetic and influential parents behind the recipients, too.

However, literature has often shown that fathers play lesser roles than do mothers in nurturing their children. Moreover, because of gender difference, relationships between fathers and girls appear less intense as compared to those between fathers and boys (Honzik, 1967; Lamb, 1975, 1976; Radin, 1981; Siegal, 1987; Solomon, Houlihan, Busse, & Parelius, 1971). Despite the lack of literature addressing the fathers' roles in child development, there has been a considerable amount of anecdotal evidence (e.g. the

daughters of Tolstoy, Alder, Curie, and Booth) indicating that creative women professionals were greatly influenced by their fathers in developing their careers (Goertzel & Goertzel, 1962; Goertzel, Goertzel, & Goertzel, 1978; Helson, 1971, 1992; Pirrto, 1992, 1998). Furthermore, the influence of fathers more often than that of mothers was apparent in mathematicians and scientists (Piirto, 1992, 1998). In particular, Helson's (1992) study of creative women mathematicians showed that the professional fathers urged their daughters to enhance their mathematical competence, and that the majority of the fathers were considered their daughters' primary role models.

The following section provides an overview of paternal roles in children's talent development, focusing on the importance of the fathers' early involvements with their children. The literature on talent development is reviewed based on the developmental perspectives of Piaget, Freud, Erikson, and Vygotsky, and more specifically, Bloom's study of talented people is discussed. The issue of the fathers and children's talent development, particularly females' talent development, follows Bloom's study, and then limitations of the literature are addressed.

Theoretical Foundations

Developmental Perspectives in Talent Development

It is generally believed that there are critical periods of development in a person's life. Although the main emphasis is somewhat different according to developmental models, overall, each developmental theory assumes stages or sequences and involves some specific people or agencies that may act as driving forces toward a higher level of human development in each period. Although Piaget, Freud, Erikson, and Vygotsky

approached the entire realm of human development differently, they all emphasized the parents' role in child development, particularly in early childhood.

Piaget (1950) shed light on the issue of intellectual transitions based on universal, invariant stages and sequences for human development. He proposed four major periods in cognitive development focusing on the interactions between children and environments. Freud's (1933, 1961) psychosexual developmental theory contained five stages of the developmental period from birth to adolescence. Freud viewed the sex instinct as the most important and powerful force for human development, but also emphasized the crucial impact of early experiences on the formation and development of individuals' personalities during the first Oral stage (0 to 1 year). Through toilet training, emotional bonding with parents in relation to the children's personality development was intensified in the second Anal stage (1 to 3 years), while fathers' roles were more stressed in the next Phallic stage (3 to 6 years). Freud insisted that children should develop a strong incestuous desire for the parent of the other sex during this period, which led boys to resolve their Oedipus complex by repressing their desire for the mother and by identifying with the father. From then on, fathers became role models for their sons in regard to the masculine sex-role and encouraged them to become a real male. According to Freud and Burlingham (1944), children's relationships with their fathers began later than with their mothers; however, from the second year, fathers contributed to the formation and development of their children's personality characteristics. In emphasizing the father's engagement in play with his children, Lamb (1976) also found that fathers became a preferred playmate for their two-year-old boys although the same-aged girls did not show any preference. Additionally, Fagot (1974) claimed that a critical period for

sex-role development is the time of transition between infancy and early childhood (18-30 months).

Although Freud and others emphasized the significance of the Pre-Oedipal phase, in general, fathers were often thought to be critical in child development during the Phallic-Oedipal period (Lamb, 1975). The importance of the father's role was associated with the resolution of the Oedipal conflict, which was a prerequisite for psychosexual development for boys (Munro, 1955). This fact implies that during the ages of three to six (the Oedipal phase), fathers played very crucial roles in child development, particularly for boys, in relation to their sex-role identification.

In Erikson's (1963) psycho-socio developmental theory, the eight-stage model of human development was classified by specific developmental tasks and potential crises that were expected to happen in each stage. In the first stage (birth to one year), infants had a strong bonding with their caregivers who satisfy their basic needs; thus, mothers or other primary caregivers were crucial in resolving the crisis. From ages one to three, parents were the pivotal social agents for their children to be autonomous, and family became an important social agent to retain a sense of initiative in conflicts from ages three to six. After then, teachers and peers influenced the children as the significant social agents.

Another scholar, Vygotsky, stressed the importance of critical periods in human development (see Vygotsky, 1974). According to Vygotsky, crises occurred at (a) the age of three for transition from early childhood to preschool years, (b) that of seven for unifying links between the preschool and school period, and (c) that of thirteen for

transition into puberty. The author delineated positive aspects of three major periods; for instance, age three marked the emergence of new personality traits, while age seven was characterized by a number of great achievements in developing independence and relationships with others.

The specific developmental periods have not only been examined in relation to the entire realm of human development, but also in relation to certain specific issues such as intelligence, interests, and personality. Bloom (1964) stated that the most rapid period in the development of human characteristics emerged in the first five years of human development. That is, with the exception of school achievement, individuals' general intelligence, intellectuality, aggressiveness, dependence, or even height tends to grow rapidly in early childhood. However, he also recognized that the early measure of general intelligence could not be used simply for predicting individuals' later measure of intelligence, although considerable intellectual growth occurred during the first four years of human development. Similarly, Gruber (1982) claimed that one of the drawbacks of the study of giftedness and creativity lies in the sometimes-negative relationship between early giftedness and later creative productivity.

Although developmental theorists have suggested the importance of certain developmental stages and have proposed significant persons in each developmental phase (e.g. parents in early childhood), Feldman (1982) and Sosniak (1985) addressed an important notion in differentiating entire human development from general learning. Feldman (1982) suggested that the Piagetian universal and sequential stage model and the process of equilibrium for the development of thought process were not able to explain sufficiently the uniqueness of gifted individuals and creative innovation. In addition to

individual propensities, he proposed several components that contributed to individuals' exceptional achievements and extraordinary capabilities. These were (a) culture, (b) the timing of talent, (c) tradition, (d) history, (e) institution, (f) mentors, and (g) instruction. Feldman further insisted that the coincidence of all these components is quintessential to fulfill human potential abilities, and that learning is a portion of human development characterized by environmental interventions consisting of study, instruction, or experience. Similarly, VanTassel-Baska (1989a, 1989b) addressed three major factors comprising institutional, intrapersonal, and interpersonal influences as possible contributors in the development of disadvantaged gifted students' talents. Accordingly, studies of individuals' learning need to be approached differently from those of general human development. This means that unlike human development characterized by universal achievement, spontaneous acquisition, and invariant sequence, individuals' learning activities need to rely on a variety of learners' distinctive and unique characteristics accumulated and formed by multiple components. All these notions imply that the uni-linear and universal trend for general human development may not be applicable in studying gifted and talented children who have their distinctive and special giftedness and talents. What, then, can be the alternative to explain the development of children's giftedness and talents? One solution may be found in Bloom's (1985b) study of talent development of youth.

Bloom's Study of Talent Development

Bloom's study of 120 talented young men and women reflected the transitional experiences in specific time periods linked with significant people. Based on interviews with the talented people from six different fields, Bloom and his colleagues (1985b)

examined how young people developed their specialties in artistic, cognitive, and athletic areas. The authors pointed out that there were critical motivators for talent development in three learning phases consisting of early years (roughly before age ten), middle years (ages around ten to fourteen), and later years (roughly after age fourteen).

According to Bloom (1985a), in the early years of the learning phase, motivational support and encouragement by parents and teachers were more decisive in children's talent development than were the children's particular giftedness or talents. Furthermore, it was the parents who introduced and encouraged their children to enter their initial talent fields. During the middle years in the learning phase, children depended less on encouragement and support from their family, but received as much stimulation from their teachers and peers as from their parents in the previous years. Biller and Kimpton's study (1997) supported the importance of peers outside of the home environment during this period. Their study showed that children in the years between school entry and adolescence perceived themselves in comparison to their peers, and they learned about norms, values, and structure through their interactions with peers. From the age of about fourteen, the talented people entered the third phase of learning. During this period, relationships with master teachers, outstanding colleagues, or peers encouraged the children to become experts in their respective talent fields. Then, the talented children devoted themselves to their specialty areas and were more responsible for their performances. Consequently, by sharing common interests with people in the same talent field, the talented youth became more expert in the field gradually.

Bloom and his colleagues' (1985b) study revealed that children's talents were formed and developed through the three phases of learning by means of affiliations with

significant others. Tannenbaum (1986) underlined the importance of environments in facilitating the emergence and realization of talents although he also acknowledged that it is common to study the characteristics of precocious children in reference to the manifestation of their talents. His understanding of the environmental forces corresponded to the significant persons in Bloom's talented youth. In emphasizing the importance of initial parental and environmental effects on the development of human characteristics, Bloom (1964) insisted that environments influence the formation of human characteristics in their rapidest period of growth more drastically than in any other developmental phase. For instance, in regard to school learning, children achieved most rapidly in their third grade. Bloom illustrated three factors that possibly produced differences in children's scholastic accomplishment, and these were (a) an educational meaning related to the individual's personal advancement and role in society, (b) the level of education and value placed on education by significant adults in the individual's life, and (c) an extent to which school achievement is motivated and reinforced by parents or significant adults in life. (p. 190) In this regard, for children, in the process of their talent development, early experiences with parents cannot be dismissed as an initial step for entering specific talent fields.

Fathers and Children's Academic and Social Development

A number of studies have examined maternal involvements in raising their children. Although modern fathers are emancipating themselves from traditional roles and becoming increasingly engaged in nurturing their children (Henderson, 1980), little research concerning the effects of paternal involvements on their children's development has existed. Much literature has suggested that preschool aged children often perceive

their home as dominated by mothers, with the role of fathers as the breadwinner in the family (Lewis, 1997). However, there is some evidence indicating positive paternal engagement both in children's cognitive and affective development despite the lack of research on fathering.

Biller and Kimpton (1997) observed that modeling the father figure occurred in the beginning of the school-aged period, and effective fathering affected children's intellectual and social competence including enhancing their positive body image as well as motivation, self-esteem, and morality. According to Biller (1993), paternal nurturance is very significant in stimulating and encouraging children's intellectual capacity. By demonstrating their instrumental and achievement-oriented behaviors, fathers have been recognized as role models in their children's academic development (Blanchard & Biller, 1971; Collins & Russell, 1991; Shinn, 1978). In addition, it has been reported that fathers contribute to their children's higher quantitative, mathematical abilities (Helson, 1971; Landy, Rosenberg, & Sutton-Smith, 1969; Lambert & Hart, 1976), and verbal achievement (Bing, 1963; Multimer, Laughlin, & Powell, 1966; Lambert & Hart, 1976). In Wagner and Phillips's study (1992), fathers influenced overall academic competence as perceived by their children. Several studies also demonstrated a relatively strong link between father-child relations, the child's field independent cognitive style (Dyk & Witkin, 1965), and his/her problem-solving ability (Biller & Salter, 1989; Reis & Gold, 1977).

Paternal involvements with children have also been investigated in relation to facilitating their children's socially and morally appropriate behaviors. Literature has revealed that affectionate relationships with fathers enhanced children's later social

adjustment (Biller & Trotter, 1994). For first grade boys, it was found that positive relationships with their fathers in early childhood resulted in more productive and well adjusted relationships with their peers later in school (Guidabaldi, Cleminshaw, Perry, Nastasi, & Lightel, 1986). Later peer acceptance influenced by the early positive parental relationships was also observed in the study of the social and emotional development of school-aged children (Cassidy, Parke, Butkvosky, & Braungart, 1992). The finding was specifically related to the fathers' active engagement in physical play with their children, which consequently promoted the children's peer relations during school years. Additionally, with respect to the issues of the early sex-role identification for boys and girls, it was found that constructive father-daughter relationships were associated with the girls' social adjustment and positive body image (Sarigiani, 1987). Also, the fathers' nurturance and socialization behaviors were related positively to their sons' masculinity (Lynn, 1974; Siegal, 1987), while they affected their daughters' femininity (Siegal, 1987). In regard to enhancing children's high self-esteem, Biller (1993) proposed that the quality of fathers' involvement with their children during the school-aged period has a major impact on the children's confidence and competence. Lozoff (1974) confirmed that particularly for girls, their relationships with their fathers contributed to their future career competencies. Also, the father-child relationships, especially the father-son relationships, but not the father-daughters relationships, were examined in association with the boys' moral development (Bronfenbrenner, 1961; Hoffman, 1971). Moreover, Hoffman (1971) concluded that the lack of a paternal model had a negative impact on conscience development of boys because a more adequate level of conscience development was evinced among the boys when their identification with their fathers

were stronger. Similarly, Bronfenbrenner (1961) claimed that fathers afforded their adolescent sons models of leaderships and responsibility.

On the one hand, a considerable number of studies have shown differential socialization behaviors from fathers to their sons and daughters based on the children's genders (Lamb, 1975, 1976; Siegal, 1987). According to Biller and Trotter (1994), fathers, more than their spouses, are concerned about gender in interacting with their children. Also, it has been noticed that fathers' primary concern in educating their children varied according to their children's genders (Block, Block, & Harringotn, 1974; Hoffman 1977; Lynn, 1976). That is, the fathers of boys were aware of their son's cognitive achievement, while those of girls were more concerned about their daughters' interpersonal development. In addition, the amount of the paternal involvement with their sons and daughters was different (Honzik, 1967; Radin, 1981; Solomon, Houlihan, Busse, & Parelius, 1971). A study (Solomon, Houlihan, Busse, & Parelius, 1971) showed that moderate degree of fathers' engagement in their daughters' efforts was associated with the girls' high academic achievement, while this tendency was not found among boys. Honzik (1967) and Radin (1981) supported the finding that moderate warmth and bonding with the fathers influenced positively their daughters' cognitive competence, whereas closer relationships were observed between the fathers and boys. Although a significant amount of research has shown that fathers have a more direct impact on their sons' than on their daughters' academic competence, and that the amount of the fathers' attention toward their sons is greater than toward their daughters (Biller, 1993; Honzik, 1967; Radin, 1981), the relative findings are still inconsistent.

On the other hand, an earlier onset of the father-daughter resemblance in intelligence than that of the father-son resemblance was detected. Honzik (1963) found that compared to sons, there were earlier significant correlations in mental abilities between girls and their parents. More specifically, the result showed that fathers' education and girls' IQ scores were significantly correlated from the age of three, while for boys, the statistically significant results emerged from age seven. The study implied that although children's scholastic achievements peak in middle childhood, in early childhood, the onset of cognitive development is earlier for girls than for boys by virtue of the influence of certain significant adults, particularly parents.

Fathers and Girls' Talent Development

George Eliot's (pen name) writings were full of descriptions of her father as a strong, powerful, and dedicated man who was always explaining stories to his six-year-old girl. With the inspiration of her father, the young Mary Ann Evans created the rest of the story when a book had to be returned before she could finish reading it. This fact foreshadowed the young girl's potential as a creative writer (Piirto, 1998, p. 217).

The Nobel Prize winner Marie Curie had a father who took over the parenting role after her mother died when she was young. Her father encouraged all of his children to be well educated and become brilliant, and reading was the primary activity in this intellectual family (Kerr, 1994). In the well-known Kennedy family, Joseph Kennedy, Senior emphasized both freedom and responsibility in sports and scholastic achievements to his nine children. With no doubt, the children were motivated by their father's stimulation, support, and high expectations in accomplishing their goals (Goertzel & Goertzel, 1962, pp. 161-162).

There are many eminent women who have been inspired to develop their creative talents by their dedicated parents, particularly their fathers. Piirto (1992) remarked that especially for female scientists and mathematicians, fathers were more likely than mothers to be considered their daughters' primary role models. Another study (Helson, 1971, 1992) supported the significant influence of fathers in fulfilling their daughters' creative potential by stimulating their competence without emphasis on any sexstereotyped roles. According to Helson, creative women mathematicians identified with their fathers and regarded them as the major role model in developing their future careers. Furthermore, most of the creative women mathematicians in the study had fathers who held professional careers, which also had an impact on the future professions of the creative women.

Biller and Trotter (1994) supported this fact by insisting that successful women had fathers who were personally and professionally supportive of their daughters, and the positive father-daughter relations contributed to the daughters' success in their relationships with other men later in life as well as in their professions. In Honzik's (1963) study, in comparison to maternal education, overall, paternal education correlated highly with the girls' IQ scores at all ages. The finding was contradictory to Hoffman's (1977) review on the literature illustrating that the fathers of boys were more likely to stress cognitive achievement and performance for their sons, whereas those of girls were more concerned with their daughters' socialization than with their accomplishment.

Fathers' influence on their daughters was also discovered in regard to autonomy development. Lozoff (1974) found that autonomous women who emphasized their

personal growth and talent development more than their careers had fathers who set a high value on their daughters' intellectual abilities and distinctive talents.

However, as indicated previously, differentiated paternal behaviors toward boys and girls have also been reported in relation to children's social and emotional development (Bell, Johnson, McGillicuddy-DeLisi, & Siegal, 1981; Biller, 1971; Lamb, 1975, 1976; Siegal, 1987). Also, fathers' differentiated attitudes were recognized in regard to their children's cognitive development (Block, Block, & Harrington, 1974; Hoffman, 1977; Honzik, 1963; Lynn & Cross, 1974; Lynn, 1976; Pedersen, Rubenstein, & Yarrow, 1979; Radin, 1981; Shinn, 1978; Solomon, Houlihan, Busse, & Parelius, 1971). Moreover, literature in gifted education has illustrated that many gifted females were concerned about balancing their career with family (Arnold, 1995; Noble, 1989a, 1989b; Piirto, 1991; Reis, 1987, 1991; 1995; Silverman, 1995). This fact led to lower productivity and later accomplishments of gifted females compared to gifted males (Piirto, 1991; Reis, 1995, 1998) although both were remarkably alike in terms of their personality characteristics (Piirto, 1991). Reis (1987) insisted that even though females receive higher grades throughout school, later in their lives, their professional productivity is relatively lower than males'. The author further proposed that such a gap results from the cultural stereotyping, sex roles, and mixed messages for the gifted females (Arnold, 1993, 1995; Ochse, 1991; Reis, 1991; 1995, 1998; Subotnik & Arnold, 1995). Due to these factors, there are many gifted females who have become adult underachievers (Reis, 1991). Noble (1989a, 1989b) also pointed out that gifted females face an inconsistent and mutually exclusive expectation as being gifted and female. Eccles (1985) made an interesting statement after reviewing both the Terman and the

John Hopkins studies of the gifted. She concluded that parents were not sensitive to their children's genders in terms of the children's general intelligence, but rather, they were more concerned with their children's genders in relation to domain specific skills. For instance, mathematics and mechanical ingenuity have been emphasized for boys, while drama and music have been emphasized for girls. Also, Eccles noticed that many gifted females do not realize their educational and vocational goals as successfully as do gifted men. Likewise, Piirto (1991) and Silverman (1995) reported that there are only a few eminent, creative female scientists, mathematicians, and visual artists compared to their male counterparts. Another scholar, Ochse (1991), also claimed that compared to males, females have not been compelled to be involved in intellectual pursuits, and their creative achievements have been ignored and underestimated. Kerr (1994) referred to the culture of romance as a distraction for many gifted females in fulfilling their gifted potential later in life. She also insisted that females are apt to lose their strong interests in achievement after age fourteen, while males tend to maintain their motivation until adulthood. Therefore, in addition to the differential attitudes from fathers, for females, their lack of commitment to creative fields appears to confirm both the prevalent sex stereotyped expectations of females and the common conflict they experienced in maintaining their professional career and family simultaneously.

Problems in the Studies of Fathers' Roles

A half century ago, Tasch (1952) examined fathers' roles in urban American families and classified the functions of fatherhood into several major categories. The fathers in her study preferred to portray themselves in the following categories: (a) companion, (b) economic provider, (c) guide and teacher, and (d) child-rearer. In regard

to the concept of the paternal roles, the fathers ranked highly the categories of (a) economic provider, (b) guide and teacher, (c) contributor to species, (d) authority, and (e) person supplying protection, stability, and emotional security. Overall, the study implied that companionship was valued highly by the fathers, while an example of masculinity was not described as a decisive paternal function for their children (Tasch, 1952). When Tasch conducted her study at the beginning of the 1950s, she might have expected the transition of paternal roles in nurturing children. That is, compared to the fathers in the past generations who had been considered more critical in the identification of the gender roles for boys and had been respected as the head of the family, the fathers in the study got more actively involved in overall childrearing, implying a more equalitarian partnership with their spouses in the family than ever before.

However, although nearly a half-century has passed, the similar issues of paternal functions touched on in the 1950s are still posed and discussed. This means that the paternal roles in childrearing have not met the expectations of what had been expected in the past decades. An interesting finding in Tasch's study was that although the fathers enjoyed spending time with their children and highly valued their companionship with them, the amount of time spent by the fathers with their children was ascribed to job pressure. That is, their job pressure became the primary excuse or complaint of the fathers, which discouraged them from sharing as much time with their children as they hoped. This fact may be true of the fathers even now. The majority of the studies of fathers had been published in the 1960's and 1970's, but the studies suggested similar implications that were addressed and discussed in the 1950s. Furthermore, the subsequent literature has repeatedly revealed the importance of fathers within the categories

illustrated in Tasch's study; thus, also, it is not difficult to find studies of fathering indicating similar findings and implications to the previous ones, even published in the 1990's. In this sense, longitudinal studies are needed to examine long-term effects of the fathers on their children's talent development (Radin, 1981).

The problems of methodology in examining the father's roles are not likely to be changed. In many studies, the fathers' roles have been described indirectly from children's points of view rather than from fathers' (Radin, 1981). Moreover, it has been noticed that father-child relations vary according to observational conditions. For instance, Russell and Russell (1987) found that, in the presence of observers, fathers were more inhibited toward their children, and their different affectionate behaviors were evinced according to their children's genders. Also, the paternal behaviors with their sons and daughters were changed if mothers were not present in the research situation. In contrast, mothers' relationships with their sons and daughters were different with the presence of their spouses (Gjerde, 1986). Additionally, Biller (1968) claimed that a great deal of research published prior to the 1970's addressed the paternal engagement with their school-aged children, particularly boys, but not girls. Therefore, the research findings have varied depending on different research designs, which ultimately have produced differential paternal behaviors toward children based on gender.

In conclusion, the relevant literature on fathering has not sufficiently showed the unique roles endowed or taken over by the fathers in nurturing their children's academic, creative, and athletic talents. Because of the paucity of research and problems in methodology such as the inappropriate approach to research participants (e.g. from mothers' or children's perspectives) and the careless research design (e.g. the presence of

observers), overall, the paternal roles for their children have not been discovered and discussed appropriately although they have been perceived as significant as the maternal roles.

