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THE EFFECT OF PARENTAL BROKERING ON ADULT SOCIABILITY: A COMPARISON OF ONLY AND NONONLY CHILDREN

The Ohio State University

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THE EFFECT OF PARENTAL BROKERING ON ADULT
SOCIALABILITY: A COMPARISON OF ONLY AND
NONONLY CHILDREN

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Barbara E. Johnson, B.A., M.A.

*****

The Ohio State University
1985

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ACKNOWLEDGEMENTS

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CHAPTER 1
INTRODUCTION

Changing attitudes toward childbearing in American society have led to a decline in average family size of the American family. Accordingly, over the past decade, there have been increasing amounts of research focused on nonnormative family sizes—particularly the one child family and the voluntarily childless (Houseknecht, 1982). In fact, some researchers are suggesting that the one child family is the family of the future (Hawke and Knox, 1977; Peck, 1977; and Falbo, 1982). Brozan (1975) has described it as a blend of sentimentalism and pragmatism, that may allow a couple to experience the parenting process and still have time for personal growth and development.

One child families are gradually gaining societal approval, and social scientists are taking a strong research interest in the lifestyle. Recent research efforts have been extremely diverse in nature. Some research has been psychologically based (Arlow, 1972; and Thompson, 1974). Other researchers have studied one child families as part of demographic trends.
(Blake, 1974, 1981; and Placek and Placek, 1981), and still other researchers have included single child families as part of their work on family size preferences (Griffith, 1973; and Polit, 1978). Other recent research has dealt with characteristics of one child families (Knox and Hawke, 1977) and only children (Mott and Haurin, 1982), reasons for having an only child (Falbo, 1978) or how only children fit into birth order literature (Belmont and Marolla, 1973; Breland, 1974; and Zajonc and Markus, 1975).

While these developments are interesting and exciting, research findings need to be better integrated, and there are a number of issues regarding one child families that require further study. A topic that has been constantly discussed within the literature is the interpersonal skills of only children. However, conclusions about the social skills of only children have been contradictory. Some research has concluded that only children are maladjusted, isolated individuals who lack social graces (Bohannan, 1898; Neal, 1927; Stuart, 1926; and Claudy et al., 1976). But other research indicates that only children possess social skills that are equal, if not superior, to children with siblings (Dyer, 1945; Terhune, 1974; and Thompson, 1974). These conflicting findings suggest that the sociability of only children is one area that warrants further attention.
It was initially assumed by social scientists that single children would be socially inadequate due to lack of sibling interaction, which was deemed necessary to develop proper social skills (Ward, 1930; and Sutton-Smith and Rosenberg, 1970), and this idea of the antisocial only child has persisted over time. However, this lack of sibling interaction apparently does not socially handicap the only child as much as many researchers had suggested (Falbo, 1984; Heise and Roberts, 1970; and Moore and Holtzman, 1965). Without siblings, a child is forced to interact with people outside the familial primary group, and this interaction may actually offer the child a richer social environment in which to grow and develop his or her social skills.

Thus, it can be argued that parents as well as siblings play an important role in the development of children's social skills because parents can act as a mediator between their child and social systems external to the family. It has long been argued that children need siblings for proper growth and development. Bossard and Boll (1956) are researchers who address this issue. They contend that children from a large family relate well to others because they do not receive intensive parenting and siblings learn to get along by interacting with each other. Conversely, they assert that children from small families and only children work best alone and are social isolates because they have no
experience in relating to peers. Their argument suggests that siblings are necessary for social development because they provide an environment of peers in which to interact and learn social skills. Similarly, Sutton-Smith and Rosenberg (1970) state they feel siblings are the primary agents in development of interpersonal behavior. Terhune (1974) further supports this belief by reporting the results of a survey of 300 married women in Buffalo, New York. Thirty-six percent of the people surveyed stated that an only child was socially disadvantaged because they lacked the social benefits of siblings. Specifically, they could not learn to share and to get along with others.

This research takes a different approach to analyzing the development of children's social skills. It is hypothesized that it is not necessarily interaction with siblings that is important to social growth of children, rather it is peer interaction. Thus, family size or lack of siblings is not unequivocably related to sociability.

Perhaps, at one time lack of siblings may have indeed been a disadvantage to a child because the nuclear family was fairly isolated and there were minimal opportunities for socialization experiences with peers outside of the family unit. Now, however,
American society is extremely mobile and numerous possibilities exist for socialization outside of the family. This research assesses the relative importance of siblings and parents in the development of social skills by considering parental activity in regulating their offspring's contact with social systems external to the nuclear family itself.

It can be argued that parental involvement in their child(ren)'s activities can offset any negative effects lack of siblings might have on sociability. Parents can conscientiously make an effort to get their child(ren) involved with others their own age through a wide variety of actions such as encouraging their children to join youth organizations, placing them in day care or nursery school, or actually introducing them to potential friends. These parental actions will be referred to as parental brokering throughout this research—a term chosen because it suggests a mediating role between children and wider society.

I am suggesting that it is not family size per se that affects sociability. It is the amount of peer interaction a child engages in. Siblings are a ready made source of peer interaction, and hence the idea that children without siblings are antisocial. However, this is not necessarily true. When siblings are unavailable, there are still many opportunities for peer
interaction outside of the family if parents are willing
to broker for their child(ren). Family size may
indirectly affect sociability because it may be related
to the extent of parental brokering activities.

Figure 1 illustrates how these variables might be
related to one another.

