Parent perceptions and expectations for siblings of different birth-order positions

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Parent perceptions and expectations for siblings of different birth-order positions

by

Anne Sullivan Laing

A Thesis Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of

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Signatures have been redacted for privacy

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INTRODUCTION

Statement of the Problem

There has been much research to support the relationship between birth-order position, the chronological birth order of a child among siblings, and superior achievement of firstborn children (White-Hicks, 1980). Firstborn children are more highly motivated to achieve (Leman, 1985). Richardson and Richardson (1990) noted firstborns also have better verbal skills, apply knowledge at a higher level, and experience a high rate of success in school. Firstborns read earlier and are more articulate upon entering school than their siblings (Pfouts, 1978).

School achievement is just one area of firstborn superiority. On nationwide achievement tests, firstborn children consistently score higher than later-born children (Adams & Phillips, 1972; Nichols, 1964; Breland, 1962). Forer (1977) noted firstborn children are overrepresented in college populations and in careers such as medicine, law, and the sciences. In spite of these achievement differences between first and later-born children, Forer (1976) found a high degree of similarity in intelligence scores among siblings. Therefore, the problem the researcher examined was why the discrepancy in achievement among birth-order positions exists despite similar intelligence found among siblings on intelligence tests.
Flaws of past birth order research

Past research in this area has neglected to consider variables such as birth interval (space of time between the births of siblings), sex of siblings, sibship size (number of children in a family), family intactness (biological mother, father, and their children living together), age of subjects, intelligence, and socioeconomic status (Schooler, 1972; Gonnay, 1974; Manaster, 1977). Past studies that disregard these variables pose a problem because these factors affect the results of birth order research. When neglecting to take birth order factors such as birth interval, sex of siblings, sibship size, family intactness, sibling age, intelligence quotient of siblings, or socioeconomic status into account, any findings resulting from a study may be considered suspect.

Other major faults of past studies include selection bias and a sample that represents no known population. These flaws influence study outcomes and their applicability to other contexts.

No past research effort has been a synthesis of other studies that is logical and easily understood (Howard & Sewell, 1983). Researchers have also failed to offer enough information to conclude anything definite about the effect of birth-order position.

Purpose of Research

The researcher has considered the flaws and contradictory results of past studies. She noted the superior school achievement and over-representation of firstborns in higher education. The researcher also noted that despite the similarities in measured IQ among siblings, a
discrepancy in achievement remains among birth-order positions. This leads the researcher to wonder how and what parents contribute in the home environment that may encourage achievement in one sibling more than another.

Considering these concerns, the purpose of this study was to gain a better understanding of differences in parental expectations and perceptions of their children. The researcher’s focus was on differences that could contribute to a discrepancy in achievement between siblings.

Explanation of Research

This research study answers the question: Do parents have different expectations for siblings of different birth-order positions? The aim of this study was to gather and analyze data through interviews with parents to examine parents’ expectations and perceptions of their children based on birth order position.

Step I:

A literature review was conducted to study past research efforts and to guide the researcher by building a knowledge base. Special attention was given to studies that considered differences in parental expectations and parent/child interaction.

Step II:

The researcher then requested permission to conduct research in the West Des Moines Community School District. After receiving permission,
the researcher then identified all siblings in the district who met these criteria:

1. Birth interval: Siblings twelve to thirty-six months apart
2. Sibship size: Two-child families
3. Age range: 9 to 13 years old
4. Sex: Siblings of the same gender
5. Race: Caucasian

Step III:

After the subjects meeting all these criteria were identified, the researcher narrowed the scope of participation with the use of a questionnaire. On the questionnaire, the researcher asked questions about socioeconomic status, family intactness, and intelligence. These three criteria have been cited in research as being relevant to birth order position. See Appendix B for parent questionnaire and consent form.

Step IV:

Of the questionnaires returned indicating a willingness to participate, the researcher identified those who met the criteria for middle socioeconomic status, an intact family, and sibling scores within forty points on the verbal, nonverbal, and quantitative batteries of the Cognitive Abilities Test.
Step V: Those families who met all the criteria were asked to participate in an interview.

Step VI: The researcher developed an interviewing instrument that focused on parental expectations and descriptions of each child based on information found in the literature as related to such expectations. See Appendix C for interview instrument.

Step VII: The researcher conducted interviews in the homes of ten participants. At the request of one participant, the interview took place in the elementary school where the children were enrolled.

Step VIII: The researcher analyzed the data for commonalities and differences in expectations and attitudes toward each sibling, considering his/her birth-order position. The researcher drew conclusions concerning parents’ perceptions and expectations of siblings of different birth-order positions.
Discrepancies in Achievement Among Birth-Order Positions

Siblings live in a family environment unique to them. They share a genetic background, parents, relatives, religion, ethnicity, race, community, and size of family. They share the same psychological and cultural interactions within a family that is part of a larger community (Hauser & Sewell, 1983). Studies in the United States, Great Britain, Finland, and Sweden, however, show a shared family environment may not have the same effect on siblings (Ornstein, 1993). Factors, including birth order, expose children to different worlds, causing them to develop differently. Despite all the commonalities shared by siblings, research suggests a definite relationship exists between birth order and achievement in that firstborn children will achieve more than later-born children (Cherry, 1990).

Adler (1931) investigated his assumption that birth-order position affects a child’s attitude toward life, academic goals, and career goals. He found that with the addition of siblings, the oldest child feels threatened that he/she will be replaced as the center of attention. This causes the oldest child to feel inferior. The oldest child must then constantly work for superiority over his/her siblings through avenues such as academics or a career. After Adler’s research, there is a gap in birth order research until the early sixties when it again became the subject of research. This is because researchers looked to factors such as socioeconomic status, birth interval, sibship size, gender of siblings,
and/or race to explain differences in achievement rather than to birth-order position, itself.

There has been much research to support the relationship between birth order and achievement. Lindert (1977) stated that firstborns have higher IQs and achievement than children in the middle or younger birth-order positions. They walk and talk earlier (Leman, 1985), do better on the Iowa Test of Basic Skills (White-Hicks, 1980), and have superior academic achievement (Ogletree, 1980). Nuttall (1976) found that the grades firstborn females received in school were significantly higher than those of later-born females, although no difference was found for males.

The discrepancy between first- and later-born children continues beyond elementary, middle, and high school. Both Schacter (1963) and Sampson (1965) found a disproportionately high number of firstborns among students in college. Altus (1965) discovered that 60% of the students entering the University of California at Santa Barbara from 1960-1963 were firstborns. Tahmisian and Walker (1967) replicated the study which produced the same results. Firstborns were also overrepresented in medical and graduate schools (Altus, 1965; Capra & Dittes, 1962; Danskin, 1964; Burger & Hall, 1964).

Considering past research, firstborn children scored better in all the various measures of achievement compared to later born children, but did significantly better on verbal tests (White-Hicks, 1980). Adams and Phillips (1972) had similar results when they examined scores on both the Metropolitan Achievement Test and the California Test of Mental Maturity.
They found that firstborn children had higher verbal and non-verbal scores on both tests.

Explanations for Why Birth Order Differences Exist

Research in the area of birth order has not yet explained why differences in achievement exist (Baskett, 1984). Forer (1976) found genetic factors indicate a high degree of similarity in intelligence among siblings, yet differences in achievement exist. This similarity indicates that high achievers are not necessarily more intelligent. Thus the firstborn's higher achievement cannot be attributed to an intellectual advantage. According to Forer, the difference in achievement lies in the opportunities given to firstborn children in developing intellectual potential, and that the environment unique to each birth-order position may influence choices. Forer stated that firstborns and only children are generally superior in their schoolwork and are overrepresented in colleges and universities. This factor may be due to parental pressure and/or limited family resources, allowing only the firstborn to attend college.

The high degree of verbal skill possessed by firstborns, according to Forer (1976), is because of their close relationship with their parents. This verbal ability may result in high test scores, good grades in school, or success in science and teaching careers which use vocabulary and verbal reasoning. He adds that the firstborn is the preferred birth-order position for motivation toward verbal development, academic achievement, and accomplishment.
Ogletree (1980) attributes the superior academic achievement of firstborn children to a greater need to succeed in school, mostly because of expectations from parents. This firstborn advantage in achievement can be lessened when there is an adequate gap in birth interval between children in a family.

Forer (1976) also cites that the degree to which a child feels a need to achieve depends on birth-order position. He adds that gender of the child and his/her siblings, along with pressure from significant others, contributes to this need to achieve. Firstborns generally have a higher need to achieve, with firstborn men having the greatest need.

The effect of birth interval on achievement must also be considered, according to Cicerelli (1978). Achievement increases as birth interval increases. Cicerelli also found that ability and achievement decrease as birth order and the number of children in a family increase. Large scale studies suggest that the effects of birth-order position on achievement are actually the influence of socioeconomic status as well as sibship size (number of children in a family). Cicerelli concluded that there is no basis for the superiority of the eldest child, and that once socioeconomic status and sibship size are controlled, relationships between birth order and academic achievement are random.

Sex of the sibling also influences ability of other siblings according to Cicerelli (1978). He adds that sisters enhance verbal ability of their siblings and brothers enhance quantitative ability of their siblings. Cicerelli also found the effects of birth order depend
somewhat on the age of the child, with differences usually becoming evident between the age of 11 and 14.

Nommay (1988) concluded, as Cicerelli did, that as the number of siblings in a family increased, achievement of siblings decreased. Age was also found to influence study findings. Smith (1984) found that as the number of older siblings increased, grades earned in school decreased, but he found no significant relationship between grades and the number of younger siblings. This illustrates the importance of examining the position of each child within the family, rather than considering only the total number of siblings.

Grotevant (1977) agreed that the size of the sibship affects achievement. He reasoned that parents who produce several children create less genetically fit individuals in terms of intelligence. This inadequacy is then passed on through each generation.

There have been numerous studies that explain the differences in achievement through the effect of birth-order position. However, the outcomes of other studies do not support a significant relationship between birth order and academic achievement (Galbraith, 1983; Whitney, 1989; Svanum & Bringle, 1980).

There is research that both supports and refutes the relationship between birth order and achievement. Some researchers believe most studies conducted in the past were not valid enough to draw any conclusions because of methodological flaws. Hauser & Sewell (1983) stated that no past research effort has encompassed information from past
studies, nor has it included enough information to conclude anything
definite about the effects of birth order on children.

Characteristics neglected for consideration in studies of birth-order
positions include birth interval, size of sibship, sex of siblings, family
intactness, age of mother, and socioeconomic status (Schooler, 1972;
Manaster, 1977). Other research flaws found included selection bias,
inadequate samples, and failure to control variables known to affect the
research (Hauser & Sewell, 1985).

The Confluence Model

One theoretical explanation of achievement differences among birth­
order positions that has been the subject of much debate is the Confluence
Model. Created by Zajonc and Markus (1975), it has been the catalyst for
much research. Zajonc and Markus stated that a child’s intelligence is
viewed as a result of the intellectual environment in which he/she
develops. The intellectual environment is composed of the average
intellectual level of all family members with each level given equal
weight. Children do not have the intellect of adults, so the environment
of the family becomes weighted with less mentally developed people.
Therefore, the intellectual environment experienced by children lessens in
quality.

Zajonc and Markus (1975) stated in the Confluence Model that
intellectual growth and rate of intellectual growth also depend on birth­
order position and birth intervals in the family. They found that if
birth intervals were short, earlier born children do better than later
Because firstborns interact most with adults, they have an enriched cognitive environment that later born children do not have.