CHAPTER 3

METHODS

Theoretical Framework

Symbolic Interactionism

Because this study examined the interactions between the fathers and the girls in order to explore the fathers' roles from the family perspective, symbolic interactionism was a primary theoretical framework. According to Crotty (1998), symbolic interactionism deals with all social interactions formed by the issues of language, communication, interrelationships, and community. Its object is to investigate how individuals are being socialized through the process of perceiving social values and attitudes. In symbolic interactionism, meanings of things are understood to derive from and to be formed by all social relationships within individuals, and the meanings vary through the ongoing interactive process in different contexts and encountered situations (Blumer, 1969; Hutchinson, 1990; Woods, 1990, 1992). Accordingly, symbolic interactionism focuses on people's perspectives instead of on objective goals defined in cultures where the people interact (Woods, 1990).

Feminism

Another theoretical framework of this study was feminism. As addressed previously, several studies have indicated barriers for adult gifted women in actualizing their giftedness and talents because of the difficulties in combining their family and

career. Many gifted women have faced difficulties in developing their gifted potential due to the sex-stereotyped expectations that are still deeply rooted in society.

Furthermore, the literature has illustrated that fathers behave differently toward their children based on gender, although the related findings of this issue have been inconsistent. Considering these problems, the interview questions in this study included some notions of women culture as related to specific female aesthetics involving art, literature, or music (Crotty, 1998). More specific follow-up questions (e.g. Do you consider different plays or activities based on your child's gender?) regarding the gender stereotyped behaviors and attitudes were also asked of both parent participants.

Case Studies

Case studies of five girls were conducted to explore the questions of the family perceptions of the fathers' roles in their daughters' talent development. According to Merriam (1998), case study--a qualitative research method--is a particularistic, descriptive, and heuristic analysis of a single instance, phenomenon, or social unit. This method is useful when researchers are interested in the process of monitoring, causal explanation, and in revealing a unique phenomenon (Merriam, 1998). In a narrower sense, Wolcott (2001) proposed case study as a format of reporting rather than a strategy for conducting research. He insisted that in conducting a case study, researchers should provide readers with adequate detail of the research strategy rather than depend on the case study itself as an invincible strategy in presenting the findings. In effect, in a qualitative study, it is not easy to determine the typicality or representativeness of findings derived from only a few cases (Mehan, 1979). Stake (1994) reminds us that case studies do not attempt to generalize beyond a single case or to build new theories.

Therefore, the goal of case studies is to understand the particular case in depth, not to find out what is generally true of many other cases.

Gifted and talented children are distinguished in terms of their cognitive and affective characteristics. Furthermore, considerable individual differences have been detected within the gifted and talented population as much as their distinctive characteristics. In this sense, the case study method is especially appropriate for the study of the gifted and talented because their unique characteristics are difficult to generalize across the entire gifted and talented population, to say nothing of the general non-gifted population.

Sampling Procedure

Participants were selected based on purposive sampling. According to Silverman (2000), purposive sampling involves choosing cases if they demonstrate some feature or process in which the researcher is interested. Five girls consisting of two six-year-olds and three eight-year-olds were selected as child participants for this study according to the following screening procedures: First, a possible list of child participants comprising 30 girls aged six to twelve was provided by participating in a gifted program in a local university in the middle of May 2001. Second, out of the 30 girls, fourteen girls who registered for the gifted program and lived close to the university community were selected as an initial sample pool; thus, convenience sampling (Merriam, 1998) was also applied to this study. Third, the researcher mailed a letter to the parents of these fourteen girls to briefly introduce this study and to ask permission for their daughters' and their own participation in the study. Fourth, four out of the fourteen parents responded to the researcher via mail, and one parent responded via email. Finally, five girls were chosen

as the child participants and had the following characteristics: Three out of the five children whose parents responded to the mailing were selected, while the remaining two did not fit in the screening criteria because of absence of fathers in the family. These three girls have working fathers, but only one of them has a mother currently working full time. The other two have mothers who are primarily homemakers and working part time. However, the mothers have an equivalent educational level with their spouses; they all graduated from college as their husbands did. The three girls were all eight years old and rising third graders at that point. The other two child participants were selected through the snowball chain (network chain) method. Because two prospective respondents did not fit the criteria, additionally, two girls needed to be selected by recommendation from two faculty members in the university. A recommended girl had participated in another study of the researcher before, and her mother is a colleague of the researcher in the university. The other girl was a daughter of another colleague of the researcher, but she was contacted for the first time for this study. Two were aged six, and their mothers filled out the participant information sheet and signed the permission form like the other three children.

Participant Descriptions²

Child Participants

All the child participants in this study were Caucasians who come from middle to upper-middle class American families living in one of the largest university communities in the southeast United States. Because the girls were six to eight years old, some of them had not been tested for gifted placement in school; the two six year olds were not

² All names are pseudonyms in order to ensure confidentiality.

identified as gifted because there was no gifted program for preschoolers in their schools. However, when I asked them about their daughters in the initial recruiting process, the five parents all mentioned that they consider their daughters as gifted and talented. The three eight-year-old girls are described first, followed by the descriptions of the two six-year-old girls (refer to Table 1 for summary).

Kate. An eight-year-old girl, Kate, is of average height and slightly tanned with brunette hair. The only child in her family, she lives with a father who is an information technician at the university and a mother who is a doctoral student at the same university. Before I interviewed her in her home, it was observed that her playroom was filled with a vast variety of toys, CDs, and books provided by her parents. Kate was identified as gifted based on the state's eligibility criteria. She fitted the criteria requiring the 96th percentile or above on the composite score in mental ability, 90th percentile or above in the total math, total reading, or total battery in achievement, and 90th percentile or above on the scale of 1-100 in motivation. Her score in the *Torrance Tests of Creative Thinking* (TTCT: Figural) ranked among the highest (at the 99th percentile). She is currently in a gifted program in school. Both this year's grade report and an achievement test demonstrated her excellent performance in overall academic subjects including reading, mathematics, social development, and social studies. In particular, Kate was excellent in reading and listening comprehension. Her reading performance was ranked at the 99th percentile in STAR reading test and at the 98th percentile in Stanford Achievement Test. She excelled in writing, too. Kate and her parents told me that she loves reading, creating stories, and acting. In addition, Kate is very sociable, friendly, active, but also very sensitive to people and animals. After the terrorist attack on September 11, 2001, she

wrote an article in a local newspaper and expressed her emotional sensitivity to the event. Also, because she greatly enjoys talking even with a stranger, she responded to the interview questions very well. In a grade report, her teacher made the following comment on her talking: "I am encouraging her to monitor the amount of talking she does throughout the day." The teacher also described her as a very special young lady and an excellent girl who is enthusiastic to learn.

Cathy. A tall, thin, and blonde eight-year-old lives with her parents and one elder sister. Her father is a businessman, and her mother is a homemaker but also works parttime in a substance abuse prevention/awareness program. Her room was neatly arranged with books and several pieces of her art awards. A few trophies for her distinguished performance in swimming were also displayed in the hallway. Cathy was identified as gifted by meeting the state's eligibility criteria. Overall, she was excellent in all of the academic subjects and special areas including art and athletics. In this year's *Iowa Tests* of Basic Skills, Cathy's overall achievement was ranked at the 98th percentile compared to her grade equivalent group. Specifically, her language total, mathematics total, and language total lay in the 99th percentile, 98th percentile, and 93rd percentile, respectively. Her grade reports supported her outstanding performances in every scholastic and aptitude area as well. Cathy has received several awards for her exceptional performances in school including the Outstanding Student Award two times. Her teachers supported her distinguished achievements by making the following comments: (a) a very conscientious and capable student, (b) a top point earner with an accelerated reader, and (c) impressed with the way she sets goals and works hard to meet them. A certificate of achievement from a school of dance demonstrated her physical talent, too.

Edna. Another eight-year-old girl Edna is of average height, thin, and blonde. She is the second child in her family with one elder sister, one younger sister, and brother. Edna's academic strength was evident in word analysis; in this year's and last year's cognitive test, her scores were ranked at the 99th and 98th percentile, respectively, compared to her grade equivalent group. Also, her scores in mathematics were ranked at the 96th and 99th percentile, respectively, in both tests. Edna was also in the gifted program in her school. Her father is a businessman, and her mother is a homemaker who worked at the microbiology laboratory before Edna was born. Edna is an athletically talented girl who has earned several awards for her excellent accomplishment in swimming. The awards showed that her swimming took first place four times in the county swim league since 1999. A presidential physical fitness award supported her outstanding athletic achievement as well. Edna is diligent, willful, and independent in accomplishing her work. The teachers' comments in the report cards confirmed that she is very determined, eager to learn, and completes her work very promptly and independently. Several progress report cards illustrated that Edna is making excellent progress in all of the academic subjects. In particular, her areas of strength were evident in art and music as well as in physical activities. Her artistic talent was also reflected in the TTCT in which her elaboration score was ranked at the 95th percentile. Edna is perceived to be affectionate and warm toward her peers and other people. Her teachers' statements such as a caring friend, a fun loving friend, and their evaluations on her social

Table 1

Child participants

Name	Age (Grade)	Siblings/Birth order Work	ing parents	Gifted program
Ann	6 (K)	One brother/Youngest	Yes	No
Emma	6 (K)	Two brothers/Oldest	Yes	No
Cathy	8 (2)	One sister/Youngest	No	Yes
Kate	8 (2)	Only child	Yes	Yes
Edna	8 (2)	Two sisters and one brother/	No	Yes
		Second daughter		
Name Academic talents		Nonacademic talents	Future career options	
Ann Math		Interpersonal, Drawing	Did not know yet	
		Music		
Emma Reading, Math		Drawing	Physics teacher	
Sc	ience			
Cathy Ma	ath	Athletics, Drawing	Doctor (Obstetrician)	
Kate Re	eading, Writing	Acting, Drawing	Author, Actor, Artist,	
			Animal help	per, Athlete,
			Computer e	xpert
Edna M	ath	Athletics	Businessman	

Note. Both Ann and Emma were not in the gifted program at this point because there was no gifted program for preschoolers in their schools.

development verified her superior social skills. In addition, Edna's report cards showed her great interest in reading and good performance in language arts.

Emma. A six-year-old Emma is tall and thin with blonde hair. She is the eldest child in her family with two younger brothers. Her father is a high school physics teacher, and her mother is a graduate student at a local university. In her home, there was a room, originally a garage but ultimately transformed by her parents into a playroom for their three children. It was filled with toys, books, and a playhouse. Emma's pre-school assessment demonstrated that she was superior in every academic area and very ready to enter elementary school. Her current progress report in school confirmed her outstanding level of development across scholastic and non-scholastic areas. Her score on the TTCT ranked among the highest in comparison to her grade equivalent group. Her overall creativity index was ranked at the 99th percentile. Teachers' comments on her report cards indicated Emma's cooperative and conscientious attitude as well as her eagerness to learn. One of her teachers' comments was, "She has been 'my ray of sunshine' every day." Emma's mother told me that her daughter adores drawing and art. Her score in the elaboration (ranked at the 99th percentile) in the TTCT held up the fact that she is very good at enriching her drawing with great details.

Ann. Ann is six years old, but she looks as old as a second grader. She is quite tall, chubby, and blonde. She has one elder brother and lives with her parents in university housing. Her mother got her doctoral degree in educational statistics, and she is working as a statistician at one of the most prestigious institutes in the States. Her father is a supervisor in a local company. Ann's grade reports showed that Ann is ready to head to elementary school. Her performances in school were all excellent in every subject area.

Ann's artistic talent was evident in her works of art shared by her mother. Ann was not shy in talking about her family during the interviews and very friendly in meeting with me. Her mother agreed that Ann is very sensitive and emotional in spite of her young age. *Parent Participants*

Jimmy and Lori. Jimmy, Kate's father, works with computers at the local university as an information technician. At first, he was friendly but quiet and reluctant to talk; however, he was more willing to talk with me as time passed. Jimmy loves music, animals, enjoys cooking at home, and he is the major cook in the family. Lori, Kate's mother, is a doctoral student studying education at the university. She showed a great interest in this study and informed me about Kate's essay regarding the terrorist attack last September when she posted it online in the local newspaper. Lori appeared to be very proud of her daughter's outstanding performance in reading and writing.

John, Pam, Doug, and Natalie. Cathy's parents, John and Pam, and Edna's parents, Doug and Natalie had some commonalities. Both families have fathers who are businessmen and mothers who do not work full time outside of the home. John studied education but manages a company with his brother. He was somewhat quiet but often showed a sense of humor during the interview. His wife Pam studied business management in college and works part time with a drug awareness coalition. Doug, Edna's father, studied risk management and insurance in college and is now holding a consulting job. He has his own files for his four children's achievements in and outside of school and has arranged every report card of the children. All of the interviews with Edna's family were conducted at Doug's study room in the home where all the children's files were preserved. Natalie, his wife, is a homemaker who studied microbiology and

medical technology in college. She is working part time as a substitute teacher in an elementary school. She had worked at a laboratory before she had her first daughter. Both parents of Cathy and Edna are pleased with the fact that the mothers serve as homemakers instead of having their own careers. They all agreed that it would be better for the mothers to devote their time to their children until the children grow up. Both mothers also mentioned that they are happy with their current status as homemakers.

Timothy and Elaine. Timothy, Emma's father, is a high school physics teacher who studied physics and math in college. He loves spending time with his children and doing athletic activities with his family. Timothy is very supportive of his wife Elaine's studying as a graduate student. Elaine told me that she could not have returned to school without her husband's encouragement and support. Elaine studied French and education in college. Currently, she is working for her doctoral degree in education. Both Timothy and Elaine are proud of the fact that Elaine has been developing her own professional career along with three children.

Jerry and Dianne. Jerry, Ann's father, has a sense of humor and indicated various interests in many subjects during the interviews. He loves music and enjoys playing the harmonica. He quit his study in college because he did not believe that continuing his college education at that time was necessary for his success in life. He was very cooperative with this study and did not hesitate to express his own beliefs and philosophies in educating his children. Dianne, his wife, earned her doctoral degree in educational psychology at a local university. Recently, she moved to the northeastern United States with her family to start her professional career at a research institute.

at home, while her husband is an outgoing person who enjoys social relations with others.

Table 2 summarizes the parent participants in this study.

Data Collection

This study was designed to include three different sources of qualitative data comprising interview, document, and observation (when possible). As one of the strengths of the fieldwork (Wolcott, 2001), triangulation--the attempt to obtain findings by combining different ways of looking at cases (Silverman, 2000)--was applied to this study. According to Denzin (1978), there are four types of triangulation: data, investigator, theory, and methodology. This study depended primarily on the data and methodological triangulation that refer to using several data sources and multiple methods in examining the findings. This strategy was used to strengthen the internal validity of the present study as well.

Before collecting data, parents of the five talented girls were contacted to get prior consent. Because this study involved both children and their parents as participants, prior approval from the parents was needed. After getting parental approval for the participation in this study, Institutional Research Board (IRB) in the university approved the research, thus initiating the data collection.

Semi-structured Interviews

Semi-structured interviews were the primary method of data collection in this study. According to Merriam (1998), semi-structured interviews--a common method in qualitative studies--are "guided by a set of questions and issues to be explored, but neither the exact wording nor the order of questions is predetermined" (p. 93). Kvale (1996) supported the idea that semi-structured interviews aim at interpreting descriptions

Table 2

Parent participants

Father Fath	ner's final education (major)	Father's occupation
Jerry	College incomplete	Salesman
Timothy	College (Physics/Math)	Teacher (Physics)
John	College (Education)	Businessman
Jimmy	College (Drama)	Information analyst/
		Technician
Doug	College (Risk management/	Businessman
	Insurance)	
Mother	Mother's final education (Major)	Mother's occupation
Dianne	Graduate school (Education)	Research analyst
Elaine	Graduate school (French/Education)	Graduate student
Pam	College (Business management)	Homemaker/
		Part-time worker
Lori	Graduate school (Art/Education)	Graduate student
Natalie	College (Microbiology/	Homemaker/
	Medical technology)	Part-time worker
	Jerry Timothy John Jimmy Doug Mother Dianne Elaine Pam Lori	Jerry College incomplete Timothy College (Physics/Math) John College (Education) Jimmy College (Drama) Doug College (Risk management/ Insurance) Mother Mother's final education (Major) Dianne Graduate school (Education) Elaine Graduate school (French/Education) Pam College (Business management) Lori Graduate school (Art/Education) Natalie College (Microbiology/

of interviewees' lives that are originated from their own perspectives related to assumed research inquiries. Therefore, semi-structured interviews are appropriate for studying peoples' understanding of meanings, for clarifying, and elaborating their own perspectives in their own words (Kvale, 1996).

Two semi-structured interviews with the five child participants and one semistructured interview with each of the parents were held, separately. Except for one case, all of the interviews with the children took place in their homes, but the interviews with their parents, except for two families, were conducted at my office in the university. Mostly, the interview questions were constructed to compare and constrast reponses from the fathers, mothers, and their daughters to the same questions. The interview questions for the children were mainly concerned with the quality of their individual interactions with their fathers and the importance they attached to their relationships with their fathers. For the fathers, the nature of their relationships with their daughters was explored concerning the girls' talent development, while for the mothers interviews were focused on their perceptions of the relationships between their daughters and husbands. While proceeding with the interviews, some specific questions were added to follow up the responses of the interiviewees. In particular, for the girls, it was often necessary to ask them more concrete and specific questions to encourage their responses, because some of them were too shy to respond to the interveiw questions. For example, whenever they responded simply, "Yes," or "No" to the questions, I had to follow up their resposnes by asking more about their comments. Both the girls and their parents were also asked about their perceptions of their mothers' or wives' current vocational careers. Additionally, a few questions of gender stereotyped issues were asked of the girls' parents to explore

whether the fathers behave differently according to their children's genders. Samples of the interview questions are illustrated in Appendix A.

The interviews were all recorded and transcribed verbatim. Then, member checks-checking with the mothers of the child participants regarding any unclear words, names, or concepts--were conducted to enhance the internal validity of the study (Merriam, 1998).

Document Reviews and Administration of the TTCT

Document reviews were another primary method of data collection. Initially, they were conducted to identify the academic, creative, and athletic talents of the child participants. The *Torrance Tests of Creative Thinking (TTCT: Figural)* was administered to the girls after the second interviews with them. Both the document reviews and the *TTCT* demonstrated the five girls' giftedness and creative potential compared to their grade equivalent group and their unique talent areas.

Document reviews were based on the relevant documents comprising public records, personal documents, and physical materials (Merriam, 1998), which were all obtained from the girls' parents. Student record reports, progress reports, diagnostic reports, parent information letters, various certificates, personal art, and so forth were photocopied or photographed by the researcher. The purposes of the document review in this study were as follows: First, its object was to examine whether the child participants were appropriately identified as gifted and creative or could be designated as gifted and creative according to the state's eligibility criteria. This information provided the researcher with insights on the relative strengths and weaknesses of the child participants based on their academic, creative, and athletic performances. Second, the documents

were expected to assist the researcher in recognizing and exploring the current status of the children's talent development by displaying their performances in and outside of school. The documents were tabulated into three areas: (a) academic talents; (b) creative talents, namely artistic and musical; and (c) athletic talents. I looked for information that would enhance my understanding of the continuity of this development from a beginner to higher levels. I examined the document categories to determine the performance characteristics in the several areas in which the child participants excelled. Teachers' comments regarding the children's academic, creative, and athletic talents were reviewed and referred to for data analysis.

Observations

Observations at the interviews were included as a supplementary data source but not as a separate one like interviews and documents. The researcher observed both home environments of the child participants and possible interactions between the girls and their fathers when the interviews took place in their homes. According to Merriam (1998), as observations occur in the natural setting instead of the designed setting for the research, observational data provide some information in conjunction with the other data sources such as interviews and documents. Consequently, the observational data are expected to substantiate the research findings.

All the researcher's observations were recorded during and immediately following the interviews at the participants' homes. Condensed field notes that contained key words describing the actions and surroundings in which the observations took place were recorded. These initial notes were expanded to include more detailed descriptions of my observations and reflections. All observation entries were dated so that the order in

which they occurred could be noted. Additionally, I took pictures of the home environments, art created by the child participants, and several awards earned by the children. The pictures were used to recall the physical surroundings where the observation took place.

Data Coding and Analysis

The constant comparative method consisting of three levels of coding was used as a primary strategy for data analysis. According to Hutchinson (1990), the constant comparative method--a fundamental method of data analysis--aims at generating theoretical constructs derived from substantive codes, categories, and their properties. In the first level of coding, researchers do not modify the text but use the exact words of the participants. Through this initial coding, data are broken into small pieces, and in vivo or substantive codes are generated. The level II codes are called categories, the results of condensing the level I codes. In this study, all of the interview transcripts, documents, and observational field notes were read and analyzed line-by-line with the initial coding. Some examples of the codes contained (a) interest in computer, (b) she knows what to do, (c) make her do more on her own, (d) coaching baseball games, (e) suggesting books, and (f) treats somewhat equally. The initial codes derived from both girls' and their parents' responses were compared, contrasted, and categorized. Then, by using three sources of data--interview, document, and observation--I generated the related categories involving patterns and regularities of the data (Merriam, 1998). The created categories included (a) computer, (b) differences between Edna and Lisa, (c) interested in academics, (d) paternal vs. maternal involvement, (e) animals, (f) study/work habits, and (g) indefinite attention. In the level III coding, theoretical constructs that refer to general themes across

data are derived either from substantive or categorical codes (Hutchinson, 1990). As a result, this study engendered some consistent themes and connections between categories and their subcategories on the basis of the formulated categories. Eleven theoretical constructs consisting of (a) intellectual stimulation (b) educational philosophy, (c) common interests, (d) sports activities, (e) special aptitudes, (f) accessibility, (g) exposure to various experiences, (h) parenting style, (i) family structure, (j) gender issues, and (k) future career pursuits were produced (refer to Appendix B for samples of the coding procedure).

After the coding, both componential and taxonomic analyses were applied. These strategies display the principle of distinctive features of data and the hierarchical structure in sets of terms, respectively (Ryan & Bernard, 2000). In this study, the componential analysis was conducted to visualize the relationships within the created codes and emerging categories (Coffey & Atkinson, 1996) derived from the interview transcripts, documents, and observational notes. This strategy enabled me to identify the contributable paternal factors in the development of the girls' academic, creative, or athletic talents. In the componential analysis, + was given to imply an effect, while - was designated to reflect no effect of the fathers on the girls' talents. In the taxonomic analysis, hierarchical relationships among the three levels of codes were logically examined and recapitulated. Appendix C and D illustrate the process of the componential and taxonomic analysis more in detail.

Limitations

The limitations of this study were related to those of qualitative research methods such as interviews, document reviews, and observations in the following ways: First,

although some child participants in this study were identified as gifted according to the state's eligibility criteria, their talents were not identical but diverse. Because these girls are all in middle childhood, their various talents are still continuously developing. These facts pose a problem in educational treatments for gifted children because the eligibility criteria primarily rely on their test scores in school in spite of their unique and distinctive talents. This issue has been a never-ending controversy in nurturing the gifted population. Moreover, the children's documents were obtained from each parent; thus, the information might be limited by the documents held by the parents. Considering that giftedness and talent require life-long development (Feldman, 1982; Gruber, 1982), it is difficult to recognize the wide-ranging talents of the child participants based exclusively on their current or recent performances in school.