Family Size \rightarrow Parental Brokering \rightarrow Sociability

FIGURE 1
Hypothetical Relationships of Family Size,
Parental Brokering and Sociability

Family size will be inversely related to the amount of
parental brokering. Brokering is predicted to be
positively related to sociability. And there will be no
direct relationship between family size and sociability.
Family size or number of children determines the
intensity of the socializing role the parents play
within the family unit, and this in turn affects the
sociability of a child.

This study will explore family size, the importance
of siblings, and parental involvement in developing
children's social skills. Primary attention will be
directed toward parental actions in one child families
as compared to parental actions involving a non-only
child who is the youngest sibling in the family. This introductory chapter has demonstrated the need for this type of research by pointing out contradictory assumptions and inconsistent results regarding the sociability of only children. Additionally, the scope and purpose of this research has been briefly outlined.

Chapter two will review the relevant literature and discuss a theoretical framework in which the research can be considered. The third chapter includes methodological issues. Overall research design, instrument development, sampling techniques and types of data analysis will be addressed. Chapter four discusses the importance of the demographic variables in this research. Chapter five details the relationships that exist among family size, parental brokering and sociability. The final chapter is devoted to a summary of the research and implications for further research efforts.
CHAPTER 2
LITERATURE REVIEW

Literature on how family size affects individual family members is extremely diverse in nature and very extensive in scope. The parental role is expected of married couples in the United States and two to four children is the normative number of children in most families (Griffith, 1973; and Polit, 1977). However, there are indications that the typical structure of the American family is changing. Thompson (1974) asserts that family size is declining and Placek and Placek (1981) observed a distinct trend toward lower fertility rates and smaller families. Similarly, numerous social scientists suggest that reproductive intentions of women are shifting downward and there is a clear preference for smaller families on the part of many Americans (Blake, 1974; Hawke and Knox, 1977; and Waite and Wetrogan, 1979). Likewise, Huber and Spitze (1983) contend that attitudes of influential people in American society are becoming increasingly antinatalist. These changes in preferred and actual family size undoubtedly
have implications for family dynamics and interaction patterns (Cherlin, 1981).

The One Child Family in American Society

Considerable research has been conducted regarding how one child families fit into the American social structure (i.e. Hawke and Knox, 1978; Griffith, 1973; Polit, 1978; and Placek and Placek, 1981). Previous literature reports societal attitudes toward the single child family as well as birth patterns and demographic trends involving one child families.

A family unit and its members are most definitely evaluated on the basis of its size. A single child family in American society is often viewed negatively and sharply criticized. Research by Polit (1978) concluded that society tolerates large families with more than four children, but not the other extreme. Families with one child or a couple that is voluntarily childless are judged as socially undesirable. Similarly, Griffith (1973) found there is both direct and indirect societal pressure to have the first and second child. Two-thirds of the men she surveyed and three-fourths of the women said a one child family is too small. They often expressed concern about an only child being socially and personally disadvantaged.
Research indicates that the normative or "ideal" number of children in a family is two to four, with the modal category being two (Thompson, 1974). Much evidence suggests a strong adherence to this norm. Research by Hawke and Knox (1977) demonstrated that 35% of the sample they studied wanted and expected two children. The people surveyed felt that two children are affordable, can be playmates for each other, and allow parents a chance to raise a child of each sex. Likewise, Placek and Placek (1981) found that 63% of Americans polled expected two or three children while only 12% expected just one child. Similarly, in families with two children, 46% of the mothers had decided to have a second child prior to the birth of the first one. In spite of the fact the mothers admitted that two children took more time and energy than one, only 6% expressed a desire to return to the time they had only a single child. Even members of Zero Population Growth (ZPG), an organization in favor of lowering birth rates to a replacement level, want at least two children (Thompson, 1974). This data illustrates the strong cultural bias toward two child families and an aversion to having just one child.

Informal social controls operate strongly against couples with one child (Blake, 1974; Griffith, 1973; and Hawke and Knox, 1977). Grandparents, friends, other
relatives, teachers, ministers and even the media criticize couples with one child by saying it is selfish and unfair to the child if they do not provide a sibling. Fifty-six percent of the people surveyed by Hawke and Knox (1977) said they had been sanctioned by others for limiting their family size and had felt pressure from close friends and relatives to have more children. Similarly, Griffith (1973) noted that couples perceived social pressure, especially on the woman, from peers and family to have children.

Due to this pervasive negative attitude toward only children and their families, Peck (1977) coined the term "onlyism" to take its place right along side racism, sexism and ageism. She contends that the one child family is the victim of much undeserved criticism, and other researchers support her views. Pinner and Thompson (in Peck, 1977) asked college students to check adjectives describing only children. The most common ones chosen were self-centered, attention seeking, unhealthy, temperamental, dependent, anxious and unhappy. In similar research, Hawke & Knox (1977) asked university students to complete the sentence "An only child is ______." Only 11 of 133 responses were favorable. Likewise, Fenton (1928) had his child psychology class write an essay on the only child. All except two students characterized the only child as
selfish, spoiled, maladjusted or in some way not normal. (The two positive essays were written by onlies themselves!)