Because the intellectual environment has deteriorated with the introduction of other young intellects, the Confluence Model predicts that only children will do better than other children. In actuality, they do not perform as well as families with two and three children according to Zajonc and Markus (1975). They attribute this lower performance of the only child to what they term the "tutoring factor." Firstborn children have the chance to "tutor" younger siblings in the family. The tutoring reinforces learning for the older sibling and allows him or her to formulate creative responses to the questions of younger children (Pfouts, 1978). Neither the youngest nor the only child has the opportunity to tutor a younger sibling.

Later, Zajonc (1976) found that birth order effects were found in some, but not all, samples. He explained this through his claim that birth order effects are due entirely to spacing, not just the number of children in a family. Shorter birth intervals between siblings showed no birth order effects. Other factors that may affect intellectual development include socioeconomic status, race, and intactness of family.

Zajonc and Markus' Confluence Model has been criticized by several researchers. Steelman (1986) critiqued the Confluence Model, stating that interaction with intellectually stimulating people in a child's family fosters intelligence. However, children's interaction with people is not limited to those in his/her family. She felt the model needed revision and suggested a further study to examine with who or what children
interact and the amount of time spent interacting. Steelman implied that a child's complete environment should be considered rather than just the familial interactions.

Smith (1984) found responsibility for younger siblings does not have a direct effect upon intellectual growth and achievement. In terms of specific achievement for first, middle, or last born children, Wright (1977) found no support for the views of Zajonc and Markus.

In a 1985 review of the Confluence Model, conceptual and methodological flaws were found to be so great that reliable conclusions concerning the influence of birth order on intellectual development were not possible (Retherford & Sewell, 1991). Major faults included a sample that was not representative of any known population, selection bias, inadequate measurement of key variables and failure to control for socioeconomic status, sibship size, and birth interval.

The Confluence Model is a thought-provoking theory that has initiated continued research (Steelman, 1985). Considering the evidence against the model, it is not sufficient to explain differences in intellectual development.

Zajonc and Markus (1983) do not comment on research which contradicts the Confluence Model. They state that a true test of the model would require a sample representative of families across the nation that would trace intellectual development of children over time. This type of study would be very difficult to do for most researchers.
Behavioral and Personality Profiles of Birth-Order Positions

Leman (1985) contributes to birth order literature through personality and behavioral profiles of specific birth-order positions, including those that may influence achievement. He found firstborn children are more highly motivated to achieve and enjoy things that take precision, strong powers of concentration, and mental discipline. Firstborns like structure and can be perfectionists. It is also common for them to be reliable, conscientious, list makers, well-organized, critical, serious, scholarly, goal-oriented, self-sacrificing, people-pleasers, self-reliant, punctual, and accepting of rules. The firstborn child will ignore human relationships in favor of the work at hand, while later born children tend to be people-oriented, sometimes at the cost of academic success.

Forer (1976) adds that oldest children tend to gain identity from their parents more than do later-born children. Drive, ambition, and meeting goals of the parents greatly influence the firstborn child and may influence a child's attitudes towards schooling.

Characteristics of the firstborn child

Richardson and Richardson (1990) found similar characteristics typical of firstborn children. They stated that firstborns strive to please parents by such means as doing well in school. Also, firstborn children have closer contact with parents, resulting in better verbal skills and exposure to abstract thinking which is valuable to learning in school. Richardson and Richardson found a higher rate of school success
(grades and attendance) even though there was no difference in IQ between the oldest and youngest child.

**Characteristics of the middle child**

Characteristics common to a middle child include a lower need for achievement than that of the other siblings (Leman, 1985). Since the middle child may have difficulty competing with the knowledge of a first-born child, he/she may develop in other areas to receive affirmation, recognition, or attention (Richardson & Richardson, 1990). A highly competent older brother or sister may cause a middle child to have problems trying to compete. A middle child may work for parental attention or look outside the family for acceptance if he/she perceives the oldest child as competition in strength or wit. Middle children may "run" with the pack and reject family rules or attitudes about things such as school (Leman, 1985).

There are some desirable characteristics middle born children tend to possess, however. They are less anxious and fearful than firstborn children. They like peace, are good negotiators, and make compromises. These traits make middle children good leaders.

Leman (1985) also found that the middle child in a three child family who was of the same gender as the firstborn and less than five years younger tended to be an "opposite" of the firstborn. Perhaps this tendency is why middle born children are underrepresented among college students and those pursuing advanced degrees.
Characteristics of the youngest child

Youngest children have a tendency to feel less anxiety about achievement and parental expectations. Rules have little meaning for them. They are the group most likely to become procrastinators according to Richardson and Richardson (1990).

If youngest children are not encouraged, they may do just enough to get by in school. They are the least achievement-oriented, possibly because most things they might achieve have been done before by another sibling. Youngest children may have little confidence in their decision-making skills and expect other people to solve their problems. Socially, however, they do very well, and they tend to make better team players than firstborn children.

Conflicting birth order research explaining achievement discrepancies and profiles of personality and behavior characteristics provides insufficient evidence to support valid conclusions. The scope of research must be expanded. The effect of the home environment must be examined with respect to the parents' role in shaping their child.

Parental Expectations of Birth-Order Positions

Baskett (1985) studied expectations and beliefs adults may possess about a child because of his or her birth order status alone. She found adults seemed to have higher expectations for and gave more positive ratings to oldest children than to only or youngest children. However, oldest children also received more negative reactions from parents and
children in a family (Baskett, 1984). If parents interact with children differently, the children will experience different social environments.

The opinion that parents interact differently with oldest children than they do with youngest children has been the conclusion of other researchers (Cohen & Beckworth, 1977; Dunn & Kendrick, 1981; Hilton, 1967; Jacobs & Moss, 1976; Lewis & Krietzberg, 1979; Rothbart, 1971). Little explanation has been offered for the difference in treatment of siblings. This variance in treatment could be due to differences in behavior between oldest and youngest children. However, Falbo (1984) found that even when there was no difference in behavior between firstborn and younger children, firstborns were responded to more negatively by family members than youngest children.

Ornstein (1993) suggested that differences in personality among siblings may be linked to their individual experiences of being loved in a family. He encouraged distinction between a child's actual experience with parents and the child's perception of that experience. Any differences in treatment among siblings as perceived by the child will affect how he/she feels about himself/herself and the sense of justice in the family.

Even if parents dole out attention and love evenly, siblings would still experience the effects of birth order. Children may develop differently because parents react to a child's age in a certain way (Ornstein, 1993). The two-year-old child may have received the same amount of attention as his/her brother/sister when he/she was one year old but does not realize this as a two-year-old.
Although Falbo and Polit (1986) noted that firstborn children receive an abundance of attention, Forer (1976) found mothers are generally more anxious and demanding with firstborns while being more relaxed and comfortable with later children. The father disciplines the oldest child with the most severity while being tolerant of younger siblings. Parents place much more pressure on firstborn children. The addition of a second child intensifies the pressure, and the first born struggles to regain the attention of his/her parents. Forer also found that first born children gain identity from their parents more so than later born children concerning things such as drive, ambition, and meeting goals.

Adams and Phillips (1972) concluded that parental expectations determine a child’s need to achieve (a person’s drive, ambition, or motivation to succeed in competition with some standard of excellence). Baskett (1985) stated that adults have definite, strong expectations and opinions about children, considering only their birth-order position. They expect oldest children to be outgoing, dominant leaders; responsible; more obedient, secure, self-confident, and undemanding. These higher expectations for oldest children may be the cause of parents’ negative manner with them. Youngest children are expected to be likable, sociable, popular followers who are lacking in achievement, obedience, and security. These expectations about children based on their birth-order position may affect parents’ perceptions of a child’s behavior and mold a child’s behavior to create a self-fulfilling prophecy.

Differential treatment by parents may cause firstborn children to apply the high standards expected of them to their behavior and that of
others (Miller & Maruyama, 1976). This expectation may result in firstborn children becoming more critical of themselves. Younger children then become less critical and more relaxed with other people and more popular.

A child's birth-order position will have a lifelong effect. As stated in Hauser and Sewell, the family into which a child is born significantly influences his/her career. This is because an occupation is conditioned by education and because education depends to a large extent on the family. Leman (1985) testified to the magnitude of birth order expectations' effect on children. According to Leman, there is no greater influence than one's family, and how a child is shaped by the family is a large determinant of final destiny.
METHODOLOGY

This study employed a qualitative methodology characterized by collecting data in the natural setting—the home environment—with the researcher serving as the key retrieval instrument. The researcher was concerned with the context in which the data was collected. Therefore, the data is described with much detail in words which is usual of qualitative research.

The researcher focused on the process of the research which is presented in this chapter. Components of the research process described include a description of participants, data source selection, interview protocol, participant interviews, data collection procedures, and inductive analysis procedures. Indicators of rigor in the research are also presented.

Description of Participants

The sampling efforts of this study were determined by factors the literature revealed as affecting the results of birth order studies. As described in Chapter 1, thirty-nine families in the West Des Moines Community School District who met the criteria set by the researcher were sent a questionnaire. Further information and consent to take part in the study were requested.

The researcher employed purposive sampling, which means she used criteria from research to select participants for the study and to ensure
participants could offer information that was relevant to the study. The initial criteria used in identifying participants were as follows:

**Location:** All participants lived in the West Des Moines Community School District. West Des Moines is a community of approximately 31,000 people, a suburb of Des Moines, located in central Iowa.

**Race:** All parents in the study were Caucasian. Some past researchers have controlled for race, but few have given deliberate attention to race as a variable (Page & Grandon, 1979; Smith, 1984; Steelman & Doby, 1983). This is unfortunate because birth order effects are varied in different races. Therefore, race was a consideration in this study. Because of the available population in the West Des Moines Community School District, Caucasian families were the subject of this study.

**Birth interval:** Birth order has little effect on siblings with a birth interval (the number of years between children born consecutively in a family) of four or more years (Leman, 1985). Therefore, siblings twelve to thirty-six months apart in age were included in this study.

**Sibship size:** The average number of children in a family has decreased from 4.8 in the early fifties to 1.3 in 1990 (Richardson & Richardson, 1990). The research outcomes will be most useful if the sample reflects society. Therefore, two-child families were studied.

**Grade level:** In studies where birth order effects were found, the children were fourteen years of age or older. This suggests birth order effects do not start to surface until around age thirteen (Zajonc, 1979).
This study focused on descriptions given by parents for birth order characteristics in children 9 to 13 years old.

**Sex:** Siblings compared were of the same sex to be sure differences in expectations among siblings are not due to different expectations for boys and girls.

After the sub-population meeting these criteria was determined, the researcher developed a questionnaire to identify the remaining criteria which included the following:

**Socioeconomic status:** Schooler (1972) stated that keeping socioeconomic status the same among participants is essential in birth order studies because subjects of different families are compared. This study focused on middle socioeconomic status because the majority of families in the West Des Moines Community School District are of such status as described on the parent questionnaire.

**Family intactness:** Although the effect of marital disruption on children is not fully known, Zajonc (1976) believed that the absence of one parent may negatively affect the intellectual environment in the family. Therefore, intact families were the subject of this study.

**Intelligence:** In this study the Cognitive Abilities Test was used to determine intelligence among siblings. All students in grades three and six in the West Des Moines Community School District took the Cognitive Abilities Test. The guidelines used by the researcher were sibling scores within 40 points in all three sub-tests of the test (verbal, nonverbal, and quantitative). The researcher used these guidelines because of her
desire for a liberal range of difference between siblings, but not so liberal as to affect parent expectations.

Selecting Data Sources

The researcher contacted the Technology Director of the West Des Moines Community School District and asked for a computer print out of all siblings enrolled in the district. After identifying the 39 families who met the criteria sought in her purposive sampling efforts, she sent these families a letter explaining the purpose of the study and what their potential involvement would be. See Appendix A for initial letter sent to potential participants.