Second, when I was conducting interviews with the children, it was difficult to encourage them to keep talking about their fathers and themselves. Some adult participants were also reluctant to talk about their family and their personal experiences although it was far easier to get responses from them than their daughters. It was also challenging to understand and interpret some contradictory comments made by different family members. In particular, one family perceived the father's roles differently.

Because this girl was young, it is important to be careful in interpreting her responses especially when her perceptions were obviously different from her parents'. In this sense, the data should be analyzed rigorously in conjunction with the researcher's own perspectives in understanding the data. Some portions of the observational notes were included to compensate for the limitations of the interviews; however, because

observations were not a primary data source, the notes did not contribute as much as the other data sources--interviews and documents--in the present study.

Third, as qualitative research does not depend on a random sampling procedure, generalization of the findings merely based on a few cases is not acceptable (Merriam, 1995). Three of the child participants in this study were recruited from those who registered for the university gifted program during the summer break, and the other two cases were chosen by recommendation from others. This fact may have resulted in recruiting the parent participants who were more likely than others to be interested in their children's talent development. Also, it might affect the finding, indicating a more intense relationship between the fathers and their daughters compared to the general population.

Summary

First, this study specifically focused on the fathers' roles in the girls' talent development by using qualitative research methods; thus, this approach might provide new insights in understanding the father-daughter relationships that have not been discovered using the quantitative method. Second, because this study included both parents in addition to their talented children, it is expected to illustrate different, dynamic family perceptions of the research inquiry by comparing and contrasting their responses. This comprehensive approach may also compensate for the findings of the previous quantitative and/or qualitative studies that have produced inconsistent results due to the different participants (e.g. only one parent or children) involved in the study (see Gjerde, 1986; Russell & Russell, 1987 for details). Third, both data and methodological triangulation allow more in-depth examination of these family cases as well as enhance

the internal validity and reliability of the study (Denzin, 1970; Mathison, 1988; Merriam, 1995). These methods may assist in substantiating and enriching the obtained information by detecting consistencies and inconsistencies from the different sources of data. Fourth, both quantitative and qualitative methods are tools, and their powers are determined by research questions (Kvale, 1996). For this study, the qualitative research method appears to be more appropriate than the quantitative one because of the idiosyncratic nature of the talented children. Moreover, the family's perceptions of the fathers' involvement may vary since each family has its own unique family structure; thus, case study method--an in-depth way of examining the family perceptions--seems to be beneficial to the object of this study.

CHAPTER 4

FINDINGS

Overall, the five families perceived that the fathers have contributed to recognizing and nurturing their daughters' academic, creative, and athletic talents. As in the cases of many talented people in Bloom and his colleagues' study (1985b), based on their own experiences and interests, the fathers in this study have introduced their daughters to a variety of academic and nonacademic activities. In general, the fathers were observed to have influenced their daughters' talent development in the following ways: (a) intellectual stimulation, (b) educational philosophy, (c) common interests, (d) sports activities, (e) special aptitudes, (f) accessibility, (g) exposure to various experiences, (h) parenting style, (i) family structure, (j) gender issues, and (k) future career pursuits. These components enhanced an intense emotional closeness between the fathers and the daughters, and consequently affected the girls' occupational preferences in a positive way.

Apparently, the fathers intended to expose their daughters to wide-ranging experiences regardless of gender; however, the family members, particularly the fathers and the daughters, appeared to be aware of the common belief that girls are closer to mothers, while boys are closer to fathers. To some extent, this belief influenced some girls to consider spending time with their fathers more special than with their mothers. The findings also showed that the fathers were regarded as the primary role model for their daughters in relation to the girls' future professions, while the professional mothers

did not affect their daughters' career options as much as the fathers did. However, the five girls depended psychologically more on their mothers than on their fathers despite the comfortable and affectionate relationships with the fathers.

Intellectual Stimulation

Four out of five families perceived the fathers as important intellectual facilitators in their families. First of all, it was found that the fathers have been actively engaged in their daughters' schoolwork; they were all very interested in their daughters' academic performances and willing to provide support and encouragement in facilitating the girls' scholastic competence although most of them acknowledged that their spouses were more involved and helpful in their daughters' schoolwork than they were. Also, some fathers had favorable attitudes toward formal schooling in educating their daughters.

In Cathy's family, Pam mentioned that her husband John is mainly concerned with Cathy's overall education and definitely wants her to do well in school. The mother confidently stated that her husband always makes sure that he keeps up with his daughter's progress and accomplishments in school. John agreed that he is very interested in Cathy's schoolwork, but admitted that his wife is more engaged in their daughter's academic life. He did not hesitate to remark that academics are still more important than any other field although he encouraged Cathy to practice a variety of athletic activities including swimming, tennis, and basketball. Also, the girl confirmed that her father is very interested in her school achievement. She said, "My dad encourages me to study very hard, and I think he is more curious about my work than my mom." Kate's family all acknowledged that the father is greatly interested in his daughter's scholastic

achievement. The following statement from Lori, Kate's mother, demonstrated her husband's active involvement in her daughter's academic accomplishment.

Jimmy never misses the parent teacher conference, goes with me to all of those. Usually, I am not used to talking, he listens to them all, and he encourages her. He set the rule because he was concerned not with her intelligence itself as much as with her learning how to stick to something and learning how to focus on getting schoolwork done. So, he sets the rule; when she comes in the home, after school, homework is done first, and then she can watch television or work on the computer, whatever she likes to do, but homework has to happen first before anything else.

Natalie, Edna's mother, also agreed that her husband is very interested in their daughter's school life. She said that Doug is more concerned whether Edna is prepared for her tests in school or understands reading materials rather than how she actually does on the tests. Natalie stated:

He makes sure about everything she has, he'll ask what she is doing after school, do you have her signed up, you know, basketball or swimming. He's very interested in that. He leaves it up to me to decide what they're going to be. He wants to make sure that they do things after school, they don't just come home and sit around, where they would be, either out playing with their friends or they've got certain things to do after school.

The mother emphasized that her husband keeps track of their four children's test scores, individually. Also, Doug admitted that he watches Edna's report cards very carefully. The father knew even in which area his daughter has been struggling in mathematics. He

said, "She [Edna] doesn't have a lot of academic problems or tough things. She did have a problem with multiplication tables, and we worked on that earlier this year." After the interview, Doug showed his own document cabinet filled with his children's school files including report cards, parent information letters, and other school related papers. When asked about Edna's school reports for document reviews in this study, the father picked up several of his daughter's report cards from his document files. At the corner of Doug's private library in his home, the files were organized and arranged according to each of his children. Like Kate's father Jimmy, Doug never misses the parent teacher conference for Edna. Natalie said:

Doug attends when we have parent teacher conferences; he always goes; he makes sure that he can be there. They have parent teacher conferences several times during the year. If he cannot be there, we always reschedule the conference for him to be back in town, so he also goes to the conference. He talks a lot, he asks the teacher questions, you know, tell me how she is doing, how she is compared to the other children, and if she's happy in the classroom, things like that.

Then, she laughed and commented, "He doesn't think he's a good dad. He really doesn't. He doesn't think he participates as much as he probably should, but he does. He participates a lot. I think." During the interview, the mother seemed to be very proud of her husband and his roles as the father in the family.

Elaine, Emma's mother, remarked that her husband always asks her about her daughter's daily life and looks over her school folders every week. She added, "We all sit

down with her together, look over her papers, and let her talk about them. He gives her his undivided attention for that."

Although both parents in the present study acknowledged that the mothers were more or equally engaged in their daughters' schoolwork than were the fathers, some girls considered their fathers more helpful for their schoolwork. For instance, Pam said that she is the one who oversees her daughter's school projects before seeking her husband's help with the assignments. John agreed that Pam is concerned with most of Cathy's daily life, and he described his wife as a big influencer to Cathy in every aspect of her life. In contrast, Cathy stated that her father is very helpful in doing her schoolwork because he is smart, but she never called her mother smart during the interviews. However, she did not explain why she considered her father smart during the interview. Another eight-year-old, Kate, mentioned that her father is very supportive as well as helpful in her schoolwork, and her mother confirmed this fact, too. Kate noticed a major difference between her father and mother in their general attitudes toward her academic performances in the following way:

He will look through it, but he'll just skip and say, "Oh, this is really good; I like how you did this." But he won't exactly look through really carefully like my mom. She will see my schoolwork like every single detail that I've drawn. But he will look it over, he will compliment it, he'll still make me feel good, and he can make me laugh.

There were two girls who relied more on their mothers than on their fathers in relation to their academic work. An eight-year-old, Edna, expressed that her mother assists her more than her father does, particularly when he goes out for work. Also, six

year-old Ann mentioned that her mother is usually concerned with her homework and school activities because her father is always very busy. During the interviews, she consistently described that her mother is smarter than her father, but she did not explain any specific reasons for her description. Dianne, her mother, agreed that she is the primary care giver to her daughter, and she expressed her frustration with this fact as well. Jerry also admitted that his wife helps more than he does with his daughter's schoolwork and delivered the following opinions: "I want Ann to take advanced math and whatever, and I rely on Dianne because Dianne has her specialty in education, research, and child development. I'm assuming a little bit I've been locked out." He added, "That's probably why I do a little more reading than Dianne does. When Ann has a story, she comes and sits on my lap, and I might read a story to her."

The fathers' contributions were evident in enhancing their daughters' interests in reading. The five families attributed their daughters' competence in reading to the fathers' stimulation. In Kate's family, both parents considered their daughter's excellence in reading comprehension and writing as her greatest academic strength. Kate mentioned that she loves reading and writing books, and her parents, particularly her father, have inspired her interest in books since she was very young. Both reviews on her grade reports and interviews with Kate and her parents confirmed that Kate's reading ability is ranked among the highest in her school. Kate said:

When I was little, my dad taught me how to read a book, and that was very special. My mom and my dad, they both helped me. They would give me high school books. When I got frustrated, they would help. They would just help me sound out the words and say, "If you can't get the word, try to sound it out, or

skip it, and read throughout the sentence, and try to figure it out or get us." So, they always help me with that kind of stuff.

Jimmy, her father, acknowledged that he and his wife encouraged their child to read books, which are always beyond her age level. Kate's school reports consistently verified her superior accomplishment in language arts especially in fluency, expression, independent reading, communication, and writing. A teacher's comment in the report card also demonstrated her writing competence: "Kate's writing shows so much creativity." Also, Jimmy proudly stated that Kate's reading capacity falls between eighth and ninth grade. He said, "I've got and gave her some books that were mine when I was a child, a condensed version of classics, and we've encouraged her to read those." Lori admitted that she is the one who reads books to her daughter these days. But she did not hesitate to attribute her daughter's excellence in reading to Jimmy's effort to provide their child with diverse reading materials. Lori said:

When we moved up to our new home, Jimmy made it a point to show her his books that he had been given by his grandmother. And putting them on the shelves with her and pointing out the other ones, he always read and suggested she should read those first, thus always his favorites going first to her.

Pam, another mother in this study, also expressed that both she and her husband encouraged their daughter to read books since she was very young. However, she emphasized John's engagement in reading to their two daughters and said, "He read to our children at night, and especially when they were younger they could not read to themselves. Then, he would sit down actually every day and read with them before they went to bed." John was likely to associate reading with encouraging scholastic

achievements. He said, "I just think the more you read that's the key tool in advancing, especially schoolwork." Also, he mentioned that he is the primary person who would take Cathy to the library every weekend.

She [Cathy] kind of begs us to take her to the library on the weekends. She wants us to take her to the library. When she doesn't understand something, she will ask, and she wants to learn. Like I said, she has to work at it where her sister really doesn't. She always wants to learn and asks questions all the time.

A parents report card showed that Cathy has been a top point earner with the accelerated reader program in school. Her grade reports also demonstrated that she is a very capable and conscientious student who is outstanding in every academic subject including language arts.

Doug mentioned that he would read to his children as long as they let him read to them. He expressed that he was thrilled to death when his elder daughter asked him first to read to her earlier last year. The interview with the father showed that Doug reads to Edna, his second daughter, every other night--two or three nights a week--as he does with Lisa, the eldest. He said, "I don't really watch television. It's a waste of time, and I much prefer to sit in the evening and read to the kids than do anything else." Natalie, his wife, acknowledged that both her husband and daughter spend much time talking and reading together in the home. Edna confirmed that she enjoyed reading with her father; however, she expressed that her father reads to Lisa, her elder sister, more than to her. She said:

Lisa always asks, stays, and reads with him...It's not fair sometimes, because she always reads some books that I'm not interested in, I have to listen to them sometimes. He doesn't read as long to me as he does to Lisa.

In the interview, Edna seemed to be aware of and to understand her father's busy daily schedule; she expressed that she never asks her father to read to her as much as he does to her sister because she knows his lack of time.

Timothy connected his reading at home with modeling for his daughter although he was not always aware of this aspect. Also, he was conscious of the fact that children pay attention to everything related to parents. In the interview, he emphasized the following:

I encourage them to see you do read to provide a good model. If we say you need to read this and this, but she never observes us reading, then she might get signals that they force me to read. If she sees us enjoying books and reading all sorts of things, reading the newspaper, reading books, reading to them, reading with them, I think these all just model what they have observed.

On the contrary, Elaine did not agree that her husband thinks of any modeling effects of his reading on their children. Rather, she stressed that Timothy loves reading books primarily for pleasure. In regard to choosing books for her daughter, Elaine commented, "Timothy is more interested in reading science books, while I enjoy books that typically have females as main characters." Then, she confirmed that Timothy has played a critical role in developing Emma's verbal ability in the following way:

I think really what we haven't done much of is had her read to us. We probably should have done more than that. She is not really interested in the kind of stories that she can read because they don't have much of a plot. You know, really the easiest books that she is able to read herself aren't interesting. She would prefer to have us read, at this point, a more involved story. She really likes chapter books.

So, he has contributed to her vocabulary mostly and comprehension because we're reading her things like *Treasure Island* and *A Little House on the Prairie*. They are chapter books, and as we go, we're asking questions, and we're pointing things out that we see like that's a story, they mentioned this, this is what they said, and this is how they're saying it. So, I think we're helping her; particularly he's helping her in comprehension and vocabulary by reading these books.

As indicated, the mothers in this study were more likely to ascribe their daughters' current reading performance to their husbands' efforts than anything else. In contrast, the interviews with these five girls showed that their mothers are now reading books with them most of the time. However, the mothers emphasized their spouses' interest and involvement in reading more than their own involvement with their daughters. This was apparent in Ann's family, indeed. Both Dianne and Jerry addressed Jerry's overwhelming interest in reading as one of the most important and crucial influences in enhancing Ann's reading and academic performance. Dianne mentioned:

What Jerry does most often with Ann is, a lot of times, when she wants a book to read, he is the one who reads her books partly because I am busy writing my dissertation, so I ask her father. That's probably the main thing he's been doing now.

She even remarked that her husband reads books "from the moment he gets home until he leaves." However, Ann stated this somewhat differently. She said, "I like easy books, and my mom reads hard books. And she helps me read easy books, so I can know how to read better, know how to read." Furthermore, the girl mentioned that she rarely sees her father reading books at home, which was considerably contradictory to her parents' comments.

All the parents in this study perceived their daughters as gifted and precocious. When asked to describe their daughters generally before starting the interviews, they all confidently announced that their daughters are smart, gifted, and talented. This may also motivate the fathers to be more interested in their daughters' learning progress in school. For instance, Jimmy and Lori expressed that their daughter, Kate, is very quick at grasping meanings and learning, always comes with original ideas, and enjoys reading, writing, and illustrating books. Pam, another mother, described her daughter as a very bright, curious, and mature child. She emphasized that Cathy loves to read and learn and makes very good grades in school. Cathy's maturity was also confirmed by her father's comment. John said, "Cathy's nick name is 'Panasonic' because she is slightly ahead of her time. She is eight but thinks quite like a twelve-year-old." With no exception, for the two six-year-olds, Emma and Ann, both parents portrayed their daughters as very precocious, bright, and active girls. Also, they all included perfectionism in describing their daughters. One of the examples of Emma's perfectionism was Elaine's comment on her daughter's disappointment when she did not complete all of the stimuli in the TTCT. Timothy specifically addressed Emma's curiosity as a characteristic that he would like to encourage more for her, while Jerry and Dianne referred to precocity and sensitivity as the most distinctive traits of Ann, their daughter, in the interviews.

Educational Philosophy

The interviews with each of the five families demonstrated that the fathers have their own educational philosophies in rearing their daughters. Also, some fathers expressed favorable attitudes toward formal school education in their daughters' academic and social development. Jimmy, the father of eight-year-old Kate expressed

that he tries to help his daughter to think critically because he highly values challenge in stimulating his child's academic performance. He stated:

A lot of times, what we'll do is we kind of go beyond what she is learning in school. Maybe go to just a little stuff farther, introduce it to her so that when she does get to it in school, it is not new. I'm always trying to go a little further than what they are asking for her to do. I'm just encouraging her to do the best on what she does, to try to keep challenged, and not to stay in a comfort zone. If I see that she grasps something I try to introduce to her something a little bit further along.

As previously indicated, Jimmy's belief in challenge was apparent in his concern with reading for his daughter. Kate's progress report from the gifted education program demonstrated her high level of critical and creative thinking skills. Also, the document corroborated her strong motivation in accomplishing schoolwork.

Similarly, Jerry stressed challenge and independence in raising his children Ann and Eric. He expressed that he wants both of his children to be independent and to have their own judgment. Then, he illustrated the following example:

There was a story in *Reader's Digest*, which to me is a part of what I'm aiming at. There was a father with his children. Once they've got their driver's license and were better able to drive a car, he had them get out with him and see in weekends how to change a tire. They would do basic parts of maintenance; they would change oil, things of that nature. And he did it with his son and with his daughters. And I'm very much like that. I want my kids to be able to know how to get things done if it is dark outside, what to do and fix in a storm, what happens if the car breaks down. I'm not saying I want them to be a car mechanic and be able

to rewire the car completely. I do want them to be able to handle the basic problems of their cars if they won't start.

Jerry added that he encourages Ann to be exposed to the world in order to choose various opportunities to recognize and develop her gifted potential by her own determination.

Also, both Jerry and Dianne acknowledged that Ann enjoys being outside and getting involved in outdoor activities with others, even only with boys.

The interview with Emma's father, Timothy, showed his educational beliefs in learning through curiosity, productive thinking, and self-expression. Based on his experiences with students as a physics teacher, he has been able to reinforce his educational philosophy. He stated:

As a teacher, I like my students and obviously my children to be curious and good thinkers, be able to think for themselves, and be able to express themselves. I think you have to teach to the whole child and teach how the child does understand, so if you give them an example, and it doesn't make any sense then you need to find another way to express it to them and teach them as there are all sources of different ways, expressing ideas, and learning things.

Doug emphasized the importance of parental expectations on the basis of his own experiences in childhood. Natalie, his wife, agreed that Doug has high goals for their children's academic accomplishment. In recalling his childhood, the father confessed that he does not think his parents set an exceptionally high expectation of him.

My grades were not very good in elementary school. I always graduated in the top 10% in my class, but not in high school that much. My grades were always probably good other than the first year, the first quarter. My grades were always

good, acceptable, and my parents were never upset about it much. But I don't think they had very high expectations for me because I was so difficult academically and couldn't sit still. It was a discipline problem because I didn't listen to the instructions. Not because I was a bad child, I didn't get into any trouble, the only trouble I got was, I wasn't paying attention, I didn't do what I was told, so my parents had lower expectations for me than my other two brothers and sister. It brought down my expectation I had for myself.

He continued to point out the need of high expectations for his children. Doug stated:

And that's one of the reasons why I want, I did, I tell my children, "This is what I expect of you." So, they know the expectation is at a higher level, and they can strive to meet that. Because I am the firm believer, and you rise to meet your own expectations for the expectation people placed in you. And so I want them to realize that I have a very high expectation, and that average, in my opinion, is mediocrity. So, my kids have been given by the grace of God, luck, tremendous opportunities, and tremendous advantages, and I expect them to make use of those. That's what I want for them.

Furthermore, Doug mentioned that academically, he expects Edna to be a straight *A* student but also respects whether his daughter pours her effort into her academic performances. At the same time, the father confessed that his daughter does not appear to try her best in comparison to her academic potential, but he consistently sets a high expectation of her scholastic achievement because of his belief in the effect of parental expectations as a stimulus on children's accomplishment.

Ann's father made similar comments on this. He said that he reinforces his daughter to think of herself as smart, special, pretty, valuable, and worthwhile, and emphasized that, in his view, being smart is not identical to becoming a "bookworm," but rather it involves wisdom. Jerry commented:

My goal is to encourage Ann to think of herself as smart, think of herself as special and pretty. I want her to be used to hearing that she believes she is capable and encourage her to be sure of herself about this. I think she is worthwhile, I think she is important, she is valuable, part of that is encouraging this effect when she does good in school.

Some fathers referred to school as the most important agency in developing their daughters' intellectual capacity. This was evident in both Cathy's and Emma's father, and to some extent, their beliefs in and dependence on school education reinforced their interests in their daughter's schoolwork and scholastic achievement. John said, "School is the most important thing, and school makes good bridges, good education whether Cathy wants to be a nurse, doctor, or lawyer." Timothy, a high school teacher, expressed his own belief in school education in the following way:

I think putting kids in the school environment and having them learn not only from their teachers but also from each other is very helpful. And that's one other thing that I teach. I teach very adventurously. One other thing that I continue to remind them of is that when they go to college they're gonna learn as much as from the people in college.

Common Interests

The five girls were more likely to share their interests in academic and nonacademic activities as well as some personality characteristics with their fathers than with their mothers. In regard to the questions of similarities and differences between the fathers and the girls, the mothers were more willing to respond to them than were the fathers. An apparent example was found in the case of Edna's father when he was asked to talk about general similarities and differences with his daughter. Doug said, "I never give any thought about these things. I guess Natalie will be able to tell better than I would. Be able to look at two of us." In the interviews, most of the mothers tended to focus more on similarities than on differences between their husbands and daughters, whereas the fathers, particularly Cathy's father, pointed out different rather than similar characteristics between him and his daughter.

Kate and Jimmy shared a considerable amount of common interests. The interviews with Kate's family supported the fact that both Jimmy and Kate have a sense of humor, enjoy watching movies and playing with computers, and love animals and nature. These were all related to Jimmy's own interest areas. After the first interview, Kate shared her powerpoint slides concerning birds recently created by her and her father. It was observed that there was a small study room where both Kate and Jimmy often work together with computers. The family agreed that Kate and her father have many commonalities in addition to their physical similarities. It was also found that Kate is closer to her father than her mother in terms of her overall personality characteristics. Every Sunday morning, both the father and the child put together a comic puzzle in the newspaper. Kate stated that she is very sensitive to animal rights and environmental

issues, and thus, she wants to be an animal helper in the future. Her love for animals and nature appeared to be inspired by her father. Jimmy said, "We used to go for nature walks a lot in the woods even just around the neighborhood. I like to watch birds, and I think she is interested in all that she needs to see."