Blake (1981) argues that the negative stereotypes of one child families persist because the single child family structure threatens societal preservation. She asserts that only children are becoming more advantaged over time as more emphasis is placed on individual achievement and less importance is attached to the family and kinship ties. Indeed, one child families are slowly gaining more social approval. Research by Hawke & Knox (1977) showed that in 1972, only 6% of males and females surveyed expressed a preference for one child, but in 1974 the figure had risen to ten percent. Brozan (1975) indicated that in 1967, 6.1% of women 18-24 years old, 5.1% of those 25-29, and 5.8% of females 30-34 wanted and/or expected only one child. In 1973, the figures had increased to 9.6%, 9.1% and 7.8% respectively. Finally, Placek and Placek (1981) cited the 1979 Current Population Survey which reports that, of all married women aged 25-29, the percentage wanting one child jumped from 7% in 1971 to 13% in 1979.

Norms regarding family size in the United States are undoubtedly changing. There were fewer births in the 1970's than in the past, and this was reflected in smaller (one and two child) families (Waite and
Thus, it appears as if the single child family is slowly being re-evaluated and judged more positively by an increasing number of people, and will most probably become a more prevalent lifestyle in the future.

Characteristics of One Child Families

In their article on childbearing plans of American wives, Waite and Wetrogan (1979) indicate that expected family size depends on the age of the female, marital duration, and socioeconomic status of the couple. These social factors as well as several others definitely affect the decision of how many children to have. Their impact is particularly evident in the decision to have a single child and the dynamics of one child families.

In general, the older a woman is at first birth, the more likely she is to have only one child. Nationally, the average age of women at first birth was twenty-two in 1981. However, women with just one child tend to be considerably older. Cutts and Mosely (1950) found that 53% of mothers with one child were older than thirty at the time of the birth, and Hawke and Knox (1977) discovered that 83% of the mothers with a single child were past age twenty-three, and 33% were over thirty when the baby was born. These findings are logical in the sense that fertility rates decline with
age and risks associated with pregnancy or birth defects increase with age. Thus, an older woman might stop childbearing at one in order to minimize health risks.

Marital duration and adjustment also affects family size. Overall, parents of only children are married longer before becoming parents than spouses who have two or more children. On the average, the first child in a family is born two years after marriage (Blake, 1974). However, in the one child families studied by Falbo (1977), 64% of the parents had been married for over three years prior to having their child.

Marital adjustment or satisfaction is often a factor in determining family size. Falbo (1977) notes that parents with one child have twice the divorce rate of those parents with two or more children. Additionally, Hawke and Knox (1977) indicate that 15% of their sample cited marital difficulties as the reason for curtailing family size. Furthermore, they found that one child families are adult-oriented, and this may account for limiting the number of children. Having a single child allows time for personal growth and development of the parents. Thus, marital duration can affect family size in several ways. Some couples apparently restrict their family size in order to keep divorce proceedings relatively simple, others limit their family size because the spousal dyadic relation is
fulfilling enough without children, and still others have only one child because divorce intervenes before the intended number of births can occur.

Socioeconomic concerns figure significantly when deciding how many children to have. A high proportion of one child families are found in upper middle and upper class social strata (Hawke and Knox, 1978; and Falbo, 1978). Consistently, both parents tend to be highly educated, and there is a high probability of an only child being a part of a dual career family (Brozan, 1975). Even if the woman does not have a career per se, she usually works outside the home (Hawke and Knox, 1977). Furthermore, the one child family is more flexible, egalitarian, and less sex role stereotyped regarding household division of labor than larger families (Thompson, 1974).

The size of the parents' family of orientation is also significant in determining their preferred number of children in their family of procreation. (Stokes & Johnson, 1977). Thompson (1974) asserts that parents who have a single child tend to be either from a very large family or to be only children themselves. Perhaps individuals with many siblings have only one child so they can give the child the parental attention they never received, and only children have an only child because they were satisfied with their own childhood and life style.
Completed family size is affected by many interrelated variables, and thus it is impossible to predict with accuracy how many children a couple will have. It does appear, however, that certain characteristics separate one child families from those with two or more children. To generalize, couples who choose to have one child are older, delay childbearing, are of high socioeconomic status and are somewhat nontraditional in their value system. These differences in structure of the one child family as compared to larger family structures undoubtedly affect the growth and social development of only children as compared to children with siblings. The structure of a single child family often allows parents an opportunity to occupy an active parenting role and serve as a valuable link between their child and social systems external to the nuclear family.

Keniston (1977) suggests that parents are currently occupying a new familial role as "coordinators" or "brokers" of their child's activities. This brokering job entails selecting, meeting, talking to and regulating the "experts", technology, and other institutions that help raise children in today's society. Similarly, sponsored independence permits a child diversified social participation primarily regulated by adults. (Farber, 1964; and Elkin and
Sponsored independence is typified by children's membership in organizations such as Scouting or 4-H, summer camp attendance, and taking lessons - all accomplished with parental support.

The characteristics of single child couples facilitates their occupying this role of coordinator of their child's activities. Since parents of only children are usually older and have been married longer before having a child, they are more likely to have a well established career which would possibly permit them to place a high priority on family life. Furthermore, the high socioeconomic status of couples with one child provides the necessary resources to allow parents to place their child in situations outside the family that serve as socialization agents for the child. Finally, the small family size in and of itself simply makes it possible for parents of an only child to devote more time to their child than parents of nononlies. Eiduson (1976) contends the most salient aspect of an only child's socialization is that there is only one child to absorb parental attention and interest. There is no sibling to dilute parental concerns.