A questionnaire designed to obtain information concerning intactness of family and socioeconomic status along with the request for permission to use Cognitive Abilities Test scores of both children was also sent to the families. The potential participants were asked to indicate if they wished to participate in the study by agreeing to a thirty minute interview. A self-addressed stamped envelope was provided for the convenience of the potential participants in mailing their response. Efforts were made to assure the confidentiality of responses and identity of participants both in the initial letter and orally before each interview. This study was approved by the Human Subjects Review Committee on October 25, 1993, thus meeting all the guidelines set by the university.
Participant Response to Questionnaire

Of 39 questionnaires sent, 12 were returned indicating a desire to participate in the study, 5 were returned indicating they did not wish to participate, and 22 did not respond. One respondent indicated a willingness to participate, but information from the questionnaire revealed the family was not intact and, therefore, not eligible to participate in the study. All respondents who met the criteria and were willing to be interviewed were interviewed.

Those 11 respondents who returned the questionnaire and met the criteria for intactness of family, socioeconomic status, and intelligence quotient were contacted by telephone to set up an interview. Participants were asked to choose the most convenient location for the interview. Interviews were then conducted between November 15, 1993 and December 2, 1993. One interview was 30 minutes in length with the rest being 50 minutes in length. They were audiotaped and then transcribed by the researcher.

Both parents were present in 8 of the 11 interviews. Only one parent was present in the other three interviews. The presence of only one parent in three of the eleven interviews may have influenced the findings of the study, resulting in possible loss of data from three missing parents.

Eight of the participants marked the following description on the parent questionnaire (See Appendix B) as indicative of their socioeconomic status: successful business man or woman, doctor, lawyer, architect, college professor; an income from business profits, fees, or salaries;
live in spacious, expensive home; live in better suburbs. Three of the participants marked the following description on the parent questionnaire as indicative of their socioeconomic status: small business man or woman; white-collar worker, manager, skilled craftsman; accountant, carpenter, office worker, sales; live in smaller, well-cared for home of conventional style; live in suburbs. Both descriptions offered on the parent questionnaire indicate a middle socioeconomic status (Thomas & Anderson, 1972).

After the completion of all interviews, the researcher compared what the participants marked on the parent questionnaire as indicative of their socioeconomic status with her observations at each setting. The researcher concluded that all participants were accurate in what they indicated to be their socioeconomic status (Thomas & Anderson, 1972).

Interview Protocol

Interviewing is one of the dominant strategies for data collection in qualitative research (Merriam, 1988). Participants were chosen based on information sought by the researcher concerning differences between siblings and differences in what parents expected from them. The researcher then decided parents would provide the desired information. The design of the inquiry should be evolving and flexible, according to Merriam. As new categories of information emerged from the responses of participants during interviews, the researcher altered the interview questions to pursue more information on those categories. Participants' responses in this study guided successive interview questions. Questions
were added and altered from the original set of interview questions as new categories emerged. See Appendix C for a complete list of interview questions and rationale for their inclusion.

Parent Interviews

Participants were given no information concerning the focus of the study before the interview. The interviews began with a question designed to confirm information about names, ages, and grade level of siblings. Participants were asked to give an academic and social description of each child. The researcher asked first about the older child and then about the younger child, thereby encouraging parents to compare and contrast each child.

The researcher then asked about each child's attitudes towards school, parents' expectations for each child in school, and the child's expectations for himself/herself in school. The researcher asked about the children's priorities of academic success and social acceptance. Participants were also asked about each child's activities outside of school. They were asked which child they would expect to be most responsible and what advice they might give to each child's teacher at the beginning of the school year. Participants were also asked if either child identified more with one parent or was more similar to one parent in beliefs, mannerisms, personality, or aspirations.

The interviews concluded with the researcher asking participants to describe what they expect from their children in the future. Parents were asked what goal would they set for each child to accomplish in the next
year, and what did they expect for their children in the near and distant future in any facet of life. The researcher ended the interview by asking participants to describe things about their children that make them proud.

Audit Trail

The researcher kept a reflective journal of additional comments, feelings, and speculations. See Appendix D for researcher comments and journal entries. Using transcripts and journal notes guarantees thorough descriptions because details and reactions are fresh in the mind of the researcher. Enough information is shared that another individual can follow the logic of the researcher’s conclusions and the description of the methods used. Thus, the study could be compared to another context and the reasoning of the researcher followed (Goetz & LeCompte, 1984). This method is sometimes referred to as an audit trail. It also provides the reader with enough information to draw his/her own conclusions about the subjectivity of the researcher.

Data Collections and Analysis

Data collection and data analysis are simultaneous in qualitative research (Merriam, 1988). The purpose of this is to permit comments from the first interview to guide the interview with the next participant(s) and other subsequent interviews. The researcher began the analysis with the first interview. The instrument used for data collection and analysis in qualitative research is the researcher (Bogdan & Biklen, 1982; Guba & Lincoln, 1982). Every researcher brings his/her unique background and
experiences into a study which subjectively influences his/her perspective and decisions throughout the research. For this reason, a description of the researcher's background is provided. The process of concurrent data collection, analysis, and gathering feedback from study participants will also be addressed.

**Interviewer as the instrument**

The researcher is many times the sole instrument used for data collection in a qualitative research study (Bogdan & Biklen, 1982; Guba & Lincoln, 1982). The interviewer in this study has seven years experience as a teacher. That experience includes two years in a town of 1200 people. This experience gave the researcher the opportunity to work with all siblings in a family. Her experience also includes three years as a teacher of the gifted and talented, working with children in kindergarten through sixth grade. This experience also allowed her to become familiar with all siblings in a family, which the researcher believes adds to her understanding of parents' expectations of siblings. Her experience will aid in all phases of the study.

The influence of the researcher's values and/or biases toward the problem or setting must also be openly discussed (Merriam, 1988). The researcher's experience in teaching has shaped her beliefs and values about siblings and their parents' expectations. She believes parents' expectations can serve as a self-fulfilling prophecy for children.

The researcher is the oldest of five children in her immediate family. She believes that her parents required a much higher standard of
behavior from the oldest child, were much more controlling, and employed more severe and frequent punishment with the oldest child. The researcher also believes that the oldest child may be the first to test the limits set by parents, therefore causing the parents to view the oldest child more negatively. When other children in the family also test limits, the parents may not be as intolerant. The researcher recognizes, however, that her own personal experience is not necessarily transferable to another context or any larger population. The researcher believes there are no implications for this study in regards to the researcher's beliefs affecting the findings of the study. The data, itself, was the basis for the analysis and conclusions.

Peer examination

The researcher who utilizes peer examinations presents his/her raw data to a reviewer who then gives feedback whether or not saturation of data has occurred (Bogdan & Biklen, 1982). Saturation of data has occurred when no new themes are emerging from the data with successive interviews. If new themes seem to be presenting themselves, it may be necessary for the researcher to pursue those themes by conducting more interviews. Peer examinations permit the researcher to offer determinations derived from interviews and be open to inquiry and comments from colleagues (Merriam, 1988).
Data analysis

Data analysis is a process by which interview transcripts and field notes are ordered and grouped to present a logical organization and understanding of their contents to others (Bogdan & Biklen, 1982).

Data from each interview was examined and field notes were recorded before the next interview took place. The interviews were audiotaped and then transcribed by the researcher right after each interview. Transcriptions were then proofread by the researcher, and observer comments were recorded concerning possible themes and ideas beginning to emerge. This step of analysis included involvement with the data, arranging it, dissecting it into smaller parts, synthesizing it, looking for themes, recognizing what relevant information was revealed, and determining what information would be presented to others.

The file folders method was used to categorize, code, and sort data (Merriam, 1988). This process included making a photocopy of all case records. The researcher then wrote comments and possible categories beside each unit of data as she progressed through the raw data. The photocopied pages were then cut up and placed in manila envelopes and labeled by category. Categories were decided by the main idea of each unit of data. Those that were similar were put together. When some clusters became too large, the researcher divided the group according to the similarity of the data. Each unit of data placed in the manila envelope was also coded by number, indicating the interview in which that piece of information was obtained. The result was five major categories that will be expanded upon in Chapter 4. The master copy of each case
study was kept intact for future use. See Appendix E for example of case study summation.

After the data were organized, the researcher employed peer examination by asking another person to review the categories of data. The reviewer was a graduate student at Drake University who had experience conducting qualitative research. All changes suggested by the reviewer were considered by the researcher. One category, siblings described as opposites, was expanded at the suggestion of the reviewer.

The researcher met with her major professor to discuss writing up data from each interview and using a case study format. For the use of other researchers, they decided to make available all information obtained through interviews, parent questionnaires, and field notes.

**Member checks**

After the data analysis of interviews, the researcher decided to present the first set of findings from the study to parents for their feedback. This process of taking data and analysis back to the participants before the final draft is completed is referred to as member checks (Merriam, 1988).

The researcher and her major professor decided to employ member checks to share findings and conclusions with study participants and to obtain their feedback. Participants were asked to give written feedback on the research findings and analysis to be returned in the self-addressed envelope provided by the researcher. Participants also had the option of giving oral feedback to the researcher over the telephone. See Appendix F
for a copy of letter and findings sent to participants during member checks. Notes were taken from the participants' responses which were incorporated into the report of the findings from the study.

Indicators of Rigor

There are procedures in the design of qualitative research which ensure that results of a study have truth value and are transferable, consistent, and confirmable (Cuba, 1981; Guba & Lincoln, 1982; Patton, 1990). The procedures used in this study will be described as follows.

Truth value

Truth value in qualitative research is equivalent to internal validity in quantitative research (Merriam, 1988). Truth value pertains to the extent the researcher's findings reflect reality. Three methods of establishing truth value were practiced in this study.

First, member checks took place, whereby a summation of the data analysis was sent to the participants, the source of the data, and the participants were asked for feedback. Second, peer debriefings were utilized to check for saturation of data and obtain feedback concerning the researcher's analysis of data and conclusions. Third, the researcher presented her background and kept a journal of thoughts and reactions as evidence of her subjectivity.
Transferability

Transferability is to qualitative research what external validity is to quantitative research (Merriam, 1988). Transferability refers to how applicable the results of the study are to another context. Purposive sampling techniques were used in this study to aid in transferability. Descriptions of each case study are available to readers to assist them in deciding the applicability of the findings to other contexts.

Consistency

Consistency in qualitative research refers to whether the researcher’s findings can be replicated and is the counterpart to reliability in quantitative research (Merriam, 1988). The researcher kept the original transcripts, field notes, questionnaires, documents, and her journal which allows other researchers the opportunity to authenticate the methods and findings obtained from the raw data. This audit trail of transcripts and a journal was made available to other researchers for inspection.

Confirmability

Confirmability is described in qualitative research as having to do with securing neutrality. Neutrality is the equivalent to objectivity in quantitative research (Guba, 1981). The reviewer assisted with the coding and categorization of the data and with the case study review.
FINDINGS OF RESEARCH

In this chapter, categories that consistently emerged from the data will be examined. The findings represented in each category will be presented through a table which clearly illustrates them and through quotations from participants.

Findings Related to the Research Question

The research question for this study was as follows: Do parents have different expectations for siblings of different birth-order positions? Data from the interviews revealed five factors to be considered. Categories of information offered by the researcher as findings in this chapter include the description of siblings as opposites, academic and social differences, sibling emulation of one parent, sibling acknowledgement, and parent predictions. For the purpose of confidentiality, the names of siblings used in quotes have been replaced with "older child" and "younger child."

Opposites description

Throughout the interviews, parents consistently described their two children as opposite or as more different than alike as is shown in Table 1. In all eleven interviews, parents described their children as having many more dissimilarities than similarities. One parent commented, "[The older child] is a perfectionist, [the younger child] doesn’t care. [The older child] is very driven, [the younger child] doesn’t care."
Table 1. Parents’ description of siblings as opposites

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Another mother stated, "Physically, they are very similar and that’s about it for being similar. They are completely different as far as personality. They are from two different pods. [The older child] is quiet and reserved, [the younger child] is loud and energetic."