Pam, another mother of an eight-year-old, perceived that her husband and daughter have a sense of humor and are quick about dealing with humor. Cathy also portrayed her father as very fun throughout the interview. Pam remarked that both her husband and daughter are similar in the following ways: Both are not shy, but are not the most outgoing persons, are determined and sensitive to other people, and work very hard. John also addressed competitiveness and hard work as two of the most similar characteristics between him and his daughter. In contrast, he said that Cathy, in general, looks and acts like his wife although Pam considered her daughter more similar to John than to her. The father said, "I think the oldest one is probably more like me though. Cathy is always a mama's girl. You can tell her after, she is a baby." Cathy acknowledged that there are many similarities between her and her father, but at the same time, she expressed that both her parents are very similar in many ways.

Another eight-year-old, Edna, remarked about some activities--reading, baseball, basketball, soccer, running, and racing--as common interests between her and her father. Her mother specifically mentioned their determination, sports-mindedness, and outdoor activities as the greatest similarities between her husband and daughter. Doug also agreed that Edna loves to go out and play with him more than his other children do.

In Ann's family, the parents observed considerable shared characteristics between the father and daughter. Both mentioned that Ann is outgoing, active, and friendly like her father, while Dianne, her mother, is more or less introverted and enjoys spending time alone at home. The interviews with the family revealed that the father and daughter enjoy going out and seeing things, which are not the mother's interest. Also, Jerry and Dianne observed their daughter's strong leadership and agreed that this might come from Jerry. The father commented:

In some ways, she's more like me than Eric [Ann's brother] is. I tend to be outgoing, I tend to be the one who goes to the party, I tend to be the one who wants and doesn't mind standing up and being the master of the ceremony for the widows. I know more people than Dianne does. In that way, Ann's very much like me, and she's outgoing. I do have leadership positions and at the same time, she's a lot like me that way. Oftentimes, she likes music and that surprises me.

Some of the CDs that I played for myself she picked up, she likes that, too.

Both Ann and her father were actively involved in the Girl Scouts and the Boy Scouts, respectively. Dianne remarked that her husband and daughter love to go on field trips together, which is not her major interest. Similarly, in Kate's family, Kate and Jimmy spent time feeding animals at home, something Lori was not greatly interested in. Also, The father and child enjoyed watching movies, particularly science fiction movies, such as *Star Wars*. Kate said that she would watch those movies with her father especially when her mother is out for her business.

A similar tendency was observed in Emma's family. Elaine stated that her husband and daughter have a great deal of common interests related to science in which she is not sufficiently knowledgeable compared to her husband. It was found that both Emma and Timothy enjoy watching the scientific channel and going to museums

together, and they share their interests in astronomy. Elaine said, "Timothy likes to take Emma out and look at the stars and tell her everything, all about that. That's something I don't really know about." Then, she emphasized, "Emma is just interested in anything we've sort of presented to her."

Sports Activities

The fathers in this study were all involved in a variety of sports activities in which they are interested with their daughters. In the cases of Emma, Cathy, and Kate, their fathers as coaches taught them how to play soccer and basketball. The fathers expressed that they love to coach their daughters, and moreover, they had their own philosophies in choosing specific athletics for their children. Timothy's comments on soccer were representative evidence of this finding.

I played soccer when growing up. That's my biggest sport, and I played soccer all my life, played in high school and college, and still play on the adult team. And another reason I am very interested in encouraging children to play soccer is this has a certain aspect I really like. You can play your whole life. Even if you are much older you can still find the team and degree of speed, you know the appropriate challenge, whereas a lot of sports we sort of grow out of them. Also, I think it's tremendously healthy, and it is not a static sport. Another thing is that the sportswear has lots of different sizes for people. If different people all play basketball, it's huge. You need to be tall, whereas soccer you can be very small and have different skills that are helpful for your team. So, to me, it's a great sport for all children. The other thing, the most important about soccer for small

children is it's the easiest game to play and have fun even if we are not talented in sports.

Another shared activity between Timothy and Emma was running. Timothy explained that he encouraged Emma to run with him and also observed her athletic talent in running. He said:

She certainly has long legs and runs reasonably well, so as a running coach I think lots of people can be trained to be pretty good runners. If she is interested in that, I would love to see her develop.

Timothy remarked that he does not want his children to be obsessed with academics or athletics exclusively and thus, he would like them to be balancing out both academics and athletics. He said, "I'm gonna push her to be involved in other sorts of things so that she doesn't lose that well rounded nature."

Doug and Edna are doing several sports activities together. The interviews with Edna's family supported the fact that both the father and daughter enjoy playing all types of sports including baseball, basketball, soccer, and swimming. Edna's parents recognized that their daughter is athletically talented. Four first-place swimming awards, a presidential physical fitness award, and several trophies in sports activities displayed in her room demonstrated Edna's marvelous accomplishments in overall physical activities, particularly in swimming. During the interview, Doug described his daughter as a gifted swimmer. At the same time, he confessed that he does not have many outside interests, but he is happy to take his children to the baseball game because they want him to. The father continued to say that Edna most often asks him to play sports with her than any other child in his family. Natalie, Edna's mother, confirmed that enjoying sports and

respecting athleticism are two of the most shared interests between Doug and Edna. She stated that both she and her husband think of athletics as an important part of growing up socially as well as physically. Also, Edna acknowledged that her father is very athletically minded, and she repeatedly addressed her love for playing athletic activities and emphasized that she enjoys all types of sports more than Lisa, her sister.

Additionally, she commented that her father teaches her how to play the sports activities better than her mother does.

Kate expressed that she does not have specific interests in sports. Jimmy also announced that he did not think of his daughter as overly athletic; however, he was willing to provide as many opportunities as he could for her to be exposed to different sports activities and get her interested in them. Kate said:

He [Jimmy] was my basketball coach, and we were on a team *Mystique*, that's my favorite team. I'm glad to be in that. I don't exactly like football and can't understand it, but he started teaching me how to understand it. And then I understand baseball, and my mommy likes baseball, and so we all like the same type of sports. We don't usually see soccer, but my dad says this year, we're gonna see a lot more of that. We're gonna do a lot more of sports.

The father's involvement in sports with his daughter was also noted in the case of six-year-old Ann. Jerry said that he would take his daughter to several athletic activities such as camping, baseball, football, and women's soccer, and likes to spend time playing these with her. He mentioned that his daughter is interested in participating in various sports activities with his brother and other boys. Furthermore, Jerry expressed his hope to accompany his children to the golf course when they get older because he loves to play

golf. Dianne, his wife, illustrated their daughter's participation in the ball game as the only girl on the team:

Ann played T-ball this past year, and she was the only girl on the team, and that did not make any problems for her. It didn't bother her being the only girl and getting in there to do what she needed to do. She was the only player who wore short pants and pink shoes, but she didn't care.

In Cathy's family, the mother said that the most common interest she has perceived between her husband and daughter is sports activities. The interviews with this family showed that John enjoys playing tennis, swimming, and rafting together with Cathy, and both parents observed their daughter's athletic talent and enthusiasm. Also, a certificate of achievement for pre-ballet presented by the mother and several of Cathy's athletic awards, particularly for swimming, supported her talent. John said, "I probably encourage her too much for sports since I like sports a lot." As in the case of Jerry, John stated his hope to take his two daughters to golf, one of his favorite sports. Above all, sports provided the father with opportunities to spend time with his daughter Cathy whom he described as "a mama's girl." John said:

I think I just have to work extra hard at having girls by having relationships through different activities with them because, you know, it's so easy when you have daughters to just let their mom take care of things with them.

At the same time, the father consistently expressed his faith in academics compared to athletics. He stated:

I've just realized that I wasn't the greatest student in the world. But I'm proud that I work hard. When you get out into the workplace in the world, you've realized

that swimming and basketball mean nothing. I let them [John's two daughters] know they mean nothing although they mean good right now. I play tennis or golf or anything. Yah, bottom line is academics in the work profession. That's what I rely on living.

In contrast, his wife Pam did not address anything related to her husband's concern with academics over nonacademic areas. She acknowledged that, overall, John is concerned about their daughters' academics and wants them to excel in that; however, the mother consistently emphasized that her husband does not set any priority on academics over athletics. Furthermore, she remarked that John and Cathy enjoy different sports according to season. Pam said, "In the winter, he coaches their [the two daughters'] basketball team, and in the spring, they play tennis and swim together. He's very involved in that, and he doesn't miss their activities."

Special Aptitudes

Jerry has inspired his daughter's interest in music by playing several musical instruments for her and taking her to musical festivals. The interview with Ann's family confirmed that Jerry is very interested in music and often plays the flute, harmonica, and trumpet for his children at home. Ann said:

One time when we were at the *Georgia Tech* football game, there was a girl my daddy knew, and she was seated in back. She knew how to play the flute. And then my daddy taught me how to play the flute, and he will soon buy me a flute for my next birthday.

Ann also stated that her father likes her playing the flute, and he often brings and plays his trumpet at her Girl Scouts meeting. In the interview, Jerry was very proud when addressing Ann's interest in the musical instruments he plays for her. He confessed that because music is one of his major interests and concerns, he encourages his daughter to have wide-ranging musical experiences.

I try to show options to my kids. Once a year, I go play with Georgia Marching Band, and I have been there, too. That's why I have a trumpet thing. Ann and Eric both went to hear the band, followed them, and I played the harmonica. It's where I want them to be exposed, and part of it, is for me, also. I have CDs that I played with, I don't always say I'm gonna put the CDs in because it will be good for them. But at the same time, I'm trying to occasionally pull out things and want the opportunity. I make sure to encourage them, yes, some points rolled in with the flute on every side or whatever. For Ann and Eric, it's a kind of thing where I put the options out there, and when we see interests we try to follow up there. It's not I'm going to say you have to play the flute, or you have to play the violin. But if they say they want to play the violin, yes, we'll follow up violin.

Dianne supported her husband's statement that Ann's interest in music has been affected by his interest and passion in music, and she agreed that her daughter loves to hear her father playing the harmonica at home. She said, "A lot of time, he will get it out and play, and she really likes that. I think probably a lot of her interests in music may come from her father." Also, the mother recognized her daughter's love for drawing and presented several examples of her art to demonstrate her talent in drawing. However, Dianne did not ascribe her daughter's interest and talent in drawing to either of the parents. Rather, she considered Ann's teacher as a significant influence on her daughter's current drawing skill.

Kate stated that her father is good at acting, making funny voices, and that she loves his acting and imitating voices. She said, "He can do all the funny voices, and whenever I'm in a bad mood or something, he cheers me up by those voices." Jimmy, who studied drama in college, mentioned that he would often make different voices for his young daughter especially when reading books to her. This might have affected Kate's development of her future career options; Kate also addressed being an actor as one of her options for future professions in the interview. Jimmy said:

I was a drama major and did a lot of acting, so I try to encourage her on that. She does have a talent for it, and she's certainly not shy. Whenever she has something, some workshops in school, when she's on the play, or she has to do a presentation, I try to help her and coach her on that.

Music was another interest of Jimmy and Kate. The girl described her father as a person who loves music, particularly old musical groups such as the Beatles and the Monkees, and she said that she learned the old songs from her father. Jimmy commented that he observed his daughter's musical talent and would like to encourage her interest in music because music is one of his favorite areas. In the interviews, Kate and her parents bragged that the father makes CDs and tapes for his daughter. Kate shared some of them in her home after the interview.

The two girls, Emma and Kate, had a commonality: Both love drawing and are perceived to have artistic talents by their parents. Their artistic talents were demonstrated by their report cards illustrating their distinguished performances in art. Also, they were both ranked in the highest (at the 99th percentile) in the *Torrance Tests of Creative Thinking: Figural*. The interviews with their families indicated that the two girls'

interests in drawing have been influenced by their mothers' artistic talents. Elaine mentioned that her husband does not indicate any artistic or musical talent and never sits down and draws with Emma.

I love to sit down with her [Emma], teach her how to draw certain things. Just recently, I taught her how to draw her self-portrait, and she did a really, really good one. She is very focused, she can, and has a great attention for that.

She also explained that her mother is an artist, and oftentimes, she draws with Emma, her granddaughter. However, she emphasized the fact that Timothy tries to expose Emma to different kinds of music and art, asks her to talk about her pictures whenever she draws, and praises her art performances although he doesn't have any artistic ability.

The other girl, Kate, mentioned that her mother took an art class, created a lot of art, and encouraged her to draw. In the interview, she portrayed her father as "an apparently bad drawer," which was also confirmed by her father Jimmy. Lori, Kate's mother, recalled in her childhood that her father, an architect, was very artistically talented, would help, and work with her on her artistic school projects. She admitted her influences on her daughter's artistic trait, while Kate considered both parents as having affected her artistic talent. The girl perceived her father's contribution differently from her mother's although she acknowledged that he is not as good at drawing as her mother. At the end of the second interview, Kate suddenly drew several lines and geometric figures, called them "my unique style of drawing," and then explained that her style came from her father's ideas. She said, "When I do really unique things, that's what my dad always turns out, so maybe that comes through my dad. So, my artistic ability comes

from my mommy and daddy together pretty much." Kate also addressed an artist for her future hope.

Another eight-year-old, Edna, mentioned that she is good at drawing, and her father encourages her to practice drawing. Both Edna and her mother acknowledged that her artistic talent comes from her father, while the father never considered himself as artistic or artistically talented. Natalie described that Doug's family is very artistic, and the artistic family atmosphere influenced her husband in some ways. Although Doug did not recognize any of his artistic talents, Natalie insisted that her husband is very supportive of their children's art, and he loves for them to create art and develop their artistic talents.

During the interview, Cathy was not observed to have a great interest in either art or music. Also, her parents focused more on her athletic talent than on her musical or artistic talent as in the case of Edna's parents. John acknowledged that her daughter works hard in art as she does in swimming; however, he did not comment on her special talents related to the arts or even his own interests in them. Instead, Cathy's parents were observing their two daughters' artistic or musical talents by providing them with various opportunities to experience them. Pam said, "We encourage our girls, if they're interested in music or art, to pursue that. And of course, with respect to the cost of extra activities, John's always more than willing to let them choose the activities."

Accessibility

The five fathers were all easily accessible to their daughters although four of them except for Timothy, Emma's father, did not consider that they were spending as much time as they hoped. Timothy was very confident in that he shares much time with his

children more than many other parents do. Elaine, his wife, strongly agreed that her husband is really good at having time with their children. At the end of the interviews, all the parent participants were asked to evaluate the fathers regarding their roles in their families on the basis of a total of 100 points (refer to Table 3 for summary). Timothy did not hesitate to give himself 90 and above out of 100 points and said, "I spend a lot of time with my children and try to make sure that it is of high quality. I take them to see lots of interesting things and make sure that I am involved in their experiences." He continued to say:

Is it enough [for me to spend time with my children]? I don't know what enough is, but we're, as a family, quite lucky that we do get to spend a lot of time especially during the summer and school vacation because of the nature of our work. Now when I am in the school season, I'm frustrated because I won't get home until 6:00 to 6:30, and the children go to sleep. So, there are times during my school year, I don't feel like I get to spend as much time, but because of that we make a concerted effort to spend time on the weekends and when we can. I even enjoy the fact that I can take them to school every day because of the fifteen minutes every day I spend with them

In fact, Timothy was playing with his two children, Emma and Bob, in their playroom when I arrived at their home to interview him and his wife; they were laughing and screaming and appeared to enjoy playing with toys together. Elaine also announced that her husband enjoys traveling with Emma and her brother; last summer he took them to several places for two weeks without her because of her school classes during the break.

The mother also confessed that Emma is familiar with traveling with her father without her, which made her feel guilty about being a busy mother for her child.

In Kate's family, the father and daughter often go to the father's favorite restaurant to play pinball and a car racing game together. Kate described her spending time with her father as more special than any other time and said, "We always have such a good time together and just the same with my mom. Since I go around with my mom more, so the times with my dad are more special." The girl also thought that she and her father spend a significant amount of time, and she expressed that she feels very comfortable with him. She said, "More time with my mom, but I spend a lot of time with dad. I always try to spend time with my dad every Sunday morning." Jimmy, her father, stated that he is confident about his affectionate relationship with his daughter. So was Lori in mentioning the relationship between her daughter and husband. The mother said, "Kate's always been very comfortable with him [Jimmy], and she thinks she knows more about [everything] than we [Jimmy and Lori] do. Yes, she's fine with both of us." In interviewing Kate and her father in their home, I also observed that both father and daughter were very close with each other; they joked with each other before Jimmy started his interview after Kate's; the girl continuously nodded and smiled for a while when she heard her father's responses to the first interview question about herself.

Edna bragged that her father loves to spend time with her and her family. Natalie, her mother, described her husband as a wonderful father who is very active in their children's lives and enjoys time with his family. She confidently announced that both her husband and daughter feel very comfortable with each other and love to do something

together. Then, the mother described the affectionate relationship between her husband and daughter in the following way:

Edna loves to do things with him [Doug]. If he's sitting on the chair, reading a newspaper, reading a book, she'll go crawl on his lap and sit with him. They just lounge all over. I think she feels as comfortable talking to him as she does to me. And they [their four children] miss him a lot; all my children ask every day, they ask when he will be home, and if he is out of town, how many more days until he gets home. Edna does, too. She loves him very much. She feels very comfortable around him.

With respect to the amount of time spent by the fathers with their daughters, the mothers in this study tended to be more generous than were their spouses. That is, the mothers were more likely than the fathers to acknowledge that their spouses spend enough time with their daughters. Jimmy acknowledged that because of his job, he is not able to spend as much time as he would like to spend with Kate. He seemed to be disappointed with his lack of time with her and gave himself a score of 80 and above out of 100 points. On the contrary, Lori gave a higher score, 90 out of 100 points, concerning her husband's positive roles in the family. This tendency was similarly observed in the families of the other eight-year-olds, Edna and Cathy. Pam said that John enjoys spending time with their children, and she commented, "I think it has two goals: One is they spend time together and enjoy it; and number two, he thought that of course, it will help them later with their reading skills." In contrast, John expressed that he does not think he is greatly involved with his daughter. He referred to the time factor and said, "I've never spent enough time with Cathy." This was somewhat contradictory to Pam's

comment on John's concerned efforts for Cathy. Pam stated, "I think he's probably spending as much time as he can and just being interested in her day to day life. He really spends a lot of time with her day to day." Cathy agreed that her father tries to spend time with her and her family, and she consistently stated that she and her father do many activities together at home.

Natalie stressed that Doug might not know what a great amount of time he spends with their children. She was very satisfied with her husband as the father in the family and gave him 99 out of 100 points in evaluating him along with the following reasons: "Because he is very interested in everything they do, he laughs with them, plays with them, and he wants to be their friends." Edna even mentioned that her mother seems to be busier than her father. However, as found in the case of Cathy's family, Edna's father's primary concern in relation to his roles in the family was his lack of time with his children. Doug just assigned 75 points to himself, and the major reason was that he considered himself not spending enough time with his four children. He expressed his frustration in the following way:

Generally, I walk in, I'm tired, I'm hungry, and my biorhythms are lower. The kids are tired, something is gone inevitably wrong during the day, and I can't put it behind me. So, I don't keep my self-rating very high in coping with the kids.

One girl in this study expressed that her father is not spending enough time with her; Ann confessed that her father is always busy, and thus, he is not able to play much with her. She said, "He is not at home at night because he has to work at night and day." Ann mentioned that she usually spends time with her friends who live in the neighborhood and with her mother. She even expressed that she is not very close with her

father but very close with her mother. Dianne also confessed that she hopes Jerry will get involved with their children much more than now. In rating her husband as the father in the family, she designated 90 out of 100 points and said:

I guess, partly because there is lots of time that he can be involved. For so long, it was me doing everything. He's kind of like, when I couldn't, he filled in for me, but it was still my responsibility, and I would like him to be more equal. We both have responsibility for our children. The past few weeks, he has been almost totally responsible for picking up Ann because I've been working on my dissertation so hard. You know he didn't have to go to work, so he had time, he got everything ready, and he bought what she needed. That's really nice.

However, the mother confidently noticed an intense emotional closeness between her daughter and husband, and she remarked that her husband is very proud of their daughter, and the girl does love to spend time with him, too. She said:

Ann always participates in the Boy Scouts camp, and so she spent a lot of time with the work Jerry had to do. And I know when he went hiking a while back, he wanted my son to go, and my son, he wouldn't go. A lot of times, he doesn't want to go or he got in trouble. He couldn't go. I couldn't remember, but Ann wanted to go, and she went and loved it. Jerry had a book, which talks about the hiking trail and had some pictures of some houses and some colonial white top houses. Ann could force him to pull out the book and showed her the houses, so she could see where she's going. So, she's really, I think she feels very comfortable with him. Every night, she sits on his lap and wants him to give her a hug, and he reads her a book. And she helps dad with everything when she wants to.

Jerry had no doubt about the intense relationship between him and his daughter although he admitted that Dianne is more approachable to their children than he is. He said:

When I come home from work, I am not really being approached by any kids. I won't really say there's anything my kids can't approach me about. I would say there are things that they tend to favor Dianne over me.

At the same time, Jerry emphasized that Ann feels very comfortable in expressing her opinions and feelings to him. The father stated:

I think Ann knows that if there's something she needs to talk to me about, she can [talk with me]. I say there're maybe times where it's me not being approached by my kids but approachable almost all the time. But at the same time, I think she does know that if she has something, if she wants to ask me about and talks to me about then she can. When I am the only one in the house, I'm the one who gives her a kiss; when she scrapes her skin, I patch her up with whatever bandage it might take. I think there's a preference for the mother, somewhere because I'm unapproachable. I think it's just some roles we have fallen into.

Compared to the other fathers in this study, Jerry was less confident in responding to whether he spends enough time with his daughter. He often talked about the nature of his job, but at the same time, he pointed out that he is the one who primarily does outdoor activities with his children. After making a deep sigh, Jerry stated:

In my way of thinking, I say some time. It's a tough type of question for me to answer because I recently with my work have a really big travel. Basically, Thanksgiving I worked in Canton GA, I worked in Gainesville, I worked in

Kentucky... I've been doing a lot of traveling. When I'm home, do I spend time with Ann? To a certain degree, yes; to a certain extent, no. To a certain extent, the kids don't spend time with me because they'd rather be outside playing, they'd rather be outside with their friends because I know just a little about *Pokémon*. But at the same time, yeah, I am the one who takes them to the library. I'm one who has taken them to different places. I'm the one who has gone on the field trip with her, and I am the one who wants to take her, take Eric to their mom, and pick her up. At the same time, we can do lots of things as a family. Yes, maybe we see more Eric, maybe see more Eric than Ann. Part of that is because my schedule works out easier for us to go with Eric.

Exposure to Various Experiences

The five girls were all involved in various extracurricular activities related to art, music, gymnastics, ballet, and sports activities. Mostly, they would start learning these activities through their mothers' interests. The fathers relied on their spouses' decisions in selecting their daughters' after-school activities and enthusiastically supported their various performances.