Research has generally supported this idea that the fewer the number of children in the family, the more parental attention the children receive (Terhune, 1974, Knox & Hawke, 1977; and Eiduson, 1976). Cutts and
Mosely (1954) found that parents of only children put more thought and effort into finding playmates for their child than parents in larger families. They also noted that parents of only children gave their child more parties, took the child along to more social activities and allowed more friends to stay overnight than parents of nononlies.

Additional studies also indicate that parents of onlies are more intrusive in their child's lives than parents with at least two children. Hilton (1967) conducted a study with four year old children. She asked the children to perform simple tasks with their mother present. Even though she asked the mother to refrain from interfering in her child's activities, 38% of mothers of only children intervened in the task, but only 15% of mothers of nononlies became involved. Research regarding maternal interaction with children conducted by Sears, Maccoby and Levin (1957) concluded that mothers of only children spend more time with their child than mothers of larger families. Overall, there is an inverse relationship between family size and parental attention.
Personal Development of Only Children

When studying personal development as related to family size—specifically one child versus larger families, researchers have focused primarily on two areas of analysis. Much research has considered intelligence and achievement of only children, while other studies have assessed social adjustment and interpersonal orientation.

Intelligence and Achievement

Extensive research has been conducted pertaining to birth order and intellectual development, and these studies have indicated that birth order definitely influences achievement (Altus, 1965; Belmont and Marolla, 1973; Breland, 1974; Oberlander and Jenkins, 1967; Rosen, 1961, and Zajonc and Markus, 1975). When studying birth order and family size, researchers discovered that as a general rule, intellectual performance declines as family size increases (Belmont and Marolla, 1973, and Zajonc and Markus, 1975). This suggests that only children should have higher intellectual scores than children with siblings. Overall, this hypothesis is accurate. Only children have a distinct IQ advantage over children from larger
families with the exception of first born children from a two or three child family. (Falbo, 1984; Breland, 1974; Zajonc, 1976) Related to high IQ scores, is the tendency of only children to be high achievers. (Guilford and Worcester, 1930; Lee and Stewart, 1951; Falbo, 1977) Only children hold more post graduate degrees than children with siblings (Peck, 1977). Furthermore, single children represent only five percent of the total population, but comprise twenty-one percent of the 1980 edition of Who's Who in America (Peck, 1977). Similarly, a content analysis of Time cover photographs from 1958 - 1967 found onlies overrepresented by 22% (Toman and Toman, 1970). The achievement levels of onlies is commendable and is partially related to intelligence factors. However, it is also related to higher socioeconomic status, greater opportunity for education, and more interaction with parents.

Interpersonal Orientation

Social and interpersonal skills of only children has been the topic of much research. Findings have been somewhat inconclusive and persistent myths regarding the behavior of only children have complicated research efforts.
Traditionally, the status of "only" has been seen a significant handicap to the child's social development. Only children are often stereotyped as spoiled and antisocial. In spite of efforts on the part of social scientists to accurately portray the lot of only children, many myths have persisted over time.

Myth I: An Only Child is Lonely

One popular idea pertaining to social development of only children is that they are lonely. Over eighty years ago, Bohannan (1898) noted that single children are lonely and tend to invent imaginary playmates to compensate for lack of "real" companionship. More recent researchers (Cutts and Moseley, 1954) also contend that an only is lonely due to lack of interaction with brothers and sisters. However, they did not discover a high propensity for only children to have imaginary friends. Instead, they found that parents of only children made efforts to provide companionship by allowing friends to visit, sending the child to camp and boarding school, and encouraging group activities such as athletics and Scouting.

Falbo's (1980) research used the UCLA Loneliness Scale and found no relationship between loneliness and sibling status. Thompson (1974) noted that most people stereotyped only children as lonely, but this was a
perceived rather than actual characteristic. Peck (1977) delineates the difference between aloneness and loneliness. Aloneness connotes freedom from constant exposure to the "conventions and cliches of life" so that an individual may be developed (Arieti, 1972 in Peck). In other words, Arieti is suggesting that aloneness is a positive state that permits one to discover one's self. It allows personal growth and fosters the ability to function independently. On the other hand, loneliness is a more negative state that exists when there is inadequate social interaction. Peck contends that only children experience aloneness often but loneliness is an infrequent state.

Myth II: An Only Child is Selfish

Not only are single children perceived as selfish, but their parents are also viewed as possessing the very same trait (Thompson, 1974; Peck, 1977). It is selfish for adults not to want to give their time and resources to the still normative two to four children. And what's worse according to popular misconceptions is that these "selfish" parents are creating a situation in which further selfishness is sure to occur in the child. An only child will be selfish because she/he has no opportunities to learn to share.
J. A. Cleare (in Peck, 1977) agrees that an only child cannot just learn to share and interact successfully with other peers. A situation must exist to make learning social skills possible. She suggests gradual exposure to other children. Sharing is not automatically learned, adults must teach it.

Much research suggests that only children are actually less selfish than non-ones. Child development authorities (Krebs, Cleare, Bateson, Buhler, in Peck, 1977) contend that interaction with siblings may actually inhibit the tendency to share. Selfishness results from deprivation of personal possessions. Since only children generally have sufficient material items they can call their own, they do not mind temporarily sharing possessions with others.