One mother stated that her children are similar but described them as opposites throughout the interview. "[The older child] is very quiet...doesn’t work to his potential...doesn’t like school...likes to read...is a solitary person." [The younger child] was described as "very outgoing...a perfectionist in school...always ready to go to school...doesn’t like to read...is very verbal and likes to talk."

One set of parents mentioned academics in the opposites description, "Some things that come naturally to one don’t to the other, like with school subjects. They are really opposites considering how close they are in age."

Another set of parents cited differences in perception and outlook. "[The older child] is very focused. [The younger child] is not focused; he can successfully go six different directions, though. [The younger child] is very creative, where [the older child] is very rote. In music, [the younger child] plays by ear, while [the older child] plays with his
head. They are different. Interests are the same being from the same family, but how they look at them are different."

**Academic description of oldest child**

In the description of their children as opposites, parents elaborated by citing academic and social differences between their children. Nine out of eleven parents described their older child as someone who strives to do well in school as is shown in Table 2.

Table 2. Academic and social description of siblings

+ indicates factor is present  
- indicates factor is not present

1. The older child strives to do well in school.  
2. The younger child is more socially skilled.  
3. The older child is more concerned with academic success than social acceptance.

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One parent explained, "Academically, [the older child] is very bright. He is in the gifted and talented program. He does very, very well. I don’t know if he’s that bright, but he’s very determined and works very hard."

Another stated, "[The older child] is academically excellent, organized, cares what he does...."
Another parent added, "[The older child] excels academically. She is very organized and does a good job...she is weak in reading comprehension, but makes up for it and gets good grades through hard work. It does not come easy for her."

One set of parents, who did not describe their older child as striving to excel, did say they felt their son was very bright but was not working up to his potential. Another set of parents added that although they thought their son was working hard, he was typical of a gifted child in that he works much harder if he is really interested in the subject.

Parents commented on the academic abilities and/or performance of the younger child:

"Academically, things come a lot easier to [the younger child]...her Iowa Tests of Basic Skills are higher. She does well without working too hard at it. The work ethic is not there."

"[The younger child] is the opposite of his brother academically. Things come easily to him. He is very aware of things; he just gets it; he doesn't have to work at it."

"[The younger child] tests better than the oldest child, but he is less organized."

"Everything comes easy for [the younger child]...school has come very easy for her, even math."

Social description

Social differences among siblings were mentioned by the participants. The younger child is described in seven of eleven interviews as being more
socially skilled than the older child as is illustrated in Table 2. Parents mention specific social concerns about the older child in four of the interviews:

"[The younger child] is more social. It’s easy for him to make friends and to get along. [The older child] is a loner...he is sometimes teased by kids."

"Socially, it is more difficult for [the older child] to make friends. [The younger child] is more extraverted, her whole class is her friend."

"Socially, [the older child] is a one or two friend person. He generally picks friends that are on the fringe, which concerns us. His younger brother has a great personality. He is called a lot to do social things...lot’s of friends."

"Socially, [the older child] is not quite as advanced as his brother is. He is shy about making friends and can take things the wrong way. [The younger child] has a wide circle of friends...can get along with almost anyone.

Participants were asked if each child was more interested in academic success, social acceptance, neither, or both. In eight of eleven interviews, they stated that the older child would choose academic success over social acceptance as is depicted in Table 2.

**Sibling emulation or reflection of one parent**

Another recurring theme was the participants' description of each sibling as emulating or reflecting one parent. This was noted in nine of
eleven interviews as is shown in Table 3. The following comments were offered by different people:

"[The older child] is more like my husband...very methodical, thoughtful, and can tune out the TV. [The younger child] is more like me, outgoing, involved."

"[The older child] is like her mother. She works hard and strives to do her best. [The younger child] is more like me. She does enough to get by. She procrastinates and is charming."

"I feel like [the older child] is more like me and [the younger child] is more like his mother. I can be very structured and see things more in black and white. Their mother is more of a free spirit and creative and I would see [the younger child] that way. Neither [the younger child] or his mother are morning people."

"[The younger child] has a personality and interests like his dad. [The younger child] and his father are easy going. It's easy for [the younger child] and his father to make friends. [The older child] identifies more with me. He's very much like one of my brothers."

"[The older child] is more like me and [the younger child] is more like their mom. They have always identified one of us like that, and our personalities clash with the other child."

Table 3. Sibling emulation or reflection of one parent

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No pattern emerged to equate a birth-order position with a description of being more like the mother or more like the father. The results were mixed by birth-order position and family as to which parent each sibling resembled.

**Sibling acknowledgment**

Parents were asked to comment on what makes them proud about each of their children. As can be seen in Table 4, in eight of eleven interviews the older child was recognized for his/her achievements in academic pursuits and/or work ethic while the younger child was praised for personality characteristics:

"[The older child] scores high on tests...he is a Duke scholar, he accomplishes things, he has been in a gifted program, and has gone to Cy-Tag at Iowa State. [The younger child] finishes what he starts and follows through with things."

**Table 4. Sibling acknowledgement: What makes parents proud of each child**

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+ indicates factor is present
- indicates factor is not present

1. Parents praised the older child for achievements with academic pursuits and/or work ethic.
2. Parents praised a personality characteristic of the younger child.
"[The older child] gets such good grades and has to work at it. She is so organized she remembers to do things and even reminds me sometimes. With [the younger child], her personality [makes us proud] because she is personality plus. She’ll never embarrass you in front of another adult. She is very nice and friendly."

"[The older child] can see things in objects...he can build things...he is a deep thinker. [The younger child] is such a cuddle bunny. He loves parties, family gatherings... he’s such a fun little guy."

"[The older child] is a neat kid. She’s good in school. She helps a lot. You can’t help but love [the younger child]. She’s just that loving kind of person. She is the one that likes to be hugged and held."

"I’m proud that [the older child] is as bright as he is. [The younger child] works hard; he tries to make us proud. He has a mischievous streak in him that’s fun. He is a fun kid to be around."

"[The older child] is very bright and is a decent, honest person. We can depend on him; he’s a hard worker. [The younger child] has this little personality...he’s very humorous in a very subtle way. He’s a charmer, sensitive...he gives things his all. He’s a team player."

Of the other three interviews, two sets of parents cited personality traits for both children as reasons they were proud of their children. The other set of parents mentioned personality and work ethic for the older child and academic achievement for the younger child as being praiseworthy.
Parent expectations or predictions

When parents were asked what their expectations were of their children, they stated that they had the same expectations for both children in the four interviews where that particular question was asked:

"We have very high expectations...."

"We have the same expectations, that they work to their potential."

"I don't know that I have any expectations." When asked if she had different expectations for her two daughters she replied she did not.

Because of the researcher's desire to obtain more specific information concerning how the participants viewed each child, the question was altered by asking the parents to make predictions about each of their children. As is shown in Table 5, parents describe confidence in the older child's ability and/or destiny in nine of eleven interviews:

"[The older child] can do whatever he wants...he works hard. [The younger child] needs somebody to snap him around and make him figure out he has to work at something."

"I think whatever [the older child] does, he will excel. He talks about being a physician. My husband is a physician. He will do something

Table 5. Parent future predictions for each child

+ indicates factor is present
- indicates factor is not present

Parents describe confidence in older child's ability and/or destiny.

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that takes higher education. [The younger child] has told us he is going to get a legitimate job and get enough money to buy a taxicab and then he’s going to live in it! We don’t know how serious he is about that. He has also talked about archeology. He’s creative and he likes to dig."

"[The older child] could do whatever he pleases. He could be an inventor. [The younger child] I think will keep his charm. If he uses his potential, he’ll be successful. He’ll be in a job that involves people."

"[The older child] could be anything he wants to be. He really likes that lawyer stuff, I could see him as that. He has the discipline to put in the hours. Maybe he will be a scientist and maybe a teacher. With [the younger child] it’s hard to say. I can see him being a scientist, a chemist mixing his brew. He loves music, but I don’t know if that would be enough for him."

"[The older child] will be a nuclear physicist. He is very intelligent, a solitary person. [The younger child] will have more and varied interests. He likes people."

"I think [the older child] can do anything she sets her mind to, I really do. At this point, she still wants to be a veterinarian, and we both are letting her know which way she should go, concentrating on the sciences and math. My husband wanted to be a vet. I can see her more as a career woman than a mother, not that she wouldn’t be a good one, but I think she is extremely intelligent, and I think she will head that way. I see [the younger child] as the cheerleader type, football captain’s
girlfriend, not that I don't think she couldn't do anything she wanted to do, but that's kind of what I see."

Of the other three interviews, one set of parents felt the younger child would achieve more, although they also predicted the older child would be successful in anything she wanted to do. One other participant predicted both children would do well, mentioning the excellent work ethic of the older child. In the remaining interview, the participants were vague but mentioned the work ethic of the older child and creativity of the younger child.

Summary

Five categories of information emerged in the data from the parent interviews. Parents described their children as opposites in every interview. They elaborated by citing academic and social differences that included the older child striving to do well academically as well as being more concerned with academic success than social acceptance in the majority of cases. The younger child was described as being more socially skilled. Also found in a majority of interviews, was that each sibling emulated one parent more than the other.

Siblings were acknowledged by their parents for different characteristics in a majority of interviews. Older children were praised by their parents for achievements in academic pursuits and/or their work effort, while younger children were acknowledged for a personality characteristic. Parents also described confidence in the older child's
ability and/or destiny in the majority of interviews. Conclusions drawn from these findings will be presented in Chapter 5.
Conclusions and Discussion

The researcher examined the data to determine whether enough information was found to support the belief that considerable sibling birth-order differences do exist based on the academic and social differences described by parents. Reasons for those differences were also explored by examining differences in parents' views or expectations of each child. The researcher speculated that a difference in parental expectation could contribute to sibling differences.

Praise or acknowledgement of each sibling was first considered. The researcher then analyzed parents' statements of what they expected each child would accomplish and what his/her future destiny would be.

Sibling differences

From the findings of the study, the researcher concludes differences do exist among siblings to the extent they are described as opposites by their parents. Parents view their children as being more dissimilar than similar. This description of siblings as opposites supports similar findings by Leman (1985).

The opposites description of siblings can be elaborated on by focusing on academic and social differences between siblings. The older child had a greater need to achieve in this study which supports the finding of Ogletree (1980). This researcher found the older child strives to do well in school which may be in an effort to please parents and/or
obtain parent approval which is typical of firstborn children (Richardson & Richardson, 1990). Perhaps firstborn children choose academic success over social acceptance because of their need to accomplish the task at hand even if it means sacrificing relationships with others (Richardson & Richardson).

Most firstborn children gear themselves toward school achievement and parental approval even at the cost of social relationships. The younger child may seek a different avenue for approval or identity, perhaps in avoidance of unsuccessful competition with the firstborn child. This could encourage the younger child to excel in areas such as social skills.

Without as much desire to achieve academically, the younger child may feel less self-imposed pressure and/or not be as concerned with parental pressure. This may cause the younger child to be more relaxed, easy-going, or even humorous, while attracting and making friends more easily than the task-oriented firstborn child. This relaxed attitude may not lead to academic achievement or parental approval, resulting in the younger child looking to peers for approval and acceptance.

**Sibling emulation or reflection of one parent**

In further elaboration of differences among siblings, the older sibling was found to emulate or reflect one parent while the younger sibling emulated the other parent. Differences in personality, work ethic, and mannerisms were all offered as evidence of each sibling's reflection of one parent. Perhaps children sense differences between parents and seek to emulate the parent with whom they feel more
comfortable or relate to more closely. The younger child may focus on the parent the older child does not emulate in his/her efforts to find approval or an identity within the family.