Emma started learning ballet at her mother's suggestion, but she told me that she would like to be a ballerina in the future. With respect to her zeal for Emma to take ballet lessons, Elaine stated:

Because I took ballet for twelve years, and I loved it, of course, so I think I'm pretty typical of it; as most mothers, I don't know if you have a little girl, you want them to be in a ballet recital in a tutu, so yah, I encouraged that for sure.

Timothy didn't discourage it. But if I hadn't pushed it, she probably wouldn't take ballet.

Timothy was likely to facilitate his daughter's curiosity by providing her with various opportunities. He stated that because he likes Emma to be curious, he does not focus on one activity or area in educating her.

During the interview, Jerry consistently referred to the importance of exposure to different experiences for his children. He said that he wants Ann, his daughter, to be exposed to the world, thus, encouraging her to do physical play or outdoor activities including sports. Both Ann and Dianne acknowledged Jerry's contribution to Ann's outside activities, which are not a major interest of Dianne. As one of his concerned efforts in raising his daughter, Jerry stated as follows:

I say a lot of traveling and seeing things [as my intentional efforts]. When I say traveling, it's not like we're traveling the width and length of the United States, but trying to make sure what things are out there. What I normally do is just to show things outside.

In comparison to his wife's involvement in relatively static activities, Jerry proudly addressed his active engagement in field trips and traveling with his children. He said, "I am the one who takes them to the history site, Revolutionary or Civil War battle fields, and to the rocky center. Dianne probably takes more cultural things, the musical center, classical center, things of that nature." In the interview, Dianne supported this fact and appreciated her husband's participation in her daughter's school field trips instead of her.

Kate's family admitted that Lori has encouraged Kate to experience a wide-range of activities since she was very young. The collected documents from the mother

supported Kate's involvement in various activities. A blue belt certificate in *Tae-kwon-do* and a good citizen certificate were two of the examples. Kate also acknowledged her mother's helps with the activities and said:

My parents always sign me up for something as long as it's not too expensive. If I don't like it very much, my dad just says, 'Give us one more day.' Then, he encourages me to do it one more time.

Jimmy emphasized that he would not enforce any specific activities to his daughter but would like to expose her to diverse experiences in order to recognize her major interests and talent areas. Lori agreed that her husband respects Kate's aptitudes and interests in choosing her after-school activities rather than urging her to learn the activities based on his own interests. Additionally, the mother acknowledged that she selects her daughter's after-school programs with the following consideration:

We both work, so she's there from 2:30 to 4:30 or 5:00 every day. So, for those couple of hours, I don't want her to stay on the playground and to get in trouble. I want her to be focusing on something that will be helpful. And she enjoys them.

For the fathers, another way to expose their daughters to various stimulating environments was family trips with their children. They were aware of the importance of traveling in developing their daughters' creative potential and wide-ranging talents. John said that he loves going to new places, tries to travel with his two daughters as much as he can, and attempts to take more trips when his children get older. Pam and Cathy confirmed this fact during the interviews. Timothy, another father, mentioned that he considers curiosity as a greatly valuable asset for his children. Although he did not list traveling as an intentional family priority, he has stimulated his daughter's curiosity

through an exposure to different environments. His wife Elaine said that her husband loves to travel with their older children including Emma and Bob, her younger brother, and enjoys going to museums and caves and experiencing a variety of activities at different sites. Doug, Edna's father, described traveling as a definite agenda for his family during the break. He stated that he has planned on doing a trip per year with his two older daughters, and also his wife Natalie admitted this fact. Doug commented:

My best, my favorite times when I was growing up were on family vacations. We got in the car and drove across the country to destinations. I didn't necessarily have the passion to drive, and my best memories were being at that location, not driving to them. So, yah, traveling is definitely an agenda. Whether it's on vacation, going to visit history sites in Boston and Philadelphia.

Moreover, the father said that he is waiting for his children to get a little bit older so that he may take them to European countries, and he portrayed his plan for the trip as follows: "Renting a house in Italy, the Tuscany section for a month, the older area in France, traveling to different sites and cities, and seeing how the people live in France or Italy and so forth."

Parenting Style

The fathers demonstrated their own parenting styles formed by their experiences in childhood, educational beliefs, or their unique family structure. However, most of them were more strict and applied discipline more often than the mothers, but respected their children's distinctive characteristics and personal opinions. Also, they all encouraged their daughters to be independent and self-assured.

During the interview, Kate often mentioned that, in general, her father is very strict with her although she consistently described him as funny. She said that her father focuses on whether she pays attention in accomplishing her work, and he always stimulates her own motivation. Kate stated:

He just has his phrases that teach you, just touch your heart, something like that. He just makes sure you want to do more stuff like that. He jokes with you about it, and he makes you feel good about it. If you make a mistake or something like that, he is very strict about it though.

Jimmy encouraged his daughter to behave appropriately according to the situation, but also respected her outgoing personality characteristics. Kate confessed that sometimes she had difficulties with her teachers because of her talkativeness in school, but her father convinced her in the following way concerning this problem:

My dad says it's okay if I talk a lot, but you've got to know the right time to talk. Like if I'm trying to tell jokes, but nobody else wants to have a joke, you've got to know the right time and right place to do it. I'm also glad that my dad, he is very strict sometimes. He makes sure that I do the right thing, he lets me start to talk the way I want to talk right now, and he's always like, let her worry about that when she grows up.

There was another father who is very strict in dealing with his children's attitudes and behaviors. Doug firmly stated that he would not expect his children to have problems with marriage, drugs, and alcohol. His rigidity was obviously revealed in his comment about tattoos. Doug said:

Somebody who awfully permanently disgraces their skins with ugly tattoos or a tattoo, I want to say, you know, I tell my children, "You come home with a tattoo, you bring home with a significant somebody with the tattoo, I'll smack you upside the head."

Some fathers in this study were perceived more as disciplinarians than were the mothers. This was evident in three families: Kate's, Cathy's, and Ann's. In Kate's family, Jimmy considered himself of a more disciplinarian than Lori in raising their child, and both Lori and Kate acknowledged this fact. Kate said, "If my mom says, 'Please go upstairs now,' I can't say, 'Can I hang around just a few more minutes?' in front of my dad if I have to go upstairs right then." In regard to a major difference between him and his wife in parenting, Jimmy commented:

I try to see her behavior, I try to let her do or even make her do more on her own. If Lori is here, then Kate expects Lori to be there to help her and pick up clothes and stuff. It's something Lori enjoys doing, so it's not a problem. Lori probably tends to do a little bit more, probably is a little bit more involved in her day to day stuff, while I tend to be a little more trying to teach her to do stuff on her own, depend on herself.

Pam expressed that sometimes her two daughters including Cathy pay a little bit more attention to her husband's disciplinary actions than hers. She said, "I think they are used to being around me, and thus, sometimes try to take advantage of, take me to the limit. When he [John] speaks and disciplines them, they listen a little bit quicker than with me." Cathy confirmed this fact in talking about her father's support of her participation in a summer enrichment program last year. However, her mother

emphasized that in bringing up their daughters, joint decisions between her and her husband are made almost all the time, while her father stated that he is more concerned with the decision-making on money aspects in the family rather than with his two daughters' daily lives.

Similar findings were observed in Kate's and Ann's family. Kate remarked that compared to her father, her mother is more likely to care about details of her schoolwork and to be permissive in dealing with her. Furthermore, this girl did not hesitate to identify her father as the major decision maker in her family although her parents considered themselves equally as the decision maker. Jerry was willing to depict himself as the disciplinarian in his family, which was also confirmed by Dianne, his wife. As to the major difference between his and his wife's parenting style, he mentioned that Dianne treats their children like children, whereas he treats them like adults. Jerry was sure of his emotional closeness with his daughter, but at the same time, he admitted that both of his children are closer to their mother than to him. His comment on his strictness and role as the rule-maker in his family reflected some plausible reason for this.

I am the one with more expectations, a little bit higher for how to behave in public, whereas Dianne's more comfortable in that nature. At the same time, I'm the one who's a little less approachable because I'm the one who's saying, "Look, you'd better go to your room and get that cleaned up now. There're times they may not like things that I do. I'm not doing it because I want them to like me. I'm doing it because it's good for them. At the same time, I guess, it puts me more of a disciplinarian also.

Dianne agreed with this point and acknowledged that she is not good at playing the disciplinary role for her children. She said:

Jerry's always been the one who was a true disciplinarian. I'm not good at that. I have a real soft heart, and if I say, "Oh, you need to invite him at ten." Then, ten fifteen, ten minutes after ten, if Eric comes up and says, "Oh, but I'm reading this book, and I really like this part, I wanna finish this book." Then, I say, "Okay, you can have thirty, more minutes." Jerry is more likely to say, "Sorry, put it away, you have to finish up tomorrow." So, he hates to rule, but he makes sure all the rules get enforced.

In Edna's family, when asked if the father treats his children equally, Doug responded, "No." He confessed that he is more concerned with Edna, while Natalie is more concerned with Lisa because of the following reasons:

Personalities are completely different. I can say Lisa can do more things than Edna because she is focused, and she can get it done. I don't expect the same level of learning because Lisa's ability to immediately focus on gifted tasks is as much better than Edna's. Therefore, if she doesn't do it I pat her head and say, "You'll do it now." But Edna you'll have to remind her. She is distracted, and she is off task easily. And so I give her more leeway. Edna is also a much more perfectionist compared to Lisa. She gets under Natalie's skin in a matter of a second. Natalie is yelling at the child, she is yelling at Edna, but she doesn't yell at Lisa. And because of that, I don't like her yelling at the child, but then again I understand the frustration she goes through and her complete lack or loss of control. Because of that I make sure that Edna gets a little more special attention.

I wish each child got 50% of intention from me; I wish each child got 50% from me and 50% from Natalie. But Lisa is getting parental attention about 70% from Natalie and 30% from me. And Edna gets about 70% positive reinforcement from me and 30% from Natalie, and that's simply because Edna gets under Nancy's skin. So, I make sure that I just give Edna more attention, positive attention.

Natalie also agreed that Doug treats their two older daughters, Mary and Edna, equally but differently mainly because of their different personalities and interests. However, Doug said that he did have similar expectations of their children although he needs to observe and is more concerned with Edna's grade and homework than with Lisa's. Natalie described herself as more of a disciplinarian than her husband, which was opposite to the other families. She remarked that she is probably the stricter disciplinarian for her children, while her husband is more affectionate and permissive with them. Edna agreed that, in regard to her grades and schoolwork, her mother pushes her more than her father does. She said, "My dad just likes playing. He [just] feels about my schoolwork, too, but not as much as my mom." Doug's parenting style is also reflected in the following comment: Edna said, "When having trouble like fighting with my brothers and sisters, usually my dad says, 'I'm not gonna get into this'."

Similarly, in Ann's family, the mother perceived that her husband deals with their son and daughter differently. Dianne confessed that her husband is more strict with Eric, their son, than with Ann and has a very high expectation of the former because he had his own experiences as a boy. Whereas, Jerry was observed to be more generous and permissive with Ann because everything related to her is likely to be "a new experience"

to him. Dianne confessed that Ann is much favored over Eric by Jerry, and she even portrayed her daughter as a novelty to her husband.

Jerry had very high expectations of Eric because of what he did when he was young, Eric should be doing exactly the same way. And Eric's interests are very much more like my interests. He doesn't like to go out and know people. He's very happy at home, reading a book, playing a game, doing something quiet. That just drives Jerry off the wall because he doesn't understand why Eric doesn't want to go, why he can't be in the Scouts, why he doesn't want to do everything that has been offered. Jerry has been involved in everything Eric did, so he is very hard on Eric. Because it seems that Eric doesn't meet Jerry's expectations, and that causes him a lot of conflicts. Whereas, on the other side, I think because she is a girl, Jerry doesn't have quite the same expectation for Ann because like the Girl Scouts, Jerry wasn't in the Girl Scouts, but he was in the Boy Scouts.

However, unlike for Eric, Jerry had no such preconceptions about what Ann should do because she is the only daughter in his family. This fact contributed to his flexible attitude and open-mindedness in parenting her. The father also admitted that he discerned some differences in raising girls and boys; however, he primarily observed the differences between his children in terms of their personality characteristics. Jerry insisted that he tries to keep options open for both of his children in relation to enhancing their idiosyncratic talents.

The fathers were concerned with their daughters' study habits and skills; this was observed in the four girls: Kate, Cathy, Emma, and Edna. Edna's parents said that both of them urge their children to complete their homework first as soon as they get home and

then convince them to do other extracurricular activities. Based on his own experiences, Jimmy, Kate's father, stimulated his daughter to have good study and work habits for the following reasons, but he also respected her own determination in accomplishing her work.

What we tried to do is having good habits, good work habits for Kate. That's because that was a problem I had when I was in school. No one really made me sit down to do homework, so I never developed that. But study habits stuff like that, so we try to make sure that she is doing that regardless of what the subject is so that it becomes the routine. We try to encourage her in that so that it may be this week, next week, maybe something else, but I just also let her pick her way.

During the interviews, it was observed that Timothy and Elaine are selective as well as encouraging independence related to their children's study and play. Elaine announced that she and her husband have a similar parenting style and handle situations the same although the mother admitted that she is more patient with her first son, while her husband has more patience with Emma. Timothy stated the following concerning their parenting styles:

We have a lot of videos, and they're pretty positive. They're not necessarily educational, but they are for children. And we are very careful to try to keep away things that we think are real violent, that sort of thing. We really try to encourage them to turn the TV off and play and read, and they have such a great collection of things down there. We just sort of get them down to their playroom. Then, they find stuff to do, but when they say, "I like to watch this movie." "Oh, watch." We

don't measure how many hours they watch TV. We keep the minimum, but we don't track.

When talking about the playroom, Timothy described that his primary belief in educating his children is to enhance their independence. In fact, the teachers' comments on Emma's report cards demonstrated that Emma is very conscientious and independent in working at school. Timothy stated:

I think the playroom may not necessarily be a conscious decision as much as it was out of necessity. A good playroom is also not a bad baby sitter. We're both very busy, and there're times when we need to be able to say, "You guys need to go to the playroom and find something to do." And I think that's born out of, at least from my perspective, the way I was raised; my mother's favorite comment was "Only boring people were bored. You can always find something to do." And I think their ability to make things up themselves and play has been, at least promoted by us. I think that not all children seem to play independently, but Emma can go climb the tree up front, create enough a whole world of lions and tigers and birds, and she plays all the characters. She makes up all the dialogues and climbs the tree and jumps down on her own. It doesn't need a lot of prompting. And I think we encourage that it's okay to go play and be independent like that.

The following statement is another example of the father's encouragement of independence for his daughter. In talking about asking questions to teachers in school, Jimmy encouraged his daughter to express her opinions without hesitation. Kate said,

"My dad says it's okay to have my teacher confused first if I get confused [in class]. So, he encourages me to ask teachers questions first, whenever I could not understand them."

Family Structure

The data revealed that each unique family structure affected the fathers' attitudes toward their daughters and their talent development. That is, although all these girls were selected on the basis of the same criteria, within each of the five families, there were idiosyncratic family dynamics that impacted the fathers' roles for their daughters.

Kate is the only child in her family, and this stimulated her academic, creative, and athletic talent development in the following way: Kate's family acknowledged that since Kate is the only child in the family, she has benefited from all of her parents' attention. Kate also agreed that she could get whatever she wanted, and she shared her playroom filled with various toys, books, CDs, and tapes that were all provided or created by her parents. With respect to a working mother in the family, Jimmy and Kate expressed that they were very pleased that Lori has her own professional career. Lori also confidently said that her husband and child supported her profession. The following was Kate's statement about having a working mother.

When I hear that they [Kate's friends] have their mothers at home all the time, it just sounds like it might be a little bit harder for them, because I'm just kind of happy that she works outside, that I have both parents who work. So, whenever I come home I can say, "How was your work day?" and she will tell me if she had a bad time, and she tells me about why, so we have a good conversation instead of saying "What did you do at home today?" "Oh, I cleaned, I fed the dogs." You know what I mean, so I'm pretty happy that she works.

Jimmy attributed Kate's outgoing personality to his wife's outside career. He expressed that this fact enabled Kate to develop her outgoing personality by getting along with many other people in the day care center. However, Jimmy did not consider that his wife's professional career has influenced specifically the development of Kate's future occupational options. Nor did Lori, the working mother. As to the benefits of having a working mother, Lori said:

Benefits? To her know responsibilities, to know that's an option she has to do, but you can do that and still have good times with your family. She's never known anything else, it will be interesting to see what she thinks as she grows up.

Edna is the second child out of four children, and Cathy is the youngest of two in their families. Both had a commonality in having an elder sister who is extremely academically gifted. Edna's father confessed that when his wife first mentioned this study concerning fathers and gifted children, he initially thought of his eldest daughter, Lisa, as a child participant because of her extremely excellent academic performances. Doug stated:

I immediately thought about Lisa. I didn't think of Edna. When people talk about Edna, they talk about her personality and her looks. But again being only eight years old, she hasn't made her mark in academics. But I wouldn't be surprised if she was just above average.

Both Natalie and Edna also portrayed Lisa as very academically oriented. While interviewing Edna's family in their home, I observed Lisa reading books and playing with computers in the study room. The mother discerned some different aptitudes between Lisa and Edna, and one of them was competition. Natalie said, "Edna competes

with other people, whereas Lisa competes with herself." Furthermore, she expressed that she observed that academics come easier to Lisa in comparison to Edna because of Lisa's obvious academic giftedness. The mother said:

I think, to Edna, academic competence doesn't come as easily as to Lisa, but it comes such a different way for her. But at the same time, she doesn't want to be compared to Lisa. She tries really hard not to participate in the same things that maybe Lisa do. So, she can avoid that comparison. And I think she just hasn't the competency that Lisa does.

During the interview, it was often noticed that Edna is competitive with Lisa although she respects her sister's intellectual competence. For instance, when talking about her sister, Edna expressed her ambivalent feelings toward her sister and said, "Sometimes, we get in a fight, and I don't feel that good about her. But sometimes, I feel very good about her." However, Doug and Natalie recognized different talents of their two daughters although both acknowledged that they have greatly high expectations of their eldest daughter's scholastic achievement. Furthermore, the father confessed that he poured his concerns and efforts more to Edna than to Lisa because he thinks the second daughter needs more help and attention from her parents. Due to her parent's concern, Edna's academic progress was evident and well reflected in her report cards. When Edna was four years old, her teacher commented in a progress report, "Wow! What a change, very proud!" The subsequent progress report contained the following descriptions: "Edna is a happy, bright, and energetic child; maturing and becoming a serious student; very eager to complete her assignments and always works promptly and independently." In addition, a current school progress report consistently addressed Edna's excellent

progress in overall academics and her motivation for learning. Also, Natalie perceived Edna's talent in math as well as in athletics. One day, after the interview, Natalie shared that she explained to Lisa about the fact that Edna has her own talents, which are different from hers but equally as important as her evident academic talent.

The parents of another eight-year-old, Cathy, made similar comments as those of Edna when comparing their eldest daughter Mary and Cathy. John often depicted Cathy as a hard worker like him and a very competitive girl who is eager to win everything in which she gets involved. He discerned these aspects as a major difference between his two daughters. Both John and Pam admitted that their first child, who is two years older than Cathy, is very smart and intellectually gifted. John said:

Intellectual ability, I would rather look at tests, but Mary is probably smarter than Cathy. Naturally, Mary's been in the gifted program ever since kindergarten. First, she just took the test, and she's just in it, not that Cathy didn't make it in.

However, he mentioned that Cathy is more responsible, mature, and thinks ahead more than her sister. Because Cathy is more like her mother, John also confessed that he consciously tries to have good relationships with her, which is not necessary with Mary. Pam stated that both her daughters are similarly gifted in terms of their motivation although Mary is a little more academically oriented. However, the mother mentioned that Cathy is more observant and curious than Mary, and she commented their differences especially related to art. She said, "The academics may come easier to the oldest child, but Cathy seems to be more interested in art than my other child. She seems to excel in art, seems to be more gifted in drawing." Cathy also considered her sister apparently

Cathy worked hard to be in it now. She worked harder than Mary did.

smart, but unlike Edna, she did not show any competitiveness with or dual feeling toward her sister during the interview.

Another commonality between Cathy and Edna was about their parents' occupational status: Both fathers are businessman, and their mothers are stay-at-home mothers who are primarily devoted to their children. Interestingly, the fathers in these families considered their wives to be more intellectually oriented than themselves but preferred them to be homemakers. In regard to his wife's not having her own career, John mentioned:

I think it's great. That's selfish from my point. Well, the main reason we sacrifice to do that is so that she can devote more time to our children and their activities because they can do only half things if she is working full time. If she is working all the time, they can't do half the activities they do now. That's what we always believe. And she shares too much in the activities. I'm a cold man though...

He was sure that his wife does not want to work outside, either. Pam agreed to her husband's assurance by expressing that the most important thing in her family is their children and raising them successfully. She further remarked that the decision to stay at home was hers. She said, "I think Cathy understands that some women have careers and work full time, and some don't work at all. So, I think she sees the differences and will just have to choose what she would like to do." Such a similar atmosphere was detected in Edna's family during the interviews with her parents. In talking about the mother's and the father's roles in the family, Doug did not hesitate to say:

We structured it so that Natalie can stay home, takes care of the kids, and she is able to tell me all about the house, she does the housekeeping, and she is doing ironing, and so her job is really to make sure that the kids grow up happy and healthy.

Natalie acknowledged that her husband encouraged her to stay at home when she was pregnant with Lisa; however, she emphasized that it was she who decided to serve as a stay-at-home mother to her four children, and she seemed to be happy with this role as well.

The interviews with the two eight-year-olds, Edna and Cathy, showed that their mothers' current status as homemakers did not influence their considerations of future occupational pursuits. Both girls expressed that they want to have their own professional careers in the future: Cathy said that she would like to be a doctor, which was reinforced by her father. Edna addressed her hope to be in business like her father and to take over his current job.

Six-year-old Ann and Emma have mothers who have their own professional careers as a graduate student and a research statistician, respectively. Unlike the cases of Cathy and Edna, Ann, the second child with one elder brother, and Emma, the eldest with three younger brothers, were observed by their parents to be more academically gifted and smarter than their siblings. Both were depicted as perfectionists by their parents, and the parents often addressed their daughters' precocity. In a pre-first progress report card, Emma's teacher commented that Emma indicated an excellent level of development beyond her age, but there was no evidence of Ann's precocity in her report cards.

In Ann's family, Jerry stressed that he has the same expectations of his son and daughter, but his wife Dianne disagreed. Dianne remarked that Jerry has a higher expectation of their son not because he considers his son more gifted than his daughter,

but because he is familiar with every experience his son has had. She also stated that

Jerry is very proud of whatever Ann does; thus, she has more freedom in choosing her

academic and nonacademic activities than her brother. Dianne said:

What Jerry thinks is Eric should achieve something in the right time period, but Jerry was disappointed with Eric, and so Eric feels like he is "dead in the ground." And I think it works to be an advantage to Ann because Jerry doesn't have set expectations for what she should be doing, and when she should be doing it, and how well she should be doing it, so he's open to anything she wants to do and letting her do her best. And he is proud of her no matter what she does. She doesn't feel like she let him down. Jerry doesn't get disappointed with her, so I think any different expectation is an advantage for Ann. Because she doesn't have the same pressure tied up with how she does these different things. She is freer to choose what she wants to do, and it is going to be accepted.