Falbo (1976) utilized the Prisoner's Dilemma Game (PDG) to assess selfishness among only children. PDG is a bargaining game consisting of possible moves classified as cooperative or competitive. She found only children apt to make more trusting, cooperative moves than nononlies, who were more prone to cautious and competitive moves. She theorizes that "Perhaps this is so because only children don't have to worry about siblings who look lovingly at them as they steal their candy."
Myth III: An Only Child Lacks Social Skills/Sociability

Research findings on the interpersonal skills of only children have long been of interest to social scientists, but conclusions have been somewhat inconsistent. It appears that many factors impinge on adult sociability of individuals. Sociability can be related to social skills (Garbarino, 1981). One must possess an adequate repertoire of social coping skills in order to become sociable individuals who interact with others. Damrin (1949) and McClellan (1973) suggest intelligence and general "adaptivity" are positively associated with social competency. Bonney (1949) indicates that social popularity is somewhat dependent on social class. Furthermore, as a general rule, females tend to score higher on sociability than males do. Finally, studies demonstrate a positive relationship between self-esteem and sociability (Walster and Berschied, 1969).

While this array of variables have been considered as factors that affect sociability, a widely discussed explanation that has often been proposed regarding adult sociability is: related to family size (Terhune, 1974). Adherents of this explanation contend that children from large families will be more sociable than children from smaller families because interaction with siblings
teaches the children to get along with and value the company of others (Ward, 1926, Sutton-Smith and Rosenberg, 1970, Cutts and Mosely, 1955). Adams (1972) refers to this as the "sibling-influence theory." This theory holds that siblings have considerable influence on personal and social development. Thus, an only child would be socially handicapped because there are no sibling-sibling interactions in which to practice social skills which could later be generalized to others outside the family.

Earliest research on sociability of only children took place at the turn of the century. At this time, social scientists put forth a very negative image of the only child. Neal (1927) labeled the only child a "problem child" who was jealous, selfish, egotistical, dependent, aggressive, and quarrelsome. Bohannan (1898) asserts that only children have less command of themselves socially and that their social relationships are typified by friction. Psychologist Edward G. Hall (in Fenton, 1928) even declared that "Being an only child is a disease in itself." Overall, an only child was characterized as selfish, egotistical, conceited, isolated, spoiled, and antisocial. This picture carried over into the popular media and consequently a single child was viewed as socially undesirable. Even now,
public opinion about only children seems to support the idea of the maladjusted, antisocial only child.

It has often been thought that an only child is handicapped in social development since they lack the opportunity to interact with siblings (Terhune, 1974). Cutts and Mosely (1954) contend that onlies are often rejected by the group, teased a lot, act silly and do not share with others. Claudy et al. (1976) conclude that only children are more mature, socially sensitive, tidy and cultured--but they are somewhat less sociable. They prefer solitary over group activities and have a less intense social life than their counterparts with siblings. In 1976, Miller and Maruyama assessed peer popularity by birth order and concluded that only children were selected less frequently as someone to sit next to than nononlies. Falbo (1976) also determined that single children had fewer acquaintances than children with no siblings, but there was no significant difference in the number of close friends.

Not all research has concluded that only children are less sociable. To the contrary, much data suggest that only children are more socially outgoing. Fenton (1928) is one of the first to judge the social skills of only children in a more positive light. He asserts that as a group, only children are not seriously handicapped socially.
Witty (1937) asked elementary teachers to rate students on the following nine traits: self-confidence, industry, leadership, co-operativeness, originality, perseverance, dependability, attractiveness and sociability. Her research showed that only girls were superior to only boys on all characteristics, but as a group, only children differed little from nononly children. She also looked at extracurricular school activities of adolescents as related to sibling status, and discovered a higher rate of participation for only children as compared to any other birth order category.

Burke (1956) followed up on this research regarding extracurricular activities, and found it to be true that among college students, only men were involved more than only women. Women college students who were only children tended to participate less in extracurricular activities than their nononly female counterparts. Falbo (1976) also assessed the number of voluntary associations an only child joined as compared to first, last and middle borns. She discovered that, on the average, only children belong to fewer clubs than nononlies, but held an equal number of leadership positions, suggesting that even though single children join groups less frequently they are active group members.
Similarly, Snow, Jacklin and Maccoby (1981) observed 101 thirty-three month old children and determined that even at that age, only children acted more positively and assertively toward their peers than later borns. Furthermore, Knox and Hawke (1977) find that single children have good social skills and are popular with their peers.

Several researchers have noted gender differences pertaining to the sociability of only children (Burke, 1956; and Witty, 1937). Davis (1937) studied 333 only children, twins, and nononly children and discovered that female only children were well-adjusted and normal, while male singletons were "spoiled, queer and nervous." In a test of popularity conducted by Landis (1955), female only children were best liked among their peers and male single children were least popular. Conversely, Falbo (1976) found that female only children are more apt to prefer to spend time alone than male onlies, but neither gender is so solitary as to be social isolates or loners.

Overall, the only child has historically been reputed to lack sociability, but much research actually indicates they are socially outgoing and popular among peers. After an extensive review of the literature, Terhune (1974) has concluded that the "only child is more maligned than maladjusted."
Theoretical Explanations

Birth order has been used extensively as a research variable in an effort to explain a multitude of issues (Adams, 1972). Generally, theories accounting for birth order differences are as diversified as the topics they have tried to explain. A summary of these theories will be presented and then the theoretical model for this research will be discussed.

Physiological Theories

One physiological explanation of birth order difference falls under the rubric of the uterine fatigue hypothesis. A young mother has a "a richer uterine environment" for a first born child or only, than for later children. This richer environment provides a developing fetus more nutrients which results in a healthier and more intelligent child (Bayer, 1967).