**Sibling acknowledgment**

The researcher wanted to obtain information about what each parent found praiseworthy in each child. Therefore, parents were asked what characteristics about each child made them proud. In the majority of interviews, parents mentioned achievements in academic pursuits and/or the work ethic for the older child. In contrast, the younger child was praised for personality characteristics. Even if parents stated that the younger child was equally as bright, got better grades, or tested higher, they praised the achievements of the older child and personality characteristics of the younger child in the majority of interviews. Therefore, the older child was praised for what he/she does, while the younger child was praised for who he/she is.

The researcher speculates that these expectations are communicated from parents to children. Parents send a subtle message to the older children that they have value for what they achieve and/or how hard they work. In contrast, parents imply to younger children that they are accepted just as they are and for who they are, regardless of achievements. The younger child may also perceive that social skills and personality are what their parents value in them. The researcher believes children learn what parents expect and value in them by which behaviors or characteristics receive praise.
Parent predictions for each child

The researcher was interested in obtaining information about the future expectations parents held for each child. In the majority of interviews, parents cited confidence in the abilities of the older child and/or his/her future destiny. Even when parents stated that the younger child was equally as intelligent or more intelligent than the older child, it was usually not mentioned as a significant component in future predictions for the younger child.

Parents also gave more specific responses about their expectations for the older child’s future, while being more vague about the younger child. The researcher speculates that this difference may indicate more thought and/or attention has been given to the older child. This imbalance of attention could be perceived by both siblings as the parents having higher expectations for the older child. The result may be a self-fulfilling prophecy for both siblings.

Summary

Differences were found to exist in the parents’ perceptions of their younger and older children. Academically, the older child has a greater need to achieve and is more concerned with academic success than social acceptance, while the younger child was found to be more socially skilled.

The older sibling was also found to emulate one parent; the younger sibling was found to emulate the other parent, perhaps to gain family approval or identity within the family.
The researcher found older and younger siblings were praised and/or acknowledged by parents for different attributes. The older children were acknowledged for their achievement or work ethic-things that they do. In contrast, the younger siblings were acknowledged for personality characteristics, for who they are as people, regardless of ability or achievement.

Finally, parents had different future predictions for each sibling. They mentioned confidence in the older child’s abilities and/or destiny, while the ability and/or destiny of the younger child was not mentioned by parents in the majority of interviews. Parents were also more specific when stating what they expected the older child to achieve in the future, perhaps indicating that more thought and attention had been given to the older child.

The researcher concludes that differences do exist among siblings that are similar to those found by Richardson and Richardson (1990) and Leman (1985). Parents see their children as very different. These differences may be due to unconscious encouragement of birth order characteristics, or parents may be responding to what is innately characteristic of each child because of the child’s genetically inherited traits. The researcher would suggest observations of parent and child interactions as an avenue for future research.

The researcher also concludes that parents have different expectations for each sibling based on birth-order position. Parents focus on the older child’s intellect and achievements when stating future expectations but focus on the younger child’s personality. This
difference in perspective and expectation was found to have one common thread among the majority of families interviewed: birth-order position. Parents do have different expectations for children of different birth-order positions, although the reasons for having those different expectations is not clear. A study to examine why this is so is suggested as an area of future research.

Limitations of the Study

1. The level of educational attainment of the parents was not included in the criteria for selecting participants. Svanum and Bringle (1980) and Walther (1988) found that a relationship existed between the academic achievement of a child and the educational level of his/her parents. The researcher did not include this in the list of criteria because of the small number of potential participants.

2. Another limitation of the study was the accuracy of all information from the participants. The only accuracy check in the study involved comparing observations about the setting during each interview to questionnaire responses for socioeconomic status.

3. This study did not consider families with more than two siblings, siblings of different genders, those outside grades three through seven, or families of other races. Using sibship size, same gender siblings, age of siblings and race to select participants limits the applicability of study findings and conclusions to some other contexts.

4. Only 11 out of 39 questionnaires returned met all the criteria sought by the researcher and expressed a willingness to participate.
Information from those respondents who met the criteria but were unwilling or unable to participate may have altered the findings and conclusions of the study.

5. Richardson and Richardson (1990) suggest birth-order position may affect the way a person parents his/her children. The birth-order position of each parent was not considered for this study because of the small number of eligible participants meeting the criteria.

6. Both parents were present in eight of the eleven interviews, but only one parent was present in the other three interviews. The presence of only one parent in three of the eleven interviews may have influenced the findings and conclusions of the study because of the loss of data.

Recommendations for Future Research

The researcher suggests a study be conducted that includes observations of parent and child interaction. Interviews with parents and children, similar to the one employed in this study, would be another suggestion for inclusion. This would allow a researcher to examine the accuracy of responses by comparing his/her observations of parents and children with parent descriptions and what parents state they expect of each child. The study could also obtain further data on parent expectations for children of different birth-order positions.

The researcher also suggests that a study be conducted to examine why parents have different expectations of children in different birth-order positions. The inclusion of the birth order and educational level of the parents might be considered as criteria in selecting participants. Both
the educational level and birth-order position of parents have been shown to influence the outcome of birth order research (Svanum & Bringle, 1980; Walther, 1988; Richardson & Richardson, 1990).
BIBLIOGRAPHY


APPENDIX A.

INITIAL LETTER TO PARENTS
Dear Parents,

I am conducting a research project in the West Des Moines Community School District this fall as a part of my master's degree at Iowa State University. Targeted for this study are parents of same gender siblings, between one and three years apart in age, and currently in grades four to seven.

The purpose of this communication is to request your participation in my research. This would involve completing and signing the enclosed survey and returning it to me in the self-addressed stamped envelope. The purpose of the survey is to provide additional information to be used in description of the research population. All questions are optional. Upon return of the surveys and release forms, 20 of the families who agree to participate will be randomly drawn to take part in a thirty minute interview. I will conduct this interview in your home and at your convenience some time in November. The focus of the interview will be parenting styles, interests of each child, and personality of each child.

At no time will you or your children be personally identified in reporting the results of this research. Upon agreeing to participate, you and your children will be assigned a number for identification purposes. When the study is completed, I will notify you so that you can come in and read the results of my research.

I would greatly appreciate your participation in this research project. Please return the enclosed survey and release form in the self-addressed stamped envelope by Friday, November 12, 1993. If you have any questions, please feel free to call me at home in the evening (270-8518) or during the day at school (226-2800).

Thank you for your cooperation,

Anne Sullivan Laing
WDMCSD teacher
ISU graduate student

November 3, 1993
APPENDIX B.
PARENT QUESTIONNAIRE AND CONSENT FORM
# PARENT QUESTIONNAIRE

The information in this questionnaire will be used in describing the population in the research. ALL information is CONFIDENTIAL and your response is optional.

1. Which one of the following best describes your family? (check one)
   
   _____ a. Two-parent family 
   _____ b. Two-parent step-blended family 
   _____ c. Single father 
   _____ d. Single mother 
   _____ e. Guardian other than parents 
   _____ f. Other (please specify) ________________________ 

2. Are your children spaced at least twelve months, but not more than thirty-six months apart? 
   
   _____ yes   _____ no 

3. Which of the following BEST describes your economic status? (please check one) 

   Choice A_____ 
   - inherited wealth 
   - income from investments 
   - large, elaborate home; possibly in family for years 
   - more than one home in more than one place; exclusive neighborhoods 

   Choice B_____ 
   - very successful business man or woman 
   - self-made millionaire 
   - income from investments, business/industry profits 
   - live in very expensive, elaborate home in exclusive area 

   Choice C_____ 
   - successful business man or woman, doctor, lawyer, architect, college professor
- income from business profits, fees, or salaries
- live in spacious, expensive home
- live in better suburbs

Choice D
- small business man or woman; white-collar worker, manager, skilled craftsman; accountant, carpenter, office worker, sales
- live in smaller, well-cared for home of conventional style
- live in suburbs

Choice E
- skilled/semi-skilled factory worker, service worker
- income from wages earned from job
- live in small home or apartment in fair to good condition
- live in city, town, or suburb in an area not as desirable as most

Choice F
- untrained worker, migrant worker, unemployed or dependent on public assistance
- income from wages or assistance payments
- city tenement or substandard housing
- live in undesirable area or run-down rural area

4. May I use your children's Cognitive Abilities Test scores (already on file in the Gifted and Talented Office) to look for similarities in verbal, non-verbal, and quantitative skills?

_____ yes  _____ no

5. Would you be willing to participate further in this study by taking part in a 20-30 minute interview?

_____ yes  ___________________________________________________________________________

________ signature of mother

____________________________________________________________________________________

________ signature of father

_____ NO, I do not wish to participate in the interview.

THANK YOU FOR COMPLETING THIS SURVEY
APPENDIX C.
INTERVIEW QUESTIONS AND RATIONALE
INTERVIEW QUESTIONS AND RATIONALE

1. Describe your older/younger child academically and socially.

2. Since each child has been in school, what are his/her attitudes towards school?

   The researcher wanted to obtain information on each child in academics and socially through the description of the parents to compare with Leman's (1985) birth order profiles.

3. What are your older/younger child's expectations for himself/herself?

   The researcher wanted to compare the academic and social description of each child given by the parents with how each child viewed himself/herself. The researcher was looking for differences in the views of parents and children and what this may imply.

4. What specific goals would you like your older/younger child to work on this year in school?

   The researcher wanted more description of each child and what the parents saw as areas of improvement for each child and what the parents saw as areas of improvement for each child as well as differences among siblings.

5. As your child's teacher, what would you want me to know about each of your children?

   The researcher wanted to obtain a description of each child that could result in parents giving different descriptions to teachers that could result in a teacher treating each child in a certain way that may further solidify how a child thinks is expected of him/her.

6. Is either child more concerned with academic success or social acceptance, both, or neither?

   The researcher wanted to compare Leman's (1985) birth-order position profiles with each child and look for differences and similarities as applied to each sibling.

7. What are some interests/hobbies your older/younger child has outside of school?

   The researcher was looking for more description of each child in an area not associated with the school setting.
8. Are there any activities you think especially encourage your older/younger child to participate?

The researcher's aim was to obtain information about parent expectations for each child in the area of extracurricular areas and any differences among siblings.

9. Which of your children has viewpoints, mannerisms, or ideas more like your own? Why do you think that is?

This question emerged from the data of the first and second interview. The description by the parents of one child being more like just one of the parents seemed to indicate a child could be labeled as being like one of his/her parents and it was an avenue the researcher pursued with each successive interview.

10. Is your older/younger child more in need of parent approval?

This question was asked as a follow-up to question #9, if the feedback given was vague or limited and also to compare with Leman's (1985) birth-order position profiles for behavior and personality.

11. What are your expectations or your older/younger child in school?

This question was asked in the first and second interviews to examine differences in expectations among older and younger children, but was then dropped because descriptions given were vague.

12. What are the major differences and similarities you see between your children's attitude in their desire to succeed in school?

This question was asked to compare sibling attitudes towards success and the desire to achieve.

13. Does either of your children have perfectionistic tendencies?

The researcher asked this question to compare birth-order position responses. Also, if the child was described as a perfectionist, the researcher asked parents to speculate why this is so. The researcher speculated perfectionistic tendencies may be due to parent expectations or parent expectations as perceived by children.

14. What responsibilities does each child have at home? How were they decided?

This question was asked to compare parent expectations of each sibling in regards to responsibilities at home.

15. Which of your children would you put in charge of a task that had to be done right away and why?
The researcher asked this question to obtain information concerning parent expectations communicated through responsibilities assigned to each child. Also, parents were then asked to state why they would give more responsibility to one child which may indicate expectations and provide further description of each child.