In the family of the other six year old, Emma, the mother confessed that both she and her husband might have a higher expectation of their daughter than their son because of her obvious giftedness. Elaine stated:

Emma seems so bright. I think Bob is bright, but because he's a boy, because he's two years younger, his speech is not as clear as Emma's. He didn't talk as much as Emma early on. He doesn't display artistic talents. We know that he is smart but just not. . . it's just obvious from the start. Emma spoke so early, her vocabulary is amazing, and her memory is incredible, and so I think Timothy recognized right away as did I and everyone around us. Right now, we have

higher expectations for Emma because we do see so much ability and so many potential areas.

Elaine mentioned that in addition to Emma's intellectual competence, she noticed her daughter's emotional and sensual over-excitabilities, which are often found among many other gifted children.

In Ann's and Emma's family, the fathers were supportive of their spouses' having their professional careers. Jerry trusted his wife's educational background, education major, and her current position as an expert in the education field. The interviews verified that, to some extent, this fact has convinced him to rely on his wife's involvement in child rearing instead of stimulating his own active engagement with his children. Elaine announced that Timothy is very supportive and encouraging of her graduate school studies because he knows that she cannot be happy with merely serving as a home maker without her own professional career. She confessed that without her husband's concern, she even could not come back to school after a few years of teaching at a public school. Timothy remarked that he thinks positively about his wife's having her profession because he expects this will provide Emma with a role model as an equal partner in the family. However, sometimes, the little girl appeared to be disappointed by missing her mother at school events. As a working mother, Elaine often expressed that she is frustrated by not being able to spend much time with her daughter.

I think that it's sort of hard for me. I don't feel I have enough time with her one on one. And Emma complains about that. "You're always doing homework, you're always doing papers, and you're always working for Betts [Elaine's advisor]. But she knows I feel guilty, and so she will say those things to me when

she's tired, when she knows she can get me upset; she will say things like "All the other mothers go on field trips, you don't go on any field trips. Why don't you come to our class every Friday?" It's hard, and I try to explain to her this work is really important to me, and she knows what I am doing in a way. She knows my dissertation, and she tells her friends that my mom's working on her Ph.D. I think that ultimately, it's going to be a very positive thing for her to see her mother chose to go back to school, and that her mother wanted her career, wanted to learn, wanted to teach other people. I think that's very good. But right now, it's a hard time for her to deal with that because she doesn't have as much of my time as she wants

As to her husband's concern with her working career, Elaine proudly mentioned that her husband is very considerate and understanding of her limited amount of time during the break especially when she takes classes. The mother explained this is why Timothy would do traveling with their children even without her.

Gender Issues

The interviews with the parents and their daughters indicated no significantly differentiated paternal behaviors for their daughters influenced by gender difference.

Rather, the fathers were likely to be more concerned with their daughters' intellectual competence and creative talents than with their gender. Furthermore, one family said that the father is more tolerant and generous toward his daughter than his son because of the gender difference between him and his daughter. Another father was pleased to learn about girls through his interactions with his two daughters as well. When asked a question about whether they are aware of toys and activities solely for girls, all these

parents responded, "No." The five fathers disagreed that they have any stereotypes of gender issues. Their wives supported their husbands' unprejudiced and equivalent attitudes toward their daughters and sons except for one case, Cathy's, because of having only two daughters in the family.

In Kate's family, the typical gender roles for males and females were not even observed: Jimmy enjoys cooking, and he is the major cook in the family. The interviews revealed that Jimmy and Kate often watch a cooking program and enjoy going to grocery stores together. The father said, "We started watching the cooking show together because that's my interest, and she is kind of adopting that." Also, Kate and Lori proudly addressed Jimmy's expertise in cooking. In this family, the fact that the father is concerned with cooking and doing laundry instead of his wife were accepted very naturally. Jimmy said:

I guess in a lot of stuff, it's switched from what the traditional family would be. I do cooking and buy the groceries. But again a lot of things we do complement each other. I wash clothes, and Lori folds them. I do cooking, and Lori cleans up the kitchen, things like that. We really divide a lot of stuff, but the traditional stuff that mother would do and things that I do, Kate just accepts it that way. In effect, when she was little, she was surprised to learn that other people, other mothers actually cook. Now I think it's just a natural thing for her, and I don't think she would ever think I can't do something else.

Kate's family confirmed that both the father and daughter enjoy playing with soldiers, cowboys, Indians, and *Mickey Mouse*, which are all usually considered as toys for boys. Jimmy's flexible attitude about the paternal roles in his family enabled Lori to continue

her study in school and contributed to the development of Kate's future career options without gender constraint. This was also true of Emma's family. As indicated previously, Timothy was very supportive of his wife's study, and he considered having a professional mother might positively affect his daughter's occupational pursuits. He said:

Although we have assumed different responsibilities within the family, we share them heavily and demonstrate daily to the children that men and women need not be limited to particular roles. This idea is an important one, especially for Emma as I never want her to feel constrained by gender. Unfortunately, she will encounter this sooner or later as she grows, and we can only hope that the model we have provided will help her navigate these hurdles. Conversely, I would hope that my sons will be more sensitive to this issue having been exposed to this model in their own home.

Both Timothy and Elaine mentioned that they are very conscientious in dealing with their sons and daughter equally. Also, Emma did not talk about any differentiated behaviors of her father caused by her gender. In regard to her husband's enjoying ballgames and checkers with Emma, Elaine commented:

I think it's more their ages than their genders. He would like to play these games with Bob, but Bob is just now getting old enough to do it. But I think if he is old enough, Timothy will do the same sorts of games with him.

However, Elaine admitted that she rather than her husband might have some gender specific tendencies although her primary concern is about her children's own interests in activities regardless of their genders. She mentioned:

Definitely, I encourage Emma in gymnastics and ballet. I don't encourage Bob in that. He takes gymnastics right now, and he loves it, but he loves every other sport. I think Emma can be rather good at that, so I want to allow her the opportunity now to see if she likes it. And I encourage her in drawing, but it's because I see she likes it and has ability. I don't think Bob has an ability, at least not right now, it's not showing up. So, I encourage him in sports with balls that's because he likes that. I want Emma to wear dresses, but she hates it. She's such a tomboy. She always wants to wear blue jean shorts and t-shirts, so when we go to church or out to dinner somewhere, it's a battle. I have to bribe her to get her to wear a dress. I think especially because I only have one girl, I want her to be feminine in some way. But that's not to say I want to discourage her from playing soccer if she wants to do that. But I mean I don't dress Bob up, so that's a difference

At the same time, the mother emphasized that like her husband, she encourages her daughter to speak out and not to be afraid of avoiding her opinions in school. Also, the parents of another six-year-old Ann expressed that they are aware of not differentiating their son from their daughter on the basis of gender.

Dianne observed that her daughter is more likely to be interested in boys' things than in girls' things, and she and her husband do not set any constraints on this. However, she realized that Jerry is very concerned with what boys should do or not for their son although he does not control his daughter's inclination for the traditional boys' things. Dianne illustrated the following episode:

If Ann wants *Legos*, or cars, or anything, it's fine. She can have anything, whereas when Eric wants the *Barbie*, I got him one because I thought, "What's wrong with that?" But his father had a really hard time with the fact that Eric had the *Barbie*. Even though Jerry does not have the same expectations for our kids, I think, Ann actually has more freedom to do what she wants to do and to pursue her interests.

Meanwhile, Jerry expressed that he observes some differences between his son and daughter in their behaviors, but he also announced that he and his wife are not aware of any gender stereotypes in educating their daughter. The father even remarked that he wants his daughter to overcome the gender stereotype in academics particularly in mathematics. In fact, Ann's last year grade report verified that she is excellent in math and language arts. Jerry said, "Personally, I want to encourage Ann to think of herself as good at math because, in fact, I heard lots of studies that girls don't think they're being good at math." He added, "I see there're a lot of women leaders who come in basically equal." Additionally, in this family, being a girl seemed to be a benefit in terms of emotional sensitivity. Dianne consistently stated that Jerry is much more rigorous with and demanding of Eric than Ann. She commented, "I think Jerry is in line with me in that because Ann is a girl; we don't want to see something hurt her."

John mentioned that, overall, he is a traditional male who would like his wife to stay at home for their two daughters; however, he was not likely to have any limitations for his daughters in developing their talents and occupational goals because of gender.

John said:

We just try to set high goals for our two daughters. I don't know whether a lot of people do this for their girls, they just say you have to get ready to marry, but these days at this time, I don't think that's true.

Because there are only two daughters and no sons in this family, it was impossible to compare the father's differentiated attitudes toward boys and girls. However, both Pam and Cathy demonstrated that John is not aware of the gender difference between him and his daughter; the mother expressed that John does not hold gender-stereotyped attitudes in dealing with their daughters; the daughter agreed that she has not observed any gender biases of her father. Having girls were another enjoyable learning experience for John as the case of Jerry, Ann's father. John said, "We just serve the girl things because I have to learn. I came from a family of all boys, so I sort of have to learn all the rules, and it's been a different learning experience for me." Furthermore, both the mother and girl stated that John treats his two daughters equally but differently. Instead of being conscious of the gender difference between him and his daughters, John considered differences between Cathy and her sister. Because he feels that Cathy is much more sensitive and focused on what everybody does in comparison to Mary, his first child, who is concerned more about what she does, he said that he and his wife pay more attention to their second child. At the same time, the father admitted that he is doing something more with Mary, whereas Pam is doing more with Cathy. He mentioned, "It happens in a natural way without any specific reasons." With respect to the mother's and the father's roles, John associated his roles with being a financial provider and supporter for his family, while he associated the mother's roles with taking care of their daughters both personally and academically. He said:

Mine, the biggest role is working and providing good living for our family, giving the girls, you know, support their school, or academic, athletics, or whatever they are doing. My biggest role, right now, is in terms of all I do, she does rest.

Oh, maybe the possibility [of the mother's roles] is to take our girls, know, encourage, and help them whenever they need. Training and educating [the girls], telling [them] the aspect of life whether it's academic or personal.

Likewise, Doug stated that he treats his four children differently on the basis of their personality characteristics; however, the father tried to designate an equal amount of his time to each of his children. In talking about his lack of time with his family, Doug said, "Each child is getting robbed of their individual time because we have four children." Although Natalie observed different preferences in toys between her daughters and son, she admitted that she and her husband would not consider gender in dealing with their children. The mother confessed that her husband is more aware of gender equity after having three girls in the family. She introduced one episode related to Doug's attitude change:

I think before we had children I think he had different expectations; for what a girl can do, for what a boy can do. And now he has girls he wants them to compete with boys. He doesn't want to see them separated, he wants to see them grow up, and be able to go to the work place and wherever, not be afraid to say hold back because that's a man's job, something like that. He doesn't believe that there's a man's job, woman's job any more. He's seeing his girls grow up and realizes they are capable of doing things as he is. When we got married, I wanted to keep my maiden name, and he was very traditional. He said, "Oh, no I want

you to have Woody as your last name." And when I said, "What about hyphenated, making Douglas-Woody?" He said, "I just don't know. No case, I'm not gonna argue with that." Now he has girls; he wants them to keep their last name. He wants them to be Woody forever. He doesn't want them to change their name if they get married. So, I mean he's changed, his philosophy, also.

Despite the fact that undifferentiated paternal attitudes and behaviors were noticed, and an intense emotional closeness between the fathers and their daughters was detected by all the family members, overall, the girls in this study felt a little more comfortable with their mothers than with their fathers. The nontraditional atmosphere in Kate's family was distinctively observed throughout the study, but at the same time, both Jimmy and Kate related gender to an emotional closeness between parents and children. Kate expressed that she may feel a little bit more comfortable talking with her mother.

I also feel very comfortable with my dad. I mean I would go to either one [of my parents] to bring up a lot of problems, but just a few problems, like certain private kinds of things, I would probably go to my mom because she is my mom, you know. It's just the way with moms and daughters, and if it were a private thing with a son, he [the son] would probably go to his father. It is just the way it is. I don't know why.

Similarly, Lori remarked that her daughter consults primarily with her if she faces problems in relation to friends and school, particularly related to boys. She stated, "But if she asks me, and I feel like it is something Jimmy would help her better, I always say, 'You should talk to daddy about that'." Jimmy was willing to accept the belief that daughters are closer to their mothers although he emphasized that he does not have any

gender stereotypical attitudes toward his daughter. His statement about one-night-out for women in the family was evidence of his belief.

Every Friday evening, Lori and Kate do have a girls' night out, which is really, just a time for them to bond because we realize that girls are usually not being closer to their dads, you know, something they have. As you know, at least she has a date with Lori, and they do it. But it's very special to Kate. She gets disappointed when she can't do it.

In Cathy's family, John often mentioned that Cathy is closer to his wife, while he considers himself closer to his first daughter. His wife Pam acknowledged that Cathy feels a little more comfortable with her than with her husband especially when she gets in trouble; however, unlike John, she considered Mary, the eldest child, equally close to her and her husband. In contrast, Cathy mentioned that she is evenly close to her parents, and she expressed her equal comfort with both.

The interviews showed that due to gender, some fathers consider their spouses more of an influential person than themselves in raising their daughters. When evaluating himself, John gave high 80s out of 100 points for his roles as the father. One of the reasons he did not give himself above 90s came from the fact that he just does not know much about girls. John said, "What I do is learn about girl things. In comparison, families with a lot of sisters know more about girls than I do. That's why they have to train me about what they're doing and like to do." Meanwhile, Pam considered her influences on her daughters somewhat differently. She said:

Just because I am the mother, a primary caretaker, I'm with them more than he is and see their daily life and spend the most time with them. Although dad is very involved, I do think that way since I'm there the most with them.

There was no exception for Ann's family. Although both parents confidently explained that Ann is very close with her father and feels comfortable with him, Jerry admitted that both of his children favor Dianne over him. He confessed, "I would say there are things that they tend to favor Dianne over me. But I can't think of anything that brings it up to me." Dianne bragged about how her husband is proud of their daughter, and how good their relationships are. However, emotionally, Ann felt closer to her mother than to her father; in the interview, the girl smiled and depicted her relationship with her mother as very close and nice, while she portrayed hers with her father as sometimes nice and not so close.

Edna's parents acknowledged that Doug is a little more concerned and less strict with Edna than with the other children, while Natalie is more rigorous with her. The girl and her parents all confidently said that Edna and her father are very close and feel comfortable with each other. Simultaneously, Edna stated that she feels very comfortable with her mother as much as with her father and likes the fact that her mother is a stay-athome mother. She said, "I like to be with my mom and do stuff, and I feel safe with her." As described previously, Edna's parents expected their three daughters to go to college and have a full time job in the future. However, they both confessed that if their daughters quit their professional careers after marriage and having children, they would accept it without resentment. Doug said:

I think if you look at Natalie, Natalie is brighter than I am. She's a lot smarter than I am, and she is not working, she got a job more from her education. She's got more formal education than I do, and she is not working. Would it be a waste of time? No, because the most important job is raising children. At least in my opinion, my job allows me to provide food and educational opportunities and housing for my children. That's what we are working for until retirement. So, if the kids, my children don't go out to the work place that will be fine. I have no problem with that at all.

Similarly, Natalie remarked that she wants her daughter to have her own career, but if her daughter wants to have children after marriage she also wants her to be at home with her children. The mother said, "I want her to be the one to raise her children if that is what she wants to do."

Future Career Pursuits

The data indicated that the fathers have affected their daughters either directly or indirectly, while the mothers have not influenced much their daughters' future career options regardless of their current status as working mothers or homemakers. Moreover, although all the parents emphasized that their primary concerns lie in their daughters' happiness in relation to their career pursuits, they all had high expectations of the girls' future.

Eight-year-old Kate mentioned that she would like to be an actor, author, animal helper, or artist. The documents presented by Lori included Kate's autobiography illustrated by her mother and several writing and drawing samples. Also, there was a newsletter containing Kate's interview with a coach. Kate stated that she wants to work

with computers if she cannot be an actor or author, two of her major hopes for her future profession. Her father has also inspired her in thinking about her career options. Related to her future goals, Kate expressed that she is likely to be influenced more by her father than her mother. She commented:

Because he's just, I don't know exactly, he just helps me, I will have a lot of things I want to do. He just knows the right things to do. I'm thinking when I grow up, probably, he would be one of the persons who helps me a lot. I mean my mom, the same with my mom, but just him, about, I mean, like two millimeters more.

Edna, another eight-year-old, expressed her respect for her father and hope of identifying herself with him. In the interview, she proudly said, "I want to grow up to be like my dad, and I want to do the same kind of work that my dad is doing." On the contrary, her father commented that he does not want his daughter to take over his current job because of the unstable nature of his work. Doug said:

If one of the girls wants to do it, that's fine, but if none wants to do it, that's fine. But I don't have a preference for them to do it. I don't think that it's terribly interesting work, but it gets harder every year.

All the fathers in this study acknowledged that they recognize their daughters' unique, distinctive talents, and set high expectations of their academic accomplishments because they considered them [the girls] as gifted and talented. Another commonality the fathers indicated was that they did not show any specific preferred areas either academic or nonacademic for their daughters' future careers. During the interview, the parents all addressed their children's future happiness as their most primary concern. Jimmy said:

I would expect her as pretty much as we did, I did in school. I think if she does her best and tries her best, I would hope that she can find something that she would enjoy doing and also be able to make her living. I think that's the goal. I mean I never encourage her to do something just because it's gonna make money. It's really with her, it's whether she sets her mind, she will be able to do it, and be a success at it, because I think she is smart enough, she's outgoing enough.

Although Jimmy as a computer expert acknowledged that his daughter is interested in and good at computers, he did not specifically persuade her to think about working with computers for her future career. Jimmy said, "Again, if she wants to, if that's something that made her happy, by all means, that's what I want her to do, something that she enjoys doing." The interview showed that Lori does not set a priority on her current career related to her daughter's career options, either. She said, "I say, probably just to her to do something that makes her happy, but also can help her support her family."

Cathy remarked that she thinks her father wants her to be a doctor in the future. She specifically mentioned an obstetrician as her hope for a future profession. She said, "I think that's good for my future career, frankly speaking." During the interview, Cathy's parents admitted that the father is concerned with his daughter's overall education and academics, but they all emphasized that they did not have any professional fields they prefer for her future. They both stated that if their daughter were happy with whatever she chose, they would be very supportive of it. John said, "Whatever she is interested in, whether she wants to be a school teacher, or doctor, or nurse, or whatever she's gonna do, I just try to keep her on track and help guides her among those."

work--running a trucking company--like Edna's father, a businessman, John responded somewhat negatively due to the inconsistent and unstable nature of his work. He made a similar statement as Doug did:

Well, that will be fine if she wants to do it, but I will urge her to do something more. Rather, I will encourage her to go to something more professional like pharmacist or teacher or doctor or something like that because I might make a lot of money this year, but not any next year.

Emma was eager to be a physics teacher as her father is now. She said that she wants to be a teacher, particularly teaching physics, because of her interest in science. However, she did not mention going to graduate school or hoping to be a professor, a position her mother is currently seeking. Her parents confirmed that their daughter is curious about science and shows her great interests in astronomy and cheetahs. Elaine said that Emma has a deep passion for cheetahs and devotes herself to one particular area until she is satisfied with it. The mother described her daughter as an expert of cheetahs without hesitation. Also, Emma's curiosity in science was inspired by her father. As indicated previously, Timothy and Emma shared their interests in reading science books and watching the *Discovery* channel. Elaine said:

I think Emma only comes to me for questions about gymnastics or ballet because Timothy doesn't know anything about those or drawing, but she will go to him to ask about astronomy. I don't know volcanoes, or different science things, but I'm not passionate about that, either. She knows he knows more about it. I think Emma doesn't see him studying, but she sees the time that he puts into his

teaching. She knows he's good at what he does, and that he's just interested in and passionate about all kinds of things, so I think she wants to be like that.

Emma supported her mother's statement in her interview. However, she made the following comment in regard to her parents' study in the home: "My mom is not studying, but she is busy doing her homework all the time. My dad is studying very hard, and I would like to be like him." Emma's parents agreed that the father is very patient in responding to his daughter's curiosity. In fact, Timothy was good at explaining things to his children; Elaine said that he once spent four hours explaining stars to Emma. In talking about his intentional efforts in having relationships with his children, Timothy explained, "I'm still trying to maintain my childhood." Accordingly, the father's stimulating, patient attitude, and his desire to understand his child were conducive to the girl's identification with the father. In the interview, he stated:

Sure, I am happy with Emma's becoming a teacher. Obviously, both of us [Timothy and Elaine] have been teachers, and we value education. I personally believe that right now our society undervalues education, and we need bright, enthusiastic people to go on teaching. And I think my daughter is bright and enthusiastic, so when she grows up, and that's what she wants to do, I think the education community would benefit.

Natalie mentioned that Doug expects Edna to go to college and graduate school and to get involved in some professional fields. Both parents did not comment on any specific profession but emphasized that their primary concern with their daughter's future career options is to make her happy and self-assured. At the same time, Natalie confessed that her husband is more likely to place academics above athletics for their daughter

although he also wants her to succeed in athletics, her talented area. In contrast, Edna expressed that her mother rather than her father encourages her to study hard and get involved in academics.

Dianne and Jerry admitted their high expectations of Ann because they consider her as extremely bright. In the interview, Dianne laughed and said, "We need a woman President, and maybe Ann will be on a roll for President." Jerry further confessed that Dianne is more likely than he is to expect and persuade their children to be gifted because she is more knowledgeable in education, her field of expertise. He mentioned:

Because Dianne has the specialty of research and education, I would say Dianne may do the testing on it, but I feel comfortable that both of the kids tend to be better than average students. And Dianne might encourage them a lot to be gifted. She's pushing it because she feels like her children have to be gifted. I think they are. I think they're all gifted, and they do have more goals than some of the kids in the class.

Dianne stated that she does not think her husband has any specific career goals in his mind for their daughter; neither does she. The mother announced that she does not have a preference for academics over non-academics although she herself has been involved in academia. However, the mother said, "I want her to be the best. She will be doing the best on it." Unlike other girls in this study, Ann was the only girl who considered her mother as her role model. Ann did not specifically address any career options that she would like. She said that she has not even considered her future profession, yet. However, she expressed that she hopes to be like her mother because "She [Dianne] is very nice and not funny unlike my dad."