A second physiological explanation is that subsequent pregnancies and births become easier. This lessens the chance of using forceps and having labor complication, which minimizes the risk of injury to the newborn. Thus, later children have a better chance of being born with maximal health and intelligence.
(Breland, 1977). While these physiological perspectives have been available they are virtually unused in sociological research.

Economic Theories

This approach attributes differences in accomplishments and traits of siblings to their access to familial resources (Adams, 1972). Early born children are advantaged over later born ones because they are privileged to more of their parent's time and money.

Alternately, Bayer (1967) suggests that youngest children have an economic advantage. They benefit from an improving economic environment as their parent's careers progress and older siblings begin to contribute financially to the family.

Psychosocial Theories

One of the oldest psychosocial explanations is the theory of only child uniqueness (Guilford and Worcester, 1930). This approach claims that an only child is distinctly different from all those with siblings. It is an adult-orientation that sets the single child apart (Adams, 1972). Without siblings, an only child matures
faster and becomes concerned with adult behavior and issues at a younger age (Kammeyer, 1967).

A second social approach to looking at birth order differences is the dethronement hypothesis. Dethronement occurs when an older child is displaced by a younger one and is no longer the sole recipient of parental attention (Adler, in Adams, 1972). The "dethroned" child will then theoretically fight to reclaim his or her place of importance in the parent's eyes. This dethronement and subsequent battle to achieve an important place in the family should make the dethroned individual more competitive and independent than the never dethroned.

Sears (1950) suggests the anxious parent approach to account for differences in birth order effects. There is a propensity for parents to be overly protective of the first-born or only child which stifles independence, initiative and creativity of the child. This effect lessens with each subsequent offspring.

Sibling-influence explanations have also been hypothesized to explain differences between first and later born children in a family. Sutton-Smith and Rosenberg (1970) insistently assert that "sibling-sibling interactions are intrinsically responsible for many of the established sibling behavior and personality difference." This approach suggests
that siblings are a powerful socialization agent within the family.

Dilution Model

Psychosocial theories of birth order differences have been most compatible with past research efforts, but many of them do not adequately take the only child into account. An only child is never dethroned and has no siblings to serve as a socialization agent.

Blake (1981) contends that until recently there has been little interest in the only child and she believes that only children do not suffer as a result of having no brothers or sisters. In fact, she suggests that family size is inversely related to child quality.

She proposes the dilution model of parental inputs to explain this relationship. This model is based on the assumption that parents provide resources in the form of settings, opportunities and treatments for their children. Settings refer to types of homes, necessities of life and cultural objects. Opportunities are specific chances to engage in the outside world and treatments are personal attention, encouragement and intervention. The dilution model says that "The more children, the more these resources are divided and, hence, the lower the quality of the output." (Blake,
Quality refers to some objective measure of human potential.

Blake performed secondary analysis on four large data bases regarding family size and children's achievement, and concluded that the dilution model holds. Children apparently benefitted from parental inputs and children from smaller families had superior achievement than children from larger families.

This research uses the dilution model to study sociability of children by family size. For an only child, parental input in the child's life, especially in the form of opportunities, will offset the lack of siblings as socializers. Accordingly, only children will have more opportunities or chances to engage in social systems external to the nuclear family.

Without siblings, an only child is forced to interact with age-mates outside the familial primary group. As Heise and Roberts (1970) suggest, the large family may indeed be a handicap in learning social rules. They argue this is so because in large families, peer interaction is restricted to siblings, denying the child an opportunity to interact in and learn from the social environment outside of the immediate home and family. Likewise, Moore and Holtzman (1965) argue that "youth, for their development of self-sufficiency and independence, require opportunities to go outside the
family group into new peer and adult associations." In seeking interaction outside the home, a child will be exposed to a wider world providing a richer environment in which to grow.

In general, research has concluded that the larger the family size, the less parental attention the children will receive (Sears, Maccoby and Levin, 1957; Douglas and Bloomfield, 1964; and Terhune, 1974). Therefore it is possible to assume that most only children receive a sizeable amount of parental time (Knox and Hawke, 1977; Terhune, 1974; Cutts and Mosely, 1954). This time and attention result in increased opportunities to provide social activities for the child outside of the nuclear family.

When chances exist for the child to interact outside of the family unit, there should be an inverse relationship between family size and social development. A child from a small family required to go beyond the family for social interaction would be more likely to make friends and develop sociability (Terhune, 1974).

The Sullivan-Piaget Thesis

Historically, most theories of social development have stressed the importance of parents and other adults in childhood socialization processes. From a traditional perspective, adults serve as a vital link
between children and wider society, promoting children's social development as well as societal preservation.

However, Elder (in Youniss, 1982) indicated that social conditions in our society have led to increased attention to peer relationships. American society is moving toward greater occurrences of "age-mate rearing." Children are spending more time away from parents in day care and school settings in which there is definite segregation by age so that influences across age groups are minimized.

In his book, *Parents and Peers in Social Development*, Youniss (1982) addresses the issue of the importance of peer relationships. He contends that adults have necessary, but limited, roles to play in the social development of children, and that peer interactions play a more significant role than had been previously thought. He draws on the work of psychiatrist, Harry Stack Sullivan, and developmental psychologist, Jean Piaget, to formulate a thesis emphasizing the importance of age-mate interaction in social growth. Although acknowledging the role that parents play in socialization, both Piaget and Sullivan suggest that peer relations are a major and positive force in social development. Through friends, children learn interpersonal social skills which are important not only in childhood, but also throughout later life.
According to Youniss' interpretation of Sullivan's and Piaget's works, both parents and peers play a crucial part in social development. On one hand, children's interactions with parents and other adults are unilateral. The child learns from adults what is expected of him or her in society, but has no (or at most very little) control over the socialization process. The child simply conforms to the adults' expectations in an effort to win approval.