16. What things make you proud about your older/younger children?

This question was asked to find out what parents found notable or perhaps what they valued in each child. The researcher wanted to examine the data for differences in responses for different birth-order positions.

17. What predictions would you make about your older/younger child (family, education, career, lifestyle, etc.)?

This question was asked because of the researcher's intent to find out what different achievements, careers, etc. parents expected from each of their children. The researcher wanted to compare the data for differences in expectations among birth-order positions.
APPENDIX D.
JOURNAL KEPT BY RESEARCHER
1. It was very awkward doing the interview with both daughters present, but the mother seemed to feel free to talk. She was very pleasant and her two daughters interacted without hesitation around her.

2. The mother mentions that the stages her daughters go through and the SECOND time she goes through them, with her youngest daughter, she realizes this is just a stage. Could this indicate that the first time she experiences something, with her older daughter, she has a heightened sense of anxiety NOT knowing if this is a "stage" or a problem?

3. When I asked what made her proud of her daughters, she mentioned things that her older daughter DID that made her proud: she's good in school, she helps a lot. Then she mentioned some "down sides" to the older child, but didn't elaborate (perhaps because the older child was there in the room). However, when I asked what made her proud of her younger daughter, she mentioned the type of person the younger child is as follows: loving kind of person, likes to be hugged and held, you can't help but love HER. She didn't mention the presence of any "down sides."

4. When I asked the mother to make predictions for her daughters she said that the older child could do anything she wanted to do. The mother added that she and her husband were guiding the older child in which courses she should concentrate such as science and math. The mother said her husband wanted to be a veterinarian, but ended up in a different kind of animal science occupation. She also predicted that the older child would be more of a career woman. The mother predicted the younger child would be a cheerleader, girlfriend of the football captain, not that the younger child couldn't do anything she wanted to, but that was the mother's prediction. I found this extremely interesting. The older child was "guided" by both parents towards a career her father pursued but did not continue. The mother's prediction was again based on what the older child would DO in life whereas the mother never even made a prediction for what the younger child would do. Her predictions for the younger child were based things about HER as a person: popularity and her personality. Could this lead the older child to feel she is valued for what she ACHIEVES? Could this cause perfectionistic tendencies or feelings of not being valued for who you are as opposed to what you accomplish?

5. I am going to reword some of my interview questions before the next interview to zero in on these questions.

6. As can be gathered from the previous observer comments, there seems to be different expectations for each child although the mother states her expectations are the same or that she doesn't really have any, but that isn't consistent with what she told me. Could it be that the oldest child receives more guidance/attention from the parents and therefore the he/she
strives for parental approval which seems to come from his/her achievements?

7. Perhaps the youngest child is not aware of any expectations and left to their own expectations or the expectations of their friends. This lack of expectations may also communicate lack of confidence for what the youngest child can achieve, therefore he/she may strive to excel socially with parents and friends.

JOURNAL:

This interview took place in the participant's home. When I arrived the mother told me her husband had been called out of town and would not be able to participate in the interview so I proceeded anyway. I’ll make note of this later in my methodology. The daughters were present and refused to leave when asked. This made me very uncomfortable. When I arranged the interview, the previous week, I requested the interview take place in a location that would allow her to speak freely and she agreed.

The daughters were not intrusive, but the youngest child interrupted twice. The mother spoke much more freely than I thought she would with her daughters there. I wonder if, when hearing their mother's comments, it further solidified the way they thought they were "supposed to be."
1. Again I notice that of the two children, they are described by their parents as opposites, although this time the two daughters were a little different. The second daughter was described as what is more typically found in an oldest child and vice-versa.

2. They do have some birth order characteristics that are typical: The older child is a people pleaser, she needs reassurance.

3. They do not excel in the same areas, although both get good grades.

4. Each parent claims to identify with one of the daughters and has a personality clash with the other. Could this have been sensed by each daughter early on in that they took on the characteristics of that parent, perhaps through unintended expectations of parents, kind of self-fulfilling prophecy?

5. Again, one daughter values herself for what she does (in this case, the youngest) and one values herself for who she is (the oldest).

6. Again, when asked who they would give a responsibility that had to be done correctly, right away. They gave a definite answer, the younger child. Perhaps, if she is given those types of responsibilities more often, SHE is the one that learns to do them best.

7. When asked what they were proud of, the parents responded that with the older child, she works hard, good attitude, has fun, doesn't take things too seriously. With the younger child, they mention only school. Again, I am seeing one child valued only for what they ACHIEVE. The second born child is the one that displays typical oldest child characteristics and she is the one for which parents mention only her achievements as making them proud. The oldest displays typically youngest child characteristics, but they mention academics and several other personality related traits: hard-working, good attitude, has fun, not serious.

8. Again, the child displaying oldest child behaviors is predicted to be a successful career person. The other child is predicted to be content wife and mother ALTHOUGH BOTH DAUGHTERS ARE GOOD STUDENTS WITH GREAT POTENTIAL.

9. At the end of the interview, the parents spoke of treating the girls as individuals rather than the same. Perhaps the different treatment of who they looked like and acted like was unconsciously communicated as expectations.
10. I am really starting to notice that parents see their two children as "opposites." It seems one child is valued/noticed/praised for her achievement and one is for her personality. It also seems those behaviors could be reinforced if the child who has developed responsibility is always given the important responsibilities. When does the child who is weak in this area get a chance to improve or practice?

JOURNAL:

This interview took place in the home of the participants. Both parents were present. The parents seemed to be in agreement on all answers. The father stated he thought the mother had high expectations whereas the father thought the daughters were hard enough on themselves and therefore, he tried not to say a lot.

The unique thing about this interview was that there were two very different birth-order position profiles represented. One displayed characteristics of a firstborn child, but it was the younger daughter. The older daughter had more younger child characteristics. I discussed the topic of my research with the parents after the interview took place. The parents told me the siblings were only fifteen months apart and said they treated them the same and that maybe their "natural personalities came out."
1. Again, one child fits the firstborn profile and one child fits a middle/youngest child profile. They are described as having little in common or opposites. Again, one takes after the mother (firstborn characteristics, Tara) and one takes after the father (second/youngest child characteristics).

2. They stated they had the same high expectations for their two children, but when I asked them what made them proud of their daughters they replied differently. Their oldest child was praised for her work ethic in school, good grades, her organization. For the youngest child, they gave a one word answer, personality, EVEN though they said the younger child gets the SAME good grades/marks in the end as the older child. They seem to value different things in each child and could they be communicating this to each subconsciously?

3. The older child is the people pleaser where the younger child is more confident and will do her own thing. The older child is more like Mom and the youngest is more like Dad.

4. There is a trend here of two children being opposites and being valued/praised for different things: one for what they DO one for their personality or who they are.

5. The child that identifies with the mother is the firstborn child or has the characteristics of a typical firstborn child.

JOURNAL:

This interview took place in the home of the participants with both parents present. Right away the parents described definite personality differences. They did want to impress upon me, however, that although the youngest child did not have the work ethic and drive to do well that they would like, the youngest child was not a problem.

The interview ended on an uncomfortable note for me because, knowing I was a teacher in the same district as their children, they questioned me about a recent controversy that was mentioned in the Des Moines Register about the subject area in which I teach. I left on very good terms and I don’t think they sensed my uneasiness, but I felt they were looking to get inside information from me. I just said I wasn’t sure of the status of the situation, which I wasn’t.
1. The older child was a very typical oldest child and the younger child was a very typical youngest child. AGAIN, one child identifies strongly with one parent and the other identifies with the other parent. AGAIN, they were described as opposites only this time the child the oldest child identified with father where the youngest child identified with the mother.

2. When I asked what specific goals she had for each child she said for the older child, to remember things that had to be done for SCHOOL where with the younger child it was a personality trait, her temper. Perhaps that shows a different expectation or focus she has for each child?

3. When I asked what made her proud of her children she replied mentioned personality things for both.

4. Again, these siblings were described as "from a different pod" (opposites).

5. When I asked for predictions, she said the older child will achieve her goal if she wants it bad enough, even if it might be difficult for her. She predicted the younger child would go far maybe in a business area, MBA. She predicted career choices that were similar.

6. Again, siblings are described as opposites and each child identifies more closely with one parent. Could it be that the younger child knows how the first child is rewarded by the parents in areas such as academics, behavior traits, and which parents the older sibling identifies with? The younger child then seeks other ways to be rewarded and valued by his/her parents. Is this because nothing is ever communicated to the younger child about what the parents actually DO expect so then the younger child is left to find his/her own niche? Therefore, they aim to be praised or valued for something different than that of the oldest child so as not to have to compete. Perhaps this would not be so if the parents verbally and nonverbally (modeling) the same expectations to the younger child starting at a very young age.

JOURNAL:

By request of the parent, this interview took place in the elementary school where their children attended. The school also happened to be one of the two schools in which I work so we met in my classroom. Only the mother was able to attend the interview, but she did not elaborate as to why the father was not present.

I enjoyed this interview very much. The mother was also a teacher and gave some excellent descriptions and complete answers. The school in
which she works is in a very low socioeconomic area. She is also in a master's program similar to my own. We met for fifty minutes and then talked for another fifteen about our schools and master's degree programs.
1. There is a definite pattern developing here. The firstborn child is again praised for his intellect. He is described socially as a very quiet person, but is starting to find his niche with a close group of friends that were all in CY-TAG (a summer program for gifted youth at ISU). The older child is goal-oriented. The younger child is artistically inclined and very creative. He is thoughtful. Social acceptance/friends are very important to him. Both siblings are quite different.

2. The parents went off in different directions so questions were asked in a different order.

3. When asked what made them proud of their children they followed the pattern of naming the older child's high test scores, Duke scholar, attended Cy-Tag. With the younger child, they said he is persistent and when he starts something he follows through. The younger child is praised for a personality trait, persistence.

4. Predictions: The older child is predicted to "discover some amazing new way to use computers" and "he will be the next Bill Gates." The younger child is "going to do something with the arts something unstructured, something creative." They are more vague about the younger child's future and don't imply success as they do with the older child. I wonder if the younger child senses this difference in expectations?

5. I've also noticed some parents, including those in this interview mentioning being "amazed" at their older child's intellect.

6. When I ask parents to make predictions I now realize I am actually asking about their expectations for their children as much as when I come right out and ask them if they have the same/different expectations. When I don't use the term expectations, but rather, predictions, I am getting different responses for each child. Could these be communicated to children in some unconscious way? Do different children feel "valued" or are they "praised" for different aspects of themselves: academic versus personal? (The trend would seem to indicate this).

JOURNAL:

The parents in this interview were quite open, but we seemed to get off the subject a lot. They mentioned how amazed people were of the oldest son's intellect a lot. They did not seem to favor the older child, in my opinion, because they spoke equally well of the younger child, but in a different way. The younger child seemed to be someone whose personality and character had their respect.
1. I am starting to notice that four of my questions seem to really hone in on what it is I am after. However, I feel the other questions serve to help draw a more complete picture of each sibling which I may find useful later. I also feel the other questions, while more general in nature, serve as memory probes in that they encourage parents to start thinking about our topic and possibly produce additional data with the additional time required for all the questions. For this reason I will keep my current list that has been revised once.

2. Socially, these siblings fit the trend: The older child has one good buddy, the younger child is more outgoing to peers. However, academically, the younger child is more studious while the older child is described as "average to high average."