Based on the findings of the present study, the fathers' roles in developing the academic, creative, and athletic talents of the five girls are depicted in Figure 1 (for general) and Appendix Es (for each five cases). The diagram highlighted that the family structure was an overarching component that influenced the fathers' educational philosophies and parenting styles in rearing their daughters. Concomitantly, the fathers' own experiences with their families in childhood affected their beliefs in parenting and attitudes toward the girls. The fathers played significant roles in stimulating their daughters' intellectual capacity and creative potential through sharing their common interests in science, sports activities, drawing, and music. Furthermore, they introduced their daughters to specific talent fields not only in accordance with their [the fathers'] own interests and talents but also through traveling together. It was noteworthy to observe that the emotional closeness between the fathers and the girls mediated the fathers' roles in recognizing and enhancing their daughters' wide-ranging talents although the girls were more emotionally attached to their mothers than to their fathers. Through being approachable and accessible to their daughters, the fathers served as the most supportive and influential agent to them and thus, had an impact on the development of the girls' future career options. Accordingly, the fathers were perceived as the major role model in pursuing the girls' professions.

Figure 1. Summary of the fathers' roles in their daughters' talent development.

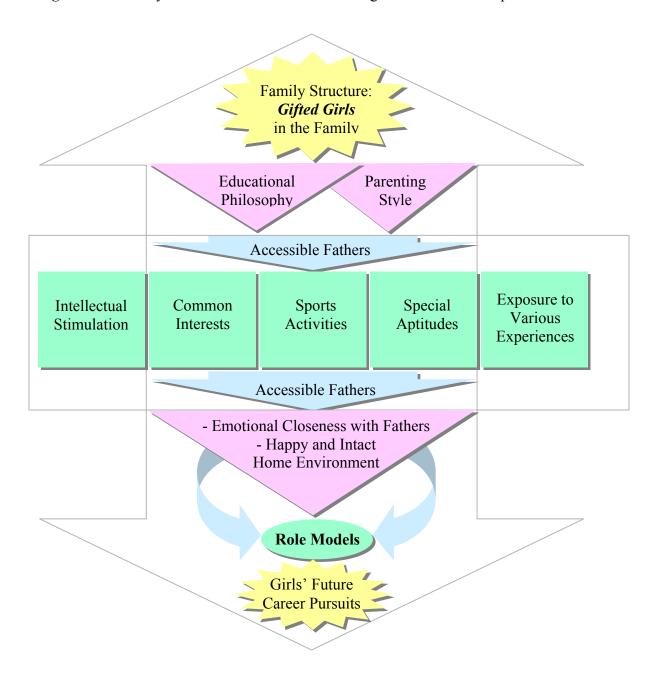


Table 3

Evaluations of the Fathers

Girls	Mothers' evaluations of the fathers	Fathers' evaluations of their roles
Ann	90/100	Considerably involved*
Emma	100/100	Somewhere in 90s
Cathy	Very satisfied*	High 80s
Kate	90/100	90/100
Edna	90/100	75/100

Note. * indicates responses which were not based on a total of 100 points.

CHAPTER 5

DISCUSSION

Summary and Discussion

What we have learned from these five family cases is that the fathers with their own educational philosophies and respect for school education were perceived to have contributed to developing their daughters' academic, creative, and athletic talents. By recognizing their daughters' distinguishing characteristics and idiosyncratic talents, introducing them to specific artistic, musical, and athletic activities, and getting involved in various experiences with them, the fathers influenced the girls' talent development. In addition, a great number of common interests shared by the fathers and their daughters (Dewing, 1970) were observed particularly in physical play or outdoor activities including athletics (Lamb, 1981; Russell & Russell, 1987) and science (McGrayne, 1993; Piirto, 1998), subjects which were not appealing to some mothers. Through all these active engagements, the fathers in this study provided the girls with a head start (Olszewski, Kulieke, & Buescher, 1987) in their talent development. Therefore, the findings are consistent with the research of Bloom and his colleagues (1985b), which indicated the influence of parental stimulation in developing a variety of talents for their children. However, conflicts between the fathers and the girls that result from the mismatch of their interests (Feldman & Piirto, 1994) were unnoticed in this study. In this regard, the present study authenticated the idea that balancing out the needs and interests

of both parents and their daughters are decisive in developing the children's talents (Snowden & Christian, 1999).

Throughout this study, the fathers' contribution to their children's intellectual competence was substantiated (Blanchard & Biller, 1971; Biller, 1993; Collins & Russell, 1991; Lozoff, 1974; Shinn, 1978; Verdiani, 1970). Also, the family values of intellectual stimulation and endeavor were reinforced (Filippelli & Walberg, 1997; MacKinnon, 1978; Ochse, 1990; Olszewski, Kulieke, & Buescher, 1987). Like many other gifted women, the girls in this study were bookish (Filippelli & Walberg, 1997; Howe, 1999; MacKinnon, 1978; Kerr, 1994; Ochse, 1990), and their fathers were reported to read voraciously and apparently inspire the girls' reading ability. Some fathers relied on and had favorable attitudes toward school education in relation to their daughters' talent development, and none of them expressed any negative attitudes of formal schooling unlike the controversial perspective of school in general (Feldman, 1999; Ochse, 1991). Although all the fathers emphasized their encouragement of their daughters' nonacademic talent development including artistic, musical, and athletic, and denied their propensity for academics, concurrently, they all expected their daughters to complete at least college education even if the girls quit their careers after marriage. Furthermore, the fathers were greatly concerned about their daughters' academic performances and generally set their priority of academics over nonacademic areas. In fact, some fathers (e.g. Cathy's and Edna's father) declared that the bottom line of talent development is in the development of academic talents, and they further attributed their inclination for academics to their social experiences. This finding is different from those in the literature revealing the paternal impact merely on boys' intellectual capacity (Hoffman, 1977;

Radin, 1981); however, the result also reflects the atmosphere of a still academically dominated society.

According to Snowden and Christian (1999), it is important to provide children with diverse experiences and options in order to fulfill their potential abilities. Likewise, one of the most conspicuous roles played by the five fathers was exposing their daughters to various environments through traveling together, while the mothers' roles were decisive in choosing a wide range of activities for the girls. Also, this study displayed different parenting styles between the fathers and the mothers in general; in comparison to the mothers, most of the families identified the fathers as disciplinarians, but at the same time, the fathers were reported to be very considerate of and respectful for their daughters' unique characteristics and talents. Traditionally, non-authoritative and permissive parents have often been found behind many potentially creative children (Dewing, 1970; Ochse, 1990) although there are other creative groups who have been disciplined by their strict and stern parents (Goertzel & Goertzel, 1962; MacKinnon, 1978; Roe, 1953, 1983). In Olszewski, Kulieke, and Buescher's (1987) review, the authoritarian but less conventional without dominance parenting style contributed to children's talent development. In this study, the fathers' parenting styles could be summarized as both authoritative (Baumrind, 1989) and nurturing (Dacey & Packer, 1992); the fathers were strict, and they disciplined their daughters on the basis of their own educational credos, but also respected their daughters' aptitudes, autonomy, and further supported the girls' interests and career goals. Through this authoritative and nurturing parenting with their emphasis on critical thinking, challenge, and curiosity, the fathers boosted their daughters' scholastic achievement and heightened the girls'

persistence and independence (Biller, 1993). However, the mothers in this study did not expect their husbands to regulate their daughters' lives merely because the former are men and the heads of their families. Instead of depending solely on their spouses' authoritarian figures, most of the mothers asserted that they both are sharing and compensating with each other by balancing out each of their parenting styles. Some mothers even insisted that they are not different from their husbands in rearing their daughters, while the girls were most likely to perceive differences in their parents' overall parenting. In many ways, the fathers' roles were defined and applied to their families in combination with the mothers'. This is why we found some strict fathers along with their tenderhearted spouses and even vice versa in this study.

In particular, this study reinforced some paternal factors that significantly affect the girls' occupational as well as talent development: the cohesive relationship within the family and the unique family structure. First, the finding demonstrated considerable benefits from emotional bonding, supportive, encouraging attitudes of the fathers, and happy home environments in nurturing the girls' talents. Through the aforementioned fathers' involvement with their daughters, an affectionate and intense relationship was formed between them; thus, such an emotional cohesiveness influenced the girls' future career pursuits related directly or indirectly to the fathers. In this regard, in comparison to father-son relationships, a certain amount of distance and autonomy from the fathers for their daughters' cognitive growth, which was shown in previous research (Honzik, 1967; Radin, 1981; Solomon, Houlihan, Busse, & Parelius, 1971), was not confirmed in this study; however, it was not my intention to compare the father-daughter relationships with the father-son relationships. Additionally, the need for emotional intensity between the

fathers and the mothers in developing their daughters' talents was observed. Therefore, the finding supported the positive influence of the cohesive family climate as found in many gifted and talented children (Fine, 1977; Olszewski, Kulieke, & Buescher, 1987; Ochse, 1990; Snowden & Christian, 1999) although some historically creative people have come from troubled homes (see Goertzel & Goertzel, 1962; Goertzel, Goertzel, & Goertzel, 1978, Piirto, 1998 for details).

Second, the effect of the idiosyncratic family structure on talent development (Gaynor & Runco, 1992; Olszewski, Kulieke, & Buescher, 1987) was very apparent for these five girls. The fathers set their expectations of and applied discipline to their daughters on the basis of their own relationships with their parents and siblings in childhood. As the second child or the less gifted child in their families, some fathers were very aware of not duplicating their unhappy experiences with their daughters, for instance, by comparing the girls with the other children in their homes. This fact encouraged the fathers to become more attentive to their daughters' unique characteristics and distinctive talents in comparison to the other children in their families. To some extent, the result supported Wagner and Phillips's (1992) finding that fathers were more engaged with their girls who were perceived to be less competent than those with more competence.

On the one hand, it is remarkable to notice that unlike several previous studies showing differentiated behaviors of the fathers toward their sons and daughters (see Biller, 1993; Biller & Trotter, 1994; Hoffman 1977; Lamb, 1976; Lynn, 1976; Siegal, 1987), the five girls in this study even benefited from their gender in establishing relationships with their fathers. The fathers were constructively conscious of their gender

differences with their daughters to prevent them from treating the girls inequitably or unfairly compared to their sons. Contrary to what Eccles (1985) recognized in Terman and the Johns Hopkins studies, gender did not affect the fathers' estimates of their daughters' special aptitudes, either. Some girls took advantage of their gender in getting engaged in various activities including stereotypical physical play for boys because these girls are novelties to their fathers who have only brothers in their families. Moreover, in educating the girls, the fathers were more concerned about their daughters' potential abilities or unique characteristics than their gender; they respected their daughters' intellectual capabilities in compelling them to pursue their academic interests instead of regarding them as sheer hobbies for the girls (see Ochse, 1991). Part of the reason may come from the fact that the fathers perceived their daughters as gifted and talented although the degree of their perceptions was different. As in the case of Wiener (as cited in Ochse, 1991), some fathers seriously considered an advanced level of instruction for their daughters in reference to their giftedness and talents. Because all the child participants were girls, it was impossible to observe the fathers' differential attitudes toward their children according to gender; however, while interviewing and observing them at their homes, I did not observe any evidence that the fathers were aware of gender in their daughters' academic and nonacademic pursuits. This finding disputed the previous result presented by Hoffman (1972), Hoffman (1977), and Lynn (1976) indicating the impact of early childhood socialization on the diminution of females' later achievement. Therefore, at least in this study, gender did not have any negative impact on the girls' talent development, but rather encouraged the fathers to nurture their daughters' academic, creative, and athletic talents in a constructive way. This result corresponds to

Biller's (1993) notion of the supportive roles, particularly played by fathers for their daughters, in comparison to the maternal roles for their sons.

On the other hand, both the fathers and daughters were willing to accept the prevalent assertion: Girls are closer to their mothers than fathers. As indicated, some girls relied more on their mothers than on their fathers both psychologically and emotionally even though they felt at ease with their fathers. A similar finding was already recognized from Helson's (1971, 1992) study of creative female careerists revealing that the successful females depended psychologically more on their mothers than on their fathers although they regarded their fathers as a stronger parent. Likewise, Kerr (1994) observed that gifted girls more than gifted boys referred to their mothers as a major influence in their lives. However, the mothers in this study did not express any more intense relationships between them and their daughters, but rather consistently insisted on the emotional closeness between their husbands and daughters. This may result from the fact that the mothers were aware of the theme of this study; thus, they tended to point out more positive aspects of their spouses' influence on their daughters.

Another example of the mothers' more affirmative perspective was found related to the fathers' availabilities for their daughters. As reflected in Tasch's (1952) study, the time factor resulting from job pressure was still observed to be a hurdle for the fathers. This fact further discouraged some fathers from seriously considering their current occupations as one of the options for their daughters' future professions although the girls were eager to have the same or similar future careers as their fathers'. In contrast, the mothers, except for one case, were very proud of their husbands' involvement with their daughters, and they were willing to call their husbands wonderful fathers and partners in

the family. Most of the girls in this study agreed with their mothers, thereby acknowledging their intact relationships with their fathers without having any frustration caused by the fathers' lack of time. These girls were very satisfied with the amount of time shared with their fathers as well. Although this study did not compare girls' and boys' reactions to their parents, also, another study (Russell & Russell, 1987) showed more positive reactions of girls to their parents' engagement in their shared activities than of boys. Generally, the mothers and the girls in this study were very understanding of the fathers' availability and accessibility in consideration of their occupations. However, the girls were not likely to consider their mothers' job pressure as seriously as their fathers'. This implies that, to these girls, the time factor associated with job pressure was more excusable for their fathers than mothers, which reminds us of the deeply rooted perception of fathers as the financial supporter and the head of the family.

It is surprising to find that the mothers' current occupations were not crucial in determining their daughters' future career options; most of the girls were more likely to be interested in their fathers' occupations than their mothers'. This fact is somewhat contradictory to Biller's (1993) statement that children tend to know more about their mothers' work than their fathers' if both parents are employed. Also, this study yielded a different finding from Kerr's (1994): Parents' occupations do not influence their gifted girls' ultimate careers. The present result implies that the presence of the professional mothers had no influence on the girls' future career options, while the presence of their accessible and affectionate fathers was critical for the girls to identify with them in their occupational pursuits. Therefore, the importance of an emotional attachment between fathers and children should be considered not only for the children's intellectual and

social development (Biller, 1993), but also for their career development (Biller & Trotter, 1994). In addition, the intense relationship with the fathers was imperative in the development of the girls' specific aptitudes--athletics and science--especially when they were the interests of the fathers and the girls but not of the mothers. In conclusion, as found in other literature on gifted and creative females, the fathers were regarded as a mentor for their daughters in developing their career preferences (Biller & Trotter, 1994; Helson, 1983, 1992; Piirto, 1992, 1998). Considering the vital role of mentors, particularly for gifted females (Kaufmann, Harrel, Milam, Woolverton, & Miller, 1986; Rogers, 1999; Subotnik & Steiner, 1994; Torrance, 1983, 1995) and the lack of role models found among the gifted females in relation to their educational and occupational development (Torrance, 1983, 1995; Walker, Reis, & Leonard, 1992), it is worthwhile to recognize that the fathers have affected their daughters as their major mentors in childhood. This finding corroborated the idea that creative females are more likely to identify professionally with their fathers (Helson, 1983, 1992) despite their emotional reliance on their mothers (Dacey & Lennon, 1998). It bolstered the portrayal of many successful females behind their supportive, encouraging, and affectionate fathers (Biller, 1993; Biller & Trotter, 1994; Goertzel & Goertzel, 1962; Helson, 1983, 1992; Kerr, 1994; Piirto, 1992, 1998). According to Helson (1983), a great number of women mathematicians have been adopted as the son of their intellectual fathers. It is not clear whether Helson's observation is applicable to this study because the girls are too young and now in the process of their initial talent development. Rather, the result partly reflected another stereotypical feature implying that girls tend to appreciate their fathers' professional career more than their mothers'.

Future Considerations

There are several issues that should be considered for future studies. First, although this study generally demonstrated the consistent perceptions of each of the families concerning the fathers' contributions to the girls' talent development, some different perspectives from the family members were also observed. Mainly, the differences were apparent in relation to the accessibility and approachability of the fathers as indicated by the amount of time spent with the girls. Likewise, some mothers overestimated their husbands' roles for their daughters although the mothers themselves were recognized as the most influential to their daughters. The discrepancies between the fathers' and the mothers' evaluations of the fathers validated this tendency. As stated repeatedly, all these findings may result from the mothers' awareness of the purpose of this study. Also, these tendencies reflect the affectionate and intact relationship between the fathers and the mothers; however, at the same time, these facts might have affected the findings as a bias. Furthermore, the interviews with the parents were conducted one time with each of the parents, and the participant observations took place only when they were available during the interviews. Accordingly, the observations did not produce much information in reaching the findings. Therefore, follow-up interviews with the child participants and long-term observations will be needed.

Second, because this study involved two six-year-olds and three eight-year-olds, the interviews with these young girls were not as easy as those with the adult interviewees. For instance, during the interviews, two girls were willing to respond to the interview questions, while the other three girls were more shy and reluctant to talk, a very difficult circumstance in continuing two one-hour interviews with them. The difficulty

was more obvious when the children simply responded, "Yes" or "No" to the questions. Unexpected responses from one of the six-year-olds made me embarrassed especially when her perspectives were completely contradictory to her parents'. This girl appeared to be emotionally hurt by her father's lack of affection toward her mother; thus, she depicted some of the issues, particularly related to emotional closeness, somewhat differently. In this regard, alternative research methods as well as thoughtful interview questions are suggested for child study.

Third, although this study intended to include diverse family backgrounds, all of the involved families were Caucasian. It was true that I did not aim to include Asian families because I assumed that child rearing and children's talent development might vary according to home environments, and that Asian and American families could be considerably different in this regard. However, the families who were finally selected as the participants through the recruiting process did not contain any African, Hispanic Americans, or other non Caucasian ethnic groups, a fact which reflects the under representation of minority children in gifted education (Ford & Harris, 1990; Frasier, 1997; Gallagher, 1991). A comparative study including families from diverse ethnic groups should be considered next time.

Fourth, this study revealed that the working mothers did not affect their daughters' career development as much as the working fathers did. Initially, this study was supposed to include both working mothers and fathers for the parent participants. However, among the mother participants, two of them did not hold a full-time job outside of the home. Furthermore, two of the working mothers were all graduate students majoring in education, and the remaining one had earned her doctoral degree in education

and was ready to start her professional work in a new place. Because there were only three mothers working outside, we need to be cautious in comparing the perspectives of the five girls concerning the issue of working mothers and their career development. Additionally, because the three mothers were all studying education and pursing their careers in graduate school, this fact might also affect the girls' responses. That is, the graduate school and the education major might not be an enthralling, appealing place, and field for these young girls. In this sense, the mother's occupation and working status should be considered in selecting participants.

Fifth, the present study demonstrated the distinctive effects of family structure on the fathers' roles in the girls' talent development. One of the findings showed that some girls were aware of their gifted siblings and competitive with them, and their fathers were cognizant of this fact as well as of their daughters' unique talents. Gifted children have often been the first or the only child in the family (Albert, 1983), and the birth order has been perceived to be a significant determinant of their psychological roles and a considerable influence in the actualization of their potential abilities (Albert, 1983; Gaynor & Runco, 1992). Because this study was heterogeneous in terms of birth order involving two first and second children and one only child, it was difficult to recognize the impact of birth order on the children's talent development. Moreover, siblings were not included at this time. Therefore, siblings' perspectives as well as birth order are expected to substantiate the present findings.

Lastly, the child participants in this study had just entered middle childhood.

Weisberg (1999) pointed out the necessity of longitudinal development of eminence after reviewing several studies on creative accomplishment (see Gardner, 1993 and Bloom et

al, 1985b). Similarly, long-term development of giftedness and talents has been claimed (Feldman, 1986, 1999). This notion reminds us of the importance of parents who are usually the first to recognize their children's precocity. However, although many gifted and talented people have displayed precocity and have been reported to be a child prodigy (Howe, 1999), it has also been found that there have been many other creative late bloomers or eminent persons who have actualized their creative potential later in life (Simonton, 1990b; Sosniak, 1985, 1990; Torrance, 1982, 1995). In particular, Howe (1999) presented Charles Darwin as an example who displayed a steady development of his competency, advanced his potential abilities, and became a historical celebrity by taking advantage of his beneficial family background. This confirms the crucial effects of supportive and stimulating circumstances on talent development (Bloom et al, 1985b; Howe, 1999) in tandem with the life-long developmental nature of giftedness and talent. Also, it has been reported that many eminent females have not fulfilled their goals because of the barriers caused by gender (Arnold, 1993, 1995; Kerr, 1994; Noble, 1989a, 1989b; Ochse, 1991; Piirto, 1991; Reis, 1987, 1991, 1995, 1998; Silverman, 1995; Subotnik & Arnold, 1995). Accordingly, it may be noteworthy to follow up these five girls' talent development from this point to adulthood. The follow up study may reinforce not only the life-long contributions of the fathers to their daughters' talent development, but also may reinforce our understanding of the girls' career development.

Implications

It has been a common myth that children's talents can be developed by their own potential abilities (Feldman, 1990, 1999, Simonton, 1984, 1988, 1990a, 1992, 1996).

However, this study reminds us that family takes the initial role of the transformation

process in children's talent development (Albert, 1975; Mansfield & Busse, 1981; Simonton, 1984), and that parents, particularly fathers, provide their children with special training on the basis of their own interests and propensities, thus, contributing to producing their gifted children (Albert, 1983; McCurdy, 1957). The present study confirmed that the fathers motivated their daughters by selecting, producing, and sharing experiences with their daughters (Albert, 1983). In this regard, as significant initial motivators and supporters in their daughters' talent development, the fathers' roles as well as the mothers' should be more recognized and appreciated than the past decades. Also, the importance of the fathers' roles needs to be acknowledged even in the singleparent (i.e. the father-absence) family to compensate for the lack of essential father figures in children's talent development. This study is expected to mitigate the inconsistent findings of the paternal differentiated treatment of their children based on their genders. However, because it was found that the fathers and the girls accepted naturally the widespread belief that girls are closer to mothers than to fathers in spite of their emotional closeness, parents should be careful not to reinforce this common idea in raising their children. Also, fathers need to be aware that their young daughters can model them in pursing their future professions. Lastly, in consideration of the crucial effects of the family structure and cohesive home atmosphere, parents should be careful not to compare each of their children's capabilities, but rather should try to recognize and respect their distinctive talents and aptitudes in a happy home environment.

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APPENDICES

APPENDIX A SAMPLES OF INTERVIEW QUESTIONS

For Child Participants

- (1) Tell me about your father.
- (2) What kind of activities did you do usually with your father when you were young?
- (3) What are you doing with your father on weekdays and weekend?
- (4) What does your father do for your schoolwork?
- (5) What about related to your extracurricular or after school activities?
- (6) How similar are you with your father?
- (7) How different are you from your father?
- (8) What are your common interests with your father?
- (9) Do you feel comfortable with your father?
- (10) What do you think about your mother's working outside/staying at home without having her own work outside?