On the other hand, when children interact with peers, there is no pre-established power relationship so the children learn from cooperative interactions with one another. The child learns normative expectations through mutually shared experiences. It is relationships with peers that provide an environment in which social skills develop and emerge.

Thus, Youniss concludes that there are two facets to socialization. Part of socialization is regulated by adults and teaches children basic societal norms, values, and role expectations. The second aspect of socialization is associated with peer interaction. According to the Sullivan-Piaget Thesis, it is within age mate relationships that children learn to become interpersonally sensitive, how to handle intimacy, and ways to achieve empathy.
Youniss (1982) suggests that peer relationships and friendship should be taken more seriously as positive contributors to social growth and that future research should attempt to clarify parent-child relations as related to social development. This study acknowledges that both parent-child and peer-child interactions affect the socialization process—particularly in regard to the development of sociability. However, instead of considering peers and parents as two separate influences on social growth, I am proposing the effects of parents and peers are interrelated. Parents are often very instrumental in regulating their child(ren)'s contact with peers, and by doing this indirectly affect the development of interpersonal relationships.
The central assumption behind this study is that family size will affect the sociability of children in the family indirectly through parental involvement in brokering activities of their children. Past research had assumed an only child would be anti-social because he or she lacked siblings from which to learn social skills, and some researchers even argued that sociability is positively related to number of siblings. This research argues that only children do not score poorly on measures of sociability because parents of only children actively broker their child's activities insuring "proper" social development.

The basic research design employed to address this issue of family size and sociability is a survey methodology utilizing self administered mailed questionnaires. The research is cross-sectional in nature and the unit of analysis is the individual. The study is designed to describe and explain differences in sociability between only children and children with siblings.
Sampling Procedures

Terhune (1974) and Adams (1972) note that most studies concerning the effects of family size or birth order variables have historically been conducted with children. They contend that it is necessary to implement birth order and family size studies with adult subjects in order to ensure stability of only child and birth order status. Recently, efforts have been made to use adult respondents (i.e., Blake, 1981; Mott and Hauren, 1982), but the studies have focused primarily on achievement and intelligence. This study utilizes adult subjects to analyze family size, the presence or absence of siblings, and sociability.

The population for this research was students at The Ohio State University during the 1983-1984 academic year. The choice of students as a population admittedly limits the generalizability of the findings. As Babbie (1983) suggests, college students are not typical of the public as a whole, but this potential sampling defect is not as problematic in an explanatory study as in a solely descriptive one. Additionally, a college student sample provides some controls not present in the total population. For example, all students have at least a high school diploma and all students are most probably over the age of eighteen. Furthermore, the student body
is sufficiently heterogeneous to ensure a suitable distribution of results for statistical analysis.

The sampling frame for this study was in the form of an organizational list - specifically the 1983-1984 Student Directory of The Ohio State University. The sampling method consisted of probability sampling in the form of systematic sampling with a random start (Babbie, 1978, 1983). In order to obtain enough only children to effectively perform the desired analyses, a sample size of about 2000 was necessary. There are approximately 50,000 student names in the directory, and accordingly a sampling interval of 25 was adopted. Every twenty-fifth name in the student directory was included in the sample. A total of 1935 names was selected to be respondents in the survey.

Questionnaire Design

A self administered, mailed questionnaire was determined to be the most appropriate design for this study. Babbie (1983) asserts that survey research is the most often used method of observation in the social sciences and that surveys are the best method available to obtain data about a large group of people. Furthermore, Bailey (1978) suggests that mailed
questionnaires can save the researcher valuable time and money as compared to face to face interviews, and the quality of data may be superior to that obtained in an interview situation since there is greater assurance of anonymity and lack of interviewer bias.

The data collection instrument for this research was designed in accordance to the Total Design Method (Dillman, 1978). This technique of designing questionnaires was created by Dillman to maximize response rates and the quality of the data collected through mail and telephone surveys. His approach is comprehensive in scope considering such details as the content of the cover letter, the timing of the mailings, question-ordering and page structuring. (For a complete description of this research method see Dillman, 1978). A copy of the questionnaire can be found in Appendix A.

The instrument was pre-tested in two upper division Sociology classes at The Ohio State University. First of all, an original draft of the questionnaire was administered. Problems were identified and discussed. The revised questionnaire was then administered to a different class with minimal problems. The final instrument incorporated the revisions suggested by the pretests.
The final questionnaire consisted of thirty-seven items grouped according to similar content. An effort was made to develop a logical line of questioning and to place the most objectionable questions at the end of the survey. Since this is a mailed questionnaire, the instrument was designed to be as clear and unambiguous as possible. The questions were constructed to be interest arousing and easily answered. Open ended questions were kept to a minimum to promote quickness and ease of responding. Connective transitions were provided to guide the respondent's train of thought and to warn the respondent of changes in the direction of questioning. Dillman (1978) also suggests that transitions are useful within a questionnaire to break the monotony and tediousness of the task.