3. This is the only pair of siblings so far that have been described by their parents as more alike than different! (It is not as though I don’t expect to find differences within siblings, but, other than this pair, they are described as "OPPOSITES.") HOWEVER, when described by their parents, they are not so much alike:

Older child: Younger child:
very quiet outgoing
doesn’t work to potential perfectionist
doesn’t like school always ready to go
likes to read doesn’t like to read
solitary person very verbal/likes to talk

4. Again, as the trend continues, one child identifies more closely with one parent. The older child looks like Mom, but has Dad’s disposition: not many friends, likes to be alone. The younger child is more like Mom, more outgoing and, if something is wrong, you know it.

5. I am amazed to see this same trend continue: The older child makes his parents proud because he is a deep thinker, he builds things, he sees things in objects: things that he does. However, the younger child, makes them proud because he is a "cuddle bunny." He loves parties and he’s a "fun little guy": personality.

6. Predictions: Again, parents are sure their oldest child will succeed in some intellectual field, in this case they named nuclear physics. They mentioned intelligence again and there was "so much going on in that mind." For their youngest child, their predictions were vague: "varied interests, he likes people, he is more into reality."
JOURNAL:

This interview took place in the home of the participants with both parents present. In this interview, I thought it was very interesting that this was the only interview in which the siblings are described as "alike." However, when I transcribed the interview from the audiotapes and proofread it, I realized she had described them as social and academic "opposites."

The father appeared to be around 55 years of age, probably the oldest parent I interviewed. The mother was probably around 45 years of age. The mother does not work and I think the father may not work either or is retired. By the size and appearance of the home, I believe he may have the financial resources to be retired.
1. The older child has some typical firstborn characteristics such as having one or two close friends, more academic than social, some insecurities about being accepted, sensitive to criticism, has passions. He doesn't have the need to achieve, but his younger brother does, according to his mother. The younger brother is competitive and organized, a people person, wants to be the best at everything in his class, is more of a perfectionist.

2. Again, parents first mention they are proud of the older child because he is bright then go on to say he has a good sense of morals and is loving. With the younger child, they say he works hard and wants to make them proud, but they also mention his "fun" personality and his mischievous streak that's fun to be around. No mention of the older child's personality or a fondness for being around him. This is not to assume they do not enjoy being around their oldest child, just that it is not something that they mentioned as something they valued in him or were proud of.

3. When asked about predictions, the older child was seen in a non-people role whereas the younger child would be in a people job, possibly in the same field as his dad.

4. As in every other interview, one child identifies more closely with one parent. The older child is more like his mother while the younger child identifies closely in interest and personality with his father.

5. The mother describes her two children as "very different from each other," which is consistent with the interviewed parents describing their two children as "opposites."

JOURNAL:

In this interview I found my information from the Technology Director (a computerized list of all siblings enrolled in school in the district) to be incomplete. There were two male siblings, in fourth and fifth grade, but there was also a younger female sibling who was three years old. However, since Leman (1985) stated that birth order has no effect if the spacing between siblings is more than five years, which in this case it was, and this sibling was of a different gender, I decided to proceed with the interview.

This interview took place in the home of the participants with only the mother present because the father was held up late at work. She said she expected him to be home at any time, but he was not able to make it to the interview. We decided to go ahead and start after we had waited ten minutes.
1. During the first question, the siblings are described as "definitely opposites." The older child is a straight A student, organized, is conscientious, and is socially very well accepted by peers and teachers. He is a perfectionist. He is more confident than the younger child.

The younger child is more creative, but unorganized. The older child has always been a leader, but now the younger child is starting to become one also. The younger child is more social.

Parents made a point to say they respect their son's differences and they accept them.

2. The trend persists, one child identifies more with one parents. The older child is more like Dad: structured, sees things in black and white. The younger child is more like Mom: a free spirit, creative. Although some common interests, how they look at things are different.

3. When I asked what made them proud they responded that both children had "a big heart." However they also mentioned the older child being "bright, good standards" and mentioned the younger child was very "happy and makes the room light up." Again, intelligence is mentioned for one child, personality for the other.

4. Predictions: The trend persists.
   Older: Very specific: "lawyer, scientist, teacher. He has the discipline, he could be anything he wants."
   He will get married, have kids, dog.

   Younger: More vague: "It's hard to say, he loves music, but I don't know if that would be enough." "I can see him being a scientist, maybe a chemist."

   They expressed doubt in the younger child's sense of right and wrong, his instincts. They concluded saying how strongly they felt about (loved) two entirely different children.

JOURNAL:

   This is the only interview I did in which I had any prior contact with the participants. The participants were acquainted with me because both sons are in the Extended Learning Program (gifted and talented program), although I am not the teacher at their schools. The parents are also involved in the gifted/talented parent support group with which I have also been involved. However, the schools the two sons attend are not the two schools in which I teach.
The interview took place in the participants' home with both parents present. I found the participants to be very warm and open. They moved here one year ago from Chicago and shared some things about the move. It was due to the father's job and the mother had recently started her own landscaping business.

The family found it somewhat difficult to move. There is not as much to do here as in Chicago (where they moved from). They have great concerns about the possibility of the school district dropping pre-algebra for seventh graders because the district thinks it is too difficult. These parents want that challenge for their children. They feel their children and others like them need the extra challenge and can handle it. They believe high ability kids deserve to have their academic needs met, too.
1. The older child is more insecure. He is passionate about things and must be committed to something to pursue it. He has one or two good friends, likes to be alone. He is a perfectionist, hard on himself, insecure, introverted. They expressed being much more concerned about the older child than the younger child.

The younger child is described as "very different than" the older child which follows the trend of few, if any, similarities. He is very social and has a lot of friends. He is self-confident, good looking as described by parents. The younger child doesn’t care what others think. School is easy for him.

2. The younger child is more like Dad interest-wise, is more competitive, laid back. They never say who the older child is like, if either parent. I get the feeling they wouldn’t really want to say they were like him and vice-versa.

3. Proud: The older child is bright (there’s that term again for the oldest child), he is a hard worker, you can depend on him to get something done, he is a decent honest person. Most of their answer was about what he DOES.

The younger child: "He’s got this little PERSONALITY" (Again, personality is given first for the youngest child). He is humorous, charmer, sensitive, gives things his all, a team player: they speak mostly to who Eric is as a person, his personality.

This creates a dilemma in my mind, kind of like the question: Which came first the chicken or the egg? In other words, are the parents proud of the oldest child’s academic ability and the youngest child’s personality because that is where the children have chosen to shine or are intrinsically skilled thus resulting in the parents being proud OR is it something that the parents, perhaps unknowingly, valued or praised in each child thus resulting in the further development/fostering of those specific traits in each child?

4. Predictions: The older child, "if he stays positive, could do whatever he pleases." Again, parents mention the firstborn could do anything they please. They specifically mention he could be an inventor. They express concerns over his reaching his potential.

Younger child: Again they mention personality: "I think he'll keep his CHARM." They only say he will be successful and have a job involving people. They expressed greater confidence in the ability of the oldest although they describe the youngest as more successful academically and socially in school.
This interview took place in the home of the participants with both parents present. As soon as we got into the interview I heard about the good and bad teachers in the school their two children attend. Although they did not use names, it made me a bit uncomfortable to hear teachers being "put down" even though they also praised some teachers, too. I have kept in mind that I only heard one side of the story. I could tell these parents were really concerned about their older child and probably spent much time worrying about him academically and socially. However, this year in school seemed to be turning things around for him. I shared some examples from my own life in 6th through 8th grade when it took me a while to "find my niche" of friends and shared an example from my family about someone who turned around after not caring about school.

These parents were really nice and really wanted to help me out since the mother had finished a thesis for her master's degree in nursing the year before. I told her about how many surveys I sent out (after she asked) and how many interviews I was going to do and had done. She was very encouraging.

I also wanted to mention that I was admiring the art pieces in the participants' home so they gave me the name and number of the artist.
1. Again, the older child is in a gifted program, very driven, very successful academically. He is outgoing and has friends around. This pair of siblings is described as "very different," also. The older child is a perfectionist and has more confidence than the younger child.

The younger child is also described as bright, but lazy, sometimes has friends, sometimes not. However, the younger child actually scores higher on intelligence tests.

2. Although the older child is described as being more like the mother’s side of the family and the younger child is described like the mother, there was not as strong of an identification with one parent by either child as was mentioned before. However, the father is a physician and that is the older child’s goal. Perhaps personality traits are similar, but were not mentioned.

3. When parents were asked about things that made them proud they responded differently for each child:

Older child: "He works really hard." (Noticed for what he DOES).

Younger child: "He’s a nice person." (Noticed for an aspect of his PERSONALITY).

4. Predictions: The older child talks about being a physician like his dad, he’ll do something that takes a lot of higher education.

The younger child has talked about driving a taxi cab, archeology. He’s creative and likes to dig. The mother did not make any predictions for him.

JOURNAL:

This interview took place in the home of the participants. Only the mother was able to be interviewed that day because the father was still at work. We had to stop and start the interview because the older child was having some kids over and she had to answer the door. The mother appeared to be pregnant, but she did not comment that she was or was not. The mother did not elaborate on her answers even when I would ask a question to encourage more discussion. She was very nice, but I think she was in a hurry to get back to the group of seventh grade boys in her living room because she offered a lot more detail during the first part of the interview. The husband was a physician, but the mother did not mention if she worked or not.
JOURNAL:

During the interview the parents went into a lot of detail and shared some information I think it is important to note. The parents mentioned concerns about the oldest child's social skills. Problems, they feel, are partly due to him/his personality and other kids picking on him. However, the oldest child, they said, was diagnosed at three years of age with a cleft palate deformity that was missed by the pediatrician when he was born. This deformity has affected his speech which may have compounded social difficulties.

Also, the parents, mainly the father, mentioned he is very concerned that his kids take for granted all that they have and are able to do (the father is a partner in his law firm, the mother does not work). The father feels that unless a great change takes place, either son will not have the material possessions or financial freedom they now enjoy. They also mentioned several negative things about their sons. The oldest child does not care about the neediness of others and is not that bright. The youngest child is annoying, makes fun of his parents, and is "big talk" most of the time. Perhaps they were just more honest about it than other parents.
APPENDIX E.

EXAMPLE OF CASE STUDY SUMMATION
CASE STUDY-PARTICIPANTS #1 (P1)

P1 are married. The mother is a homemaker and the father is in agricultural sales. They indicated a middle socioeconomic status was indicative of their social and economic status on the parent questionnaire. They live in a smaller, well-cared for home in the suburbs. Their children, two daughters, are fifteen months apart in age and are in grades four and five in school.

The older child was described by P1 as doing well academically and the parents had no worries or complaints about her performance. She is conscientious. Socially, the older child is more introverted and it is more difficult for her to make friends. She is her own person. The younger child is the same as the older child academically, a strong student. She is described as being "just the opposite" of her sister in that she is very extraverted and the whole class is her friend. The younger child is more concerned with peer pressure. The parents were not sure as to why the differences existed and mentioned that they were in the same home and in the same day care.

In regards to school, the older child loves school. She is a perfectionist and likes to do well for herself. The older child is more concerned with academic success than social acceptance. P1 stated the younger child is less excited when summer ends and it is time to go to school. The younger child wants to do well, also, but "goes more for the social part of school." P1 says they have no specific expectations for the children in school.
PI stated that they would want the teacher to know that the older child is shy and can be a perfectionist. She needs a little reassurance because she has little self-confidence which may be related to her perfectionistic tendencies. The younger child, according to PI, needs to be seated at the front of the classroom so the teacher can "keep an eye on her" and not let her fool the teacher. She knows more than she lets on and is very clever. The younger child has the potential to do well, but she hides it.

Interests and hobbies outside of school are varied. PI said the older child wants to play an instrument, is involved in Girl Scouts, and enjoys swimming. She enjoys solitary activities more than group activities, expect for family things. The younger child enjoys anything that involves horses, gymnastics, tennis, and wants to learn jazz dance and play softball.