For Father Participants

- (1) Tell me about your daughter.
- (2) What kind of activities did you often do with your daughter when she was young?
- (3) What are you doing with your daughter on weekdays and weekend?
- (4) What do you do for your daughter's schoolwork?
- (5) What about related to her extracurricular or after school activities?
- (6) How similar are you with your daughter?
- (7) How different are you from your daughter?
- (8) What are your common interests with your daughter?
- (9) Do you think your daughter feel comfortable with you?
- (10) How much do you think you have influenced your daughter in her schoolwork and extracurricular activities?
- (11) What do you think about your wife's current status as a working mother/stay-at-home mother?
- (12) Would you evaluate yourself as the father in your family? How much are you willing to designate to yourself out of 100 points?

For Mother Participants

- (1) Tell me about your daughter.
- (2) What kind of activities did your husband often do with your daughter when she was young?
- (3) What is he doing with your daughter on weekdays and weekend?
- (4) What does he do for her schoolwork?
- (5) What about related to her extracurricular or after school activities?
- (6) How similar is he with your daughter?
- (7) How different is he from her?
- (8) What are their common interests?
- (9) Do you think your daughter feel comfortable with her father?
- (10) How much do you think your husband have influenced your daughter in her schoolwork and extracurricular activities?
- (11) Would you evaluate your husband as the father in your family? How much are you willing to designate to him out of 100 points?

APPENDIX B

SAMPLES OF DATA ANALYSIS USING THREE LEVELS OF CODING IN THE CONSTANT COMPARATIVE METHOD

Appendix B1

Kate's case.

1. Computer (Level II Code)

Kate's Responses

- 1) Dad encouraged me to be interested in computer
- 2) I don't exactly know how he decided to teach me, but he talked to me, like he talked to me to do, and then I called him and said, "Dad I forgot how to do this." Just, I can't just get it right; I'm very good at learning, my dad says and my mom says, too.
- 3) Really I can catch up on things very quickly like you have to say, you do this okay, and I say, "Okay, dad, what I do again?" "You do this." I can do it very well.

 4) But if I do have a problem, probably my dad's right
- helping me.
- 5) I want to be somebody with computers but really my main ones are the ones I told you, but really if I can't find those jobs, I would love to be what my dad is, or computer consultant, or somebody with computers. I mean a secretary anybody who does something with computers, so vou know.
- 6) I do with my dad that's because I'm really good at computer. He teaches me everything about computers, and I started learning how to type without looking.

Level I Codes

encouraged, interested in computer teach me talked me to do, called him iust, can't get it right, very good at learning, dad my mom, says catch up on things very quickly

can do it very well problem, my dad's right helping me somebody with computers

dad, computer consultant, somebody with computers secretary, something with computers

do with my dad, really good at computer, teaches me, computer started learning, type without looking

Jimmy's Responses

- 1) Sometimes we're doing stuff on the computer.
- 2) I work with data base management and also manage all the computer systems at my office.
- 3) Encouraging her to do stuff on the computer.
- 4) She is very very quick on the computer. If I show her something, she will take it and she will actually take it in the next level without having to show me any more.

doing stuff on the computer work with data base, manage computer systems encouraging, the computer very very quick on the computer, show take, actually take it next level, without having to show me

Lori's Responses

- 1) Just suggesting that when she creates, when she writes books she and my husband goes down and sit.
- 2) He's always, if she is asking questions, he'll come in and basically always says "I can show it to her to learn," and she knows what to do the next time.
- 3) So, he just shows her this, how he does this, and this is the best way, and then taught her basics.
- 4) He teaches about the computer, because that's his job, software things, so he's trying to teach her on power point

suggesting, she creates, she writes books, goes down to and sat he'll come in "I can show it to her learn." she knows what to do shows her this, how he does this best way, taught her basics teaches about the computer, his job software things, teach, power point

Level III Codes

- Common interests
- Intellectual facilitators
 - Parenting style
 - -Future career options

Edna's case.

2. Differences between Edna and Lisa (Level II Code)

Edna's Responses

1) Lisa always asks, stays, and reads, so it's not fair sometimes that my dad reads more to Lisa than to me.

Because she always reads some, Lisa reads books, but I'm not interested in them, and so I have to listen sometimes.

3) Well, he has the same expectation of Lisa and me, but I like sports better than Lisa, and she likes playing but not watching.

4) I feel strange about the difference between me and Lisa because we don't agree on everything and stuff.

5) My dad focuses on me in the future to be a good person and make a right decision.

6) Well, My dad thinks Lisa's pretty smart, and she has good grades, and he thinks she doesn't like sports. Level I Codes

Lisa, asks, read, not fair dad reads more to Lisa always reads, Lisa reads books not interested in, have to listen the same expectation like sports better, likes playing, not watching feel strange, difference don't agree, everything dad focuses, future, a good person make a right decision dad thinks Lisa's pretty smart, good grades, thinks doesn't like sports

Doug's Responses

1) Edna's got a big sense of humor as an eight-year-old humor rather than more developed an eleven-year-old Lisa.

2) We have been so impressed with Lisa's academic abilities that we really don't pay attention to, yet others do. She devours books, she reads books like I look at comic books. I mean she reads many real books as I read comic books as a child. Edna reads good as well more than the average child, but not as much as the older child.

3) I think Edna is much like I was. I had a brother who is two years older than me, and I was very athletic, he wasn't very gifted athletic in a particular sport like tennis.

gifted athletic in a particular sport like tennis.

4) I feel sorry a little bit sorry for Edna because she is always gonna be overshadowed by Lisa in certain areas. But, Edna is a social butterfly, and she's got a very verbally outgoing, enthusiastic attitude and personality.

a big sense of humor, an eight-year-old more developed an eleven-year-old so impressed with, academic abilities really don't pay attention, devours books, comic books many real books, comic books good as well more than the average not much as the older child much like I was, a brother older, very athletic, wasn't very gifted athletic, sport, tennis feel sorry, a little bit sorry be overshadowed, certain areas social butterfly, very verbally outgoing enthusiastic, personality

Natalie's Responses

1) He treats some equally, but he treats some differently, and mainly because their interests are a little bit different.

 Edna is more interested in Athletics, and she's more people oriented and concerned about things happening to other people and everything.

3) Lisa is not athletic inclined, she is not competitive at all. Edna is competitive when it comes to athletics. She wants to be number one, she wants to do the best, she competes with other people, whereas Lisa competes with herself

4) I think he has a higher expectation for Lisa because everything comes so easily for her, but really I don't know. I guess he maybe expects a more strong academic background type career rather than athletics or art. treats some equally, some differently interests are a little bit different more interested in Athletics, people oriented, and concerned about, other people, everything not athletic inclined, not competitive competitive, athletics, wants number one, do the best, competes with other people, with herself a higher expectation for Lisa so easily for her, don't know expects a more strong academic type career, athletics, art

Level III Codes

- -Family Structure - Parenting style
 - Expectation

Cathy's case.

3. Interested in academics (Level II Code)

Cathy's Responses

- 1) My dad knows a lot about math, and he is good at math.
- 2) He's like, "Cathy, keep up with the good work, you know."
 And if he reads the report card, he says, "That's good."
 3) Yes, very hard (for me encourage to study hard).
- 4) He shows entirely and says, "Come on, you have to try it."
 5) (My dad and I usually have) a good talk, like he reviews
- my schoolwork and play tennis hard.
- 6) Like we have a teacher planning day, and he works for himself during the day for them to eat lunch. He helps us for refreshments to them.

Level I Codes

knows a lot about math, good at math keep up with the good work that's good very hard shows entirely, have to try a good talk, reviews schoolwork, play tennis hard teacher planning day, works for himself, eat lunch, helps refreshments

John's Responses

- 1) I think it will be fine if she is talented in sports. I will have to be realistic though. But if that's what she wants to do you know we can support and get behind it, but academic is still more important.
- 2) You know school is the most important thing, school makes good bridges, good education, whether she wants to be a nurse or doctor, lawyer, or school teacher, it's fine. She just needs, and we gives her good education, and I prepare where she can support herself.
- 3) I will say whatever she is interested in, whether she wants to be a school teacher, or doctor, or nurse, or whatever she's gonna be, I just try to keep her on track and to help guides her among that.
- 4) I just think the more you read, the more you become, that's the key to advancing especially schoolwork.
- When we get out into the workplace in the world, we've realized that swimming, basketball, I let them mean nothing although they do mean good right now. I play tennis or golf or anything, yah, bottom line is academic, in the work profession that's I rely on living.

talented in sports be realistic, wants to do support, get behind it, academic, still more important school, most important thing, makes good bridges, good education, wants nurse, doctor, lawyer, school teacher, needs, gives, good education, prepare can support herself interested in, she feels a school teacher, doctor, nurse just try to keep tracking, help guides

the more, read, the more, become key tool, advancing, schoolwork workplace in the world realized, swimming, basketball, nothing mean good right now, tennis, golf bottom line, academic, work profession, rely on living

Pam's Responses

- 1) Well, John encourages Cathy academically, and of course, financially he's willing to support their education, and anyway he can financially, I think, mostly, he's just very supportive of her any, you know, just for her daily life. I think Cathy knows that he's there and caring for.
- 2) And he always makes sure that he sees their work, what they're doing, so he keeps up with it at least on a weekly basis, if not on a daily basis.
- 3) John helps Cathy's study at night whether just you know letting them recite things, questioning type things, he's involved in that, just their study skills, and study habits.
- 4) Any teacher conferences, we have with the teachers, and he is always there, and he goes to school to visit when he can.

encourages, academically financially, support, education financially, mostly, just very supportive, for her daily life knows, he's there, caring for always makes sure, sees their work doing, keeps up with it, at least, weekly basis, not on a daily basis Helps, study at night letting them recite, questioning involved in, their study skills, habits any teacher conferences. always there, school to visit, can

Level III Codes

- Intellectual stimulation Academic atmosphere
 - Expectation

$\label{eq:appendix} \mbox{APPENDIX C} \\ \mbox{SAMPLES OF THE COMPONENTIAL ANALYSIS} \\$

1. Common I	Interests (Level III Code)	Level II Codes	AT_	CT	AHT_
	1) encouraged, interested in computer	computer	+	+	_
	2) teaches me about computer, doing stuff on	computer	+	+	_
	the computer, do with my dad	computer	+	+	_
	3) both have sense of humor, like to tease each	sense of humor	_	+	_
	other without getting upset				
	4) enjoy lots of things, love of nature, love of	nature	-	+	_
	animals	animals	-	+	-
	5) both are perfectionists, athletic, love of	perfectionists, athletic	+, -	+, -	+,+
	running, naturally inquisitive, hands on	running,inquisitive	-,+	-,+	+, -
	learners	hands on learner	+	+	-
Examples of	6) running and soccer, watching like a science	running, soccer, science	-, -, +	-, -, +	+,+, -
Responses	channel, the discovery channel, going to	science	+	+	-
	museums, loves to introduce science related	museums, science	+,+	+,+	-, -
	7) love music, like to listen to music loud in the	music	-	+	-
	car together, love reading, share interests in	reading	+	+	-
	astronomy, look at the stars and tell her	astronomy	+	+	-
	8) both like sports, baseball game, go sporting	sports, baseball	-, -	-, -	+,+
	event, athletics, mainly sports, being	athletics, sports	-, -	-, -	+,+
	outdoors	outdoors	-	+	+
	9) play basketball, like to watch sports,	basketball, sports	-, -	-, -	+,+
	Bulldogs' basketball, women's MBA	basketball	-	-	+
	games, watching the cooking show	cooking	-	+	-
	10) reads something, do a variety of stuff	reading	+	+	-
2. Family Str	ucture (Level III Code)				
	1) don't have different expectations, expect at	expectations	+	+	+
	least one if not two of the girls, end up				
	not having a full time career, want to stay	full-time career	+	+	+
	home, fine, stay-at-home mom is not bad	stay-at-home mother	+	+	+
	2) working on my dissertation, tell her to do	working mother	+	+	+
	later, cannot concentrate on my daughter	working mother	+	+	+
	3) been in a day care, been around the people	working mother	+	+	+
	4) is knowing her life, traditional model isn't	traditional roles	-	-	-
	really whatever applied to her, do the cooking		-	-	-
E	do the laundry, really divide a lot of stuff	house chores	-	-	-
Examples of	5) a little bit sorry for Edna, always gonna be	gifted sibling	+	+	+
Responses	overshadowed by Lisa	gifted sibling	+	+	+
	6) novelty to Jerry, his first girl in his life	novelty	+	+	+ +
	7) Mary is probably smarter, worked hard to be		+	+ +	
	in it now, worked harder than Mary did	efforts, competition	+,+	+,+	+,+
	8) Lisa always ask, stay, read, not fair, reads	gifted sibling	+	+	+
	books, I'm not interested in, have to listen	competition	+ +	+ +	+ + +
1	9) been the only child, not very good at sharing,				
	venue la convertal a verbatance T t				
	very bossy, do whatever I want	personality, only child	-,+	-,+	-, '
	10) many travels this summer without me	travel, working mother	-,+	-, + +, +	-,+
	10) many travels this summer without me 11) just obvious from the start, spoke so early,	travel, working mother academic giftedness	-, + +		-,+ -
	10) many travels this summer without me	travel, working mother	-,+		-,+ - -

Note. AT - academic talents; CT - creative talents; AHT - athletic talents. + indicates the paternal effects on the girls' talent development, while - indicates no effects of the paternal factors.

APPENDIX D SAMPLES OF THE TAXONOMIC ANALYSIS

Examples of

			II Codes		
Intellectual stimulation	Sports activities		Parenting style ples of I Codes	Gender issues	Future career pursuits
-reading -interest in schoolwork -computer -critical thinking -curiosity -challenge -independence -autonomy -science movie	-baseball -basketball -swimming -soccer -tennis -rafting -running -rocking	-spends time with their daughters -giving a ride -traveling -sharing various activities	-strict -disciplinary -independent -encouraging -affectionate -respecting -paternal vs. maternal involvement -nurturing	-novelty -first girl -gifted girl -smart -expectation -learning -self-esteem -valuable -marriage -working mother	-doctor -physics teacher -businessman -author -actor -artist -basketball player -animal helper -working with computers

Examples of Level I Codes

never misses the parents-teacher conference -set the rule -homework is done first try to keep challenged and not to stay in a comfort zone showing up her books he has been given by his grandmother -ĥelp her to do think critically -go beyond what she is learning -like to watch the Star Wars movie encourage the children to let them see you do it to provide a good model expect her to be a straight A student once she keeps her-run with them best, did best she could, I will be happy

-swimming and biking, playing tennis, and rock together, just spending time together also -likes to interact as a swimmer be interested in tennis, we'll lead her to the best lessons and coaching available and get -I would go to her in the best program we can if she wants to get out and play ballgames and asks me to play with I will my philosophy is trying to teach children to be healthy and show doing a physical thing is a good thing we show then we run and play with them

-he spends a lot of time with me wherever we go we have a good time. the times are more special try out to spend time with my dad every Sunday morning always been very comfortable either one to bring about a lot of problems ·we have a very easy relationship spends a lot of time with the girls doesn't have a regular work week schedule, but he spends most evening at home both spend time reading or talking in the morning

-pretty strict about my schoolwork -tell me stuff like how to search little words -see the behavior try to let her do -make her do more her own -show her how to make it herself -encourage to do it herself -wants to make sure that she learns early on encourages me to ask teachers -can show her curiosity is good -continuously encourage her to ask questions, and so if she asks question, I do my best answering the question want her capable I want her to be

independent

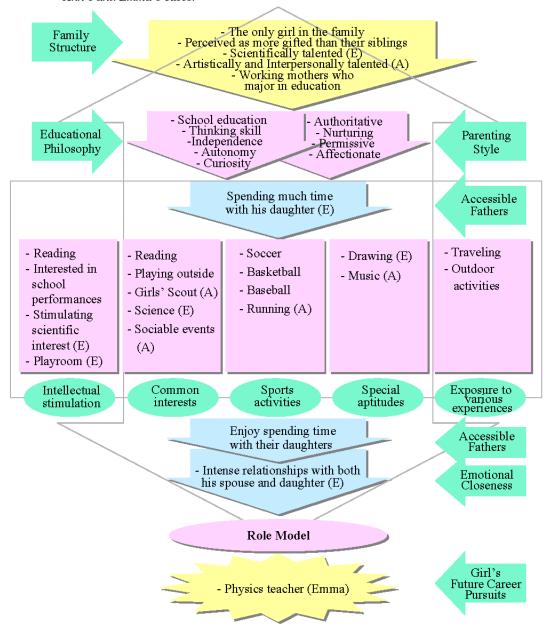
expects her to do he would be one well in school the only girl in the team, and she did fine -doesn't have quite the same expectation because like Girls' Scout, he wasn't in the Girls' Scout, he was in the Boys' Scout -like a novelty to Jerry because she is his first girl in his life want to encourage her to think of herself as good at math my goal is to encourage her to think of herself smart, special, and pretty -vou havé to get ready to marry, but these days at this time, I don't think that's true

of the persons who helps me a lot -want to do is being an actor, or being an author, so the things that he likes, I like, too -to be happy -do what makes her happy -really with her, it's whether she sets in her mind don't think he has a certain area that wants her to go into he's really interested in her being happy with what she does and successful want to grow up to be like my dad, I want to do the same kind of work that my dad does

APPENDIX E SUMMARY OF THE FATHERS' ROLES IN THEIR DAUGHTERS' TALENT DEVELOPMENT

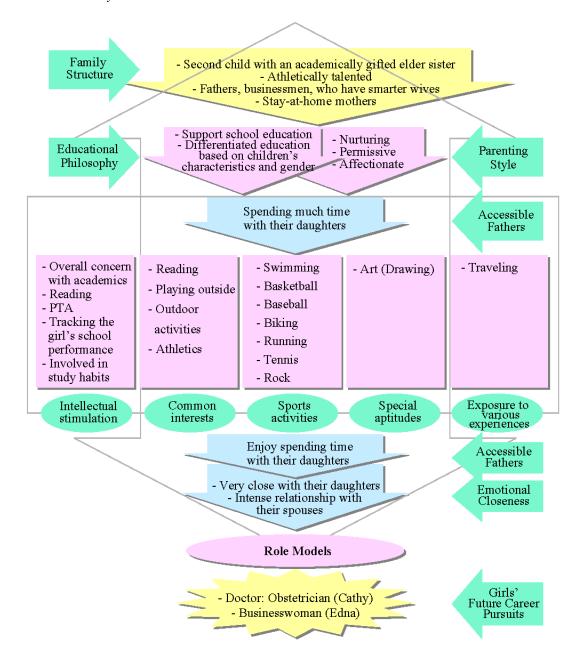
Appendix E1

Ann's and Emma's cases.



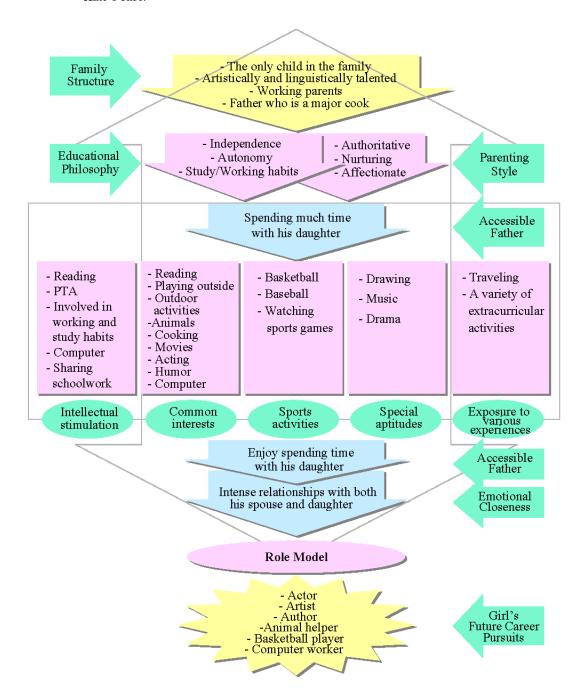
Appendix E2

Cathy's and Edna's cases.



Appendix E3

Kate's case.



APPENDIX F CONSENT FORM

Appendix F1

Participation in the Study of Seon-Young Lee.

Dear Parents:

I am Seon-Young Lee, a doctoral candidate of Educational Psychology, Gifted and Creative Education in The University of Georgia, Athens. I got your address from The Torrance Center for Creative Studies and am sending this letter to you among those who registered for the Challenge Programs this summer. Dr. Bonnie Cramond, my major professor, and I are contacting you to see if you might be interested in participating in a study looking at the role that fathers play in the academic, creative, and/or athletic talent development of gifted young girls for my doctoral dissertation. To eliminate disparate cultural issues affecting my interpretation of data, I am limiting my research sample to American parents, non-Asian. I am writing a letter because I would like to recruit five girls who are aged six to twelve and identified as gifted in school. It would be desirable if both parents have similar educational backgrounds and are working outside.

I am going to interview **your daughter two or three times** at your home or any other place you suggest. Because I also want to interview both parents one time, separately, in terms of the effects of the father on his daughter's talent development, it would be convenient if both of you parents are accessible to me either in your home or in a site suitable to you.

General findings of this study will be shared, and any recommendations or educational resources will be provided to you in order to enhance your daughter's talent development in relation to fathers' roles.

If you are interested in this study and think that your daughter and your family matches each of those criteria, please fill out the following information and personal contact form, and send it to me by <u>June 4 2001</u> using the included stamped envelope. For those who send back this information sheet, I will provide an autographed copy of the new color poster of Torrance's Manifesto whether your family is chosen for the study or not.

If you have any questions, please feel free to contact me by phone at <u>706-542-5594</u> or by email at <u>sylee@arches.uga.edu</u>, or my major advisor, Dr. Bonnie Cramond (706-542-4248). I truly appreciate your consideration for participating in this study and look forward to hearing from you soon.

B	es	t

Seon-Young Lee

Appendix F2

Participants Information.

I. Please fill out the following information
Q1. Your daughter's age:
Q2. Mother's educational level:
Q3. Father's educational level:
Q4. Mother's current occupation:
Q5. Father's current occupation:
Q6. How many children do you have in your family?
Q7. Do you have any other gifted child in your family in addition to your daughter?
YES (Go to Q8) NO (Go to Q10)
Q8. What is that child's gender?
Q9. How old is he/she?
Q10. Mother's contact address (phone/email):
Q11. Father's contact address (phone/email):
II. Personal contact form
My daughter can participate in
Seon-Young Lee's study entitled "Family Perceptions of Fathers' Roles in the Talent
Development of Gifted Girls."
Please call me at or email me to
in order to make an appointment for interviewing with my daughter, my husband/
wife, and me. The best time to contact me is

Signature of the Participant's Parent

Date:_____

APPENDIX G FINAL PARTICIPANTS INFORMATION

Please fill out the following information:

(a) Your Daughter's Name:	
(b) Father's Name:	
(c) Mother's Name:	
(d) Father's Major in College:	
(e) Mother's Major in College:	
(f) Father's Current Occupation:	
(g) Siblings:	
Name (Age):	
(h) Contact Address for Follow-Up	
Address:	
Phone/Fax:	
Email:	

Thanks for your participation in this study!