Factors Affecting Response Rate

There are many diverse factors that potentially affect the quality and number of questionnaires returned in a mailed survey. Herberlein and Baumgartner (1978) argue that in order to increase the return rate of the questionnaire, it is necessary to minimize the cost of responding to the survey recipient. Dillman (1978) also contends that response to surveys can be understood in terms of exchange theory. If there is a low perceived
cost to the respondent, he or she is more likely to reply. He further states that cost to the respondent is lessened if the researcher gives the respondent verbal/written appreciation and regard, takes little of their time, and requires no monetary output from the respondent. In this research, cost to the respondent was minimized by keeping the questionnaire short, providing clear instructions, asking nonembarrassing questions, and providing a self-addressed stamped envelope in which to return the completed form.

Additionally, other steps were taken to ensure an adequate response rate. Sponsorship is one variable that affects return of questionnaires. It can convince a potential respondent of the legitimacy of the research and make it appear more important. Organizations usually receive a good response rate from their membership. Therefore, the use of The Ohio State University stationery and envelopes to mail the questionnaire to OSU students should improve returns. Furthermore, Goyder (1982) has reported that college educated are more likely to return mailed surveys than members of lower educational levels.

Questionnaire length is another factor that affects response. Dillman (1978) found no significant difference in response rates for surveys of less than twelve pages, but Bailey (1983) suggests that after five
pages response begins to decline. The instrument for this research consisted of only five photo-reduced pages. Thus, the questionnaire length should not be a deterrent to the respondent completing the survey.

Research suggests that first class mailings are superior to bulk rate when conducting research via the mail (Babbie, 1978; Heberlein and Baumgartner, 1978). First class is more flexible, faster, and gives the survey an aura of importance. This survey was mailed through the metered mail service at The Ohio State University, reinforcing the organizational affiliation and providing the benefits of first class mail service.

Another consideration of mailed survey research is whether to utilize stamps or business reply mailing permits for return postage. Business reply postage is easier to use than applying hundreds or thousands of stamps, and with business reply permits only returned questionnaires are paid for. However, on the other hand, to many researchers (see Babbie, 1978; Bailey, 1978) the presence of a commemorative stamp is regarded as a sign of sincerity and will attract the respondent's attention and consequently increase response rate. As a general rule, if a high return rate is achieved, stamps are more cost effective. If the response is low, business reply is less expensive. Commemorative stamps were used as return postage in this research. This
option proved to be a wise decision since the return rate was high enough to have been cost effective.

All questionnaires must be accompanied by a cover letter briefly explaining the research and asking the cooperation of the respondent. Scott (1961) assessed the impact of the cover letter on response. He discovered that "permissive" letters are better than "firm" ones. It is better to ask nicely for the respondent's cooperation than to demand it. Furthermore, "short, punchy" letters get a higher response than a "longer, logical" appeal. This suggests that potential respondents reply more often to a letter that is short and to the point as compared to a letter that is longer and more time consuming to read and understand.

Additionally, personalization of the cover letter generally improves response rate (Bailey, 1978). Personal signatures of the researcher, a concise informal letter, as well as hand addressed envelopes were used in this study to make the respondent feel special and increase the likelihood of his or her completing the survey.
Mail Distribution

The timing of a mailed survey is also important in obtaining sufficient returns. Bailey (1978) warns against mailing immediately before a holiday or the start or finish of school. Dillman (1978) also suggests that a mailing early in the week is best. It allows the respondent a chance to reply before the weekend interferes.

Accordingly, the initial mailing of the questionnaire took place Monday, July 9, 1984. A total of 1935 surveys were distributed. The first mailing included a cover letter (see Appendix B), a copy of the questionnaire (see Appendix A), and a self-addressed, stamped envelope for the respondent's use in returning the questionnaire. Each survey was numbered to facilitate monitoring of the returns and to expedite follow-up mailings.

Two and a half weeks later, a second mailing was sent. A follow-up letter reminding the respondents of the questionnaire and asking them again for their help (see Appendix C), as well as a replacement survey were mailed on July 25, 1984.

Finally, a postcard (see Appendix D) was mailed on August 6, 1984, as one last reminder to please complete the questionnaire. Three contacts were made with each
respondent who did not reply since evidence suggests an original mailing and two follow-ups appear most efficient (Babbie, 1978). Herberlein and Baumgartner (1978) also noted no differences in response rates after three mailings. Figure 2 displays the effects of follow-up mailing procedures in this research.

Response Rate

Babbie (1983) contends that it is possible to suggest a rule of thumb regarding adequate response rates. A return rate of at least fifty percent is sufficient for analysis. A response rate of sixty percent is good. And a response rate of seventy percent is very good. An adequate return to a mailed questionnaire is important to minimize response bias and ensure representativeness of the sample.

Of the original 1935 questionnaires distributed, eighty-two were returned as non-deliverable. This left a net sample size of 1853. One thousand three hundred and eight surveys were completed and returned by the respondents. To compute the response rate, the questionnaires that could not be delivered were omitted, and the number of completed questionnaires was divided by the net sample size. The response rate for this survey was 70.6 percent. Table 1 displays the response rate for the data collection.
FIGURE 2
Number of Questionnaires Returned: Effect of Follow-Up Mailings
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<td>1294</td>
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<td>14</td>
<td>1308</td>
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</table>
Operationalizing Variables

The Dependent Variable: Sociability

Sociability is the dependent variable within the analysis. A review of the literature suggests that sociability has been measured in a wide variety of ways (see Chun et.al., 1975 and Bonjean et.al., 1965). Scales frequently used