There are several personality differences between the older and younger child. The older child is more domineering. She always wants to be the leader and can sometimes turn peers off because she is so aggressive. The younger child is more competitive.

Responsibilities at home are decided upon by interest of each child. Although they both are required to keep their own bedrooms picked up. The younger child takes care of the cat and the older child does the dinner dishes. The older child is more of a helper while the younger child would rather be outside playing.

PI described things that made them proud of their older child. They state "everything" makes them proud and she is a neat kid. She is good in
school and she helps out a lot. PI mentions there are some down sides, but does not elaborate. PI stated they are proud of the younger child because "she is just that loving kind of person that you can't help but love." PI notes that the younger child likes to be hugged and held more than the older child.

PI predicted that the older child can do "anything she sets her mind to." She wants to be a veterinarian so PI are guiding her in which areas to concentrate such as math and science. The father wanted to be a veterinarian so PI sees her more as a career woman than a mother, she could be a good mother, too, but that "she is extremely intelligent and will head that way." PI describes the younger child as "the cheerleader type" and the "football captain's girlfriend." PI stated the younger child could do what she wanted to, but the cheerleader and football captain's girlfriend was what they predict for the younger child.
APPENDIX F.
LETTER TO PARTICIPANTS DURING MEMBER CHECKS
February 3, 1994

Anne Sullivan Laing
4836 71st Street
Urbandale, Iowa 50322
270-8518

(address of participant)

Dear (name of participant),

Once again I would like to thank you for allowing me to interview you as a part of my thesis work. After talking with my major professor, we decided that I should show you my findings and allow you to comment on the conclusions I have drawn. I am interested in knowing if you would confirm or disconfirm my conclusions. As you read over the attachment, please feel free to make comments in the margins or on the blank sheet provided and return them in the self-addressed stamped envelope provided. If you would prefer, you may call me at the above number and give me your comments over the telephone, before February 10, if possible. If I do not hear from you, I will assume you had no suggestions for changes.

Thank you so much for your assistance.

Sincerely,

Anne Sullivan Laing
APPENDIX G.
COPY OF WRITTEN SUMMARIZATION OF DATA FINDINGS AND ANALYSIS
FINDINGS OF RESEARCH

Research question:

The research question for this study was: Do parents have different expectations for siblings of different birth-order positions that may contribute to a difference in achievement? This study revealed five factors to be considered in the findings of the research. Factors to be examined include the description of siblings as opposites, academic and social factors, attitudes towards school, sibling emulation of one parent, sibling acknowledgement, and parent predictions. For the purpose of confidentiality, the names of siblings used in quotes have been replaced with "oldest child" and "youngest child."

Opposites description:

The study findings parallel Leman's (1985) finding of the second child being "opposite" of the firstborn child if they are of the same gender. In 11 of 11 interviews, parents described their children as opposites or having many more dissimilarities than similarities. One parent commented, "The oldest child is a perfectionist, the youngest child doesn't care. The oldest child is very driven, the youngest child doesn't care."

Another mother states, "Physically, they are very similar and that's about it for being similar. They are completely different as far as personality. They are from two different pods. The oldest child is quiet and reserved, the youngest child is loud and energetic."
One mother states that her children are similar but describes them as opposites throughout the interview. "The oldest child is very quiet...doesn't work to his potential...doesn't like school...likes to read...is a solitary person." The youngest child is described as "very outgoing...a perfectionist in school...always ready to go to school...doesn't like to read...is very verbal and likes to talk."

One set of parents mentioned academics in the opposites description, "Some things that come naturally to one doesn't to the other, like with school subjects. They are really opposites considering how close they are in age."

Another set of parents cites differences in perception and outlook. "The oldest child is very focused. The youngest child is not focused, he can successfully go six different directions, though. The youngest child is very creative, where the oldest child is very rote. In music, the youngest child plays by ear while the oldest child plays with his head. They are different. Interests are the same being from the same family, but how they look at them are different."

Similarities between siblings were not elaborated on, but those mentioned in six of the interviews included being bright, loving, fun to be around, and being nice to others.

Academic and social descriptions:

In elaboration of the opposites description, many differences were noted by parents in describing their children academically and socially.
Nine of eleven parents describe their oldest child as someone who strives to do well in school.

"Academically, the oldest child is very bright. He is in the gifted and talented program. He does very, very, well. I don’t know if he’s that bright, but he’s very determined and works very hard."

"The oldest child is academically excellent, organized, cares what he does...."

"The oldest child excels academically, she is very organized and does a good job...she is weak in reading comprehension, but makes up for it and gets good grades through hard work, it does not come easy for her."

One set of parents that did not describe their oldest child as striving to excel did say they felt their son was very bright, but was not working up to where he could. Another set of parents added that although they thought their son was working hard, he was typical of a gifted child in that he works much harder if he is really interested in the subject.

The literature states firstborn children experience more school success although measured intelligence is similar to that of younger siblings. This study would support those findings in that seven of eleven parents describe the younger child as being as intelligent or more intelligent than their older sibling:

"Academically, things come a lot easier to the youngest child...her Iowa Test of Basic Skills are higher. She does well without working too hard at it. The work ethic is not there."
"He's the opposite of his brother academically. Things come easily to him. He is very aware of things, he just gets it, he doesn't have to work at it."

"The youngest child tests better than the oldest child, but he is less organized."

"Everything comes easy for her...school has come very easy for her, even math."

Socially, differences were also found. The youngest child is described in seven of eleven interviews as being more socially skilled while the parents mention specific concerns about the oldest child socially in four of the interviews:

"The youngest child is more social. It's easy for him to make friends and to get along. The oldest child is a loner...he is sometimes teased by kids."

"Socially, it is more difficult for the oldest child to make friends. The youngest child is more extraverted, her whole class is her friend."

"Socially, he's a one or two friend person. He generally picks friends that are on the fringe, which concerns us. His brother has a great personality. He is called a lot to do social things...lot's of friends."

"Socially, the oldest child is not quite as advanced as his brother is. He is shy about making friends and can take things the wrong way. The youngest child has a wide circle of friends...can get along with almost anyone."
Another theme that emerged from the research data was the firstborn’s need to achieve. When asked if each child was more interested in academic success, social acceptance, neither, or both, parents mentioned the oldest child would choose academic success over social acceptance in eight of eleven interviews. In six interviews parents state the youngest child has a preference for social acceptance with the results being mixed in other interviews.

Sibling emulation or reflection of one parent:

Another reoccurring theme was the description of each sibling as emulating one parent. This was noted in ten of eleven interviews. The following comments were offered:

"The oldest child is more like my husband...very methodical, thoughtful, and can tune out the TV. The youngest child is more like me, outgoing, involved."

"The oldest child is like her mother. She works hard and strives to do her best. The youngest child is more like me. She does enough to get by, procrastinates, is charming."

"I feel like the oldest child is more like me and the youngest child is more like his mother. I can be very structured and see things more in black and white. Their mother is more of a free spirit and creative and I would see the youngest child that way. Neither the youngest child or their mother are morning people."
"The youngest child has a personality and interests like his dad. They are easy going. It’s easy for them to make friends. The oldest child identifies more with me. He’s very much like one of my brothers."

"The oldest child is more like me and the youngest child is more like their mom. They have always identified like that and our personalities clash with the other child."

There was no trend in which sibling identified with either the mother or father. The results were mixed by birth-order position and family.

Sibling acknowledgment:

Parents were asked to comment on what makes them proud about each of their children. In eight of eleven interviews the oldest child was recognized for his/her achievements in academic pursuits and/or work ethic while the youngest child is praised for personality characteristics:

"The oldest child scores high on tests...he is a Duke scholar, he accomplishes things, he has been in a gifted program, and has gone to Cy-Tag at Iowa State. The youngest child starts what he finishes and follows through with things."

"She gets such good grades and has to work at it. She is so organized she remembers to do things and even reminds me sometimes. With the youngest child, her personality. She is personality plus. She’ll never embarrass you in front of another adult. She is very nice and friendly."
"The oldest child can see things in objects...he can build things...he is a deep thinker. The youngest child is such a cuddle bunny. He loves parties, family gatherings...he's such a fun little guy."

"The oldest child is a neat kid. She's good in school. She helps a lot. You can't help but love the youngest child. She's just that loving kind of person. She is the one that likes to be hugged and held."

"I'm proud that the oldest child is as bright as he is. The youngest child works hard, he tries to make us proud, he has a mischievous streak in him that's fun. He is a fun kid to be around."

"The oldest child is very bright and is a decent, honest person. We can depend on him, he's a hard worker. The youngest child has this little personality...he's very humorous in a very subtle way. He's a charmer, sensitive...he gives things his all. He's a team player."

Of the other three interviews, two cited personality traits for both children, and the other cited personality and work ethic for the oldest child and academic achievement for the youngest child.

**Parent expectations/predictions:**

When I asked parents what their expectations were of their children they stated they had the same expectations for both children in the four interviews that particular question was asked:

"We have very high expectations...."  
"We have the same expectations, that they work to their potential."  
"I don't know that I have any expectations." When asked if she had different expectations for her two daughters she replied she did not.
The interviewer then asked the parents to make predictions about each of their children in any facet of life. Eight of eleven interviews resulted in the parents having specific achievements in mind for the oldest child and/or mention having confidence in his/her ability whereas they are less specific about the youngest child:

"The oldest child can do whatever he wants...he works hard. The youngest child needs somebody to snap him around and make him figure out he has to work at something."

"I think whatever the oldest child does, he will excel. He talks about being a physician. My husband is a physician. He will do something that takes higher education. The youngest child has told us he is going to get a legitimate job and get enough money to buy a taxi cab and then he's going to live in it! We don't know how serious he is about that, he has also talked about archeology. He's creative and he likes to dig."

"The oldest child could do whatever he pleases. He could be an inventor. The youngest child I think will keep his charm. If he uses his potential, he'll be successful. He'll be in a job that involves people."

"The oldest child could be anything he wants to be. He really likes that lawyer stuff, I could see him as that. He has the discipline to put in the hours. Maybe a scientist and maybe a teacher. With the youngest child it's hard to say. I can see him being a scientist, a chemist mixing his brew. He loves music, but don't know if that would be enough for him."
"The oldest child will be a nuclear physicist. He is very intelligent, a solitary person. The youngest child will have more and varied interests. He likes people."

"I think the oldest child can do anything she sets her mind to, I really do. At this point, she still wants to be a veterinarian and we both are letting her know which way she should go, concentrating on the sciences and math. My husband wanted to be a vet. I can see her more as a career woman than a mother, not that she wouldn't be a good one, but I think she is extremely intelligent and I think she will head that way. I see the youngest child as the cheerleader type, football captain's girlfriend, not that I don't think she couldn't do anything she wanted to do, but that's kind of what I see."

Of the other three interviews, one set of parents felt the youngest child would achieve more although the oldest child was also predicted to be successful in anything she wanted to do. One other participant predicted both girls would do well, stating the work ethic of the oldest child. In the remaining interview, the participants were vague, but mentioned the work ethic of the oldest child and creativity of the youngest child.

**Home responsibility:**

The study did not reveal any birth order preference as to which child is given greater responsibility at home. The results were mixed based on individual characteristics of each child. In ten of eleven interviews, participants stated they had the same expectations of responsibilities at
home for both siblings. In one interview the participant listed only one example of a different responsibility, the rest were the same.
APPENDIX H.
AUTHOR NOTES
AUTHOR NOTES

This study received approval from the Human Subjects Review Committee on October 25, 1993 (Graduate College Office, 203 Beardshear Hall, Iowa State University, Ames, Iowa 50011).

Member check feedback and case study summations may be acquired upon request from Anne Sullivan Laing, 4836 Seventy-first Street, Urbandale, Iowa 50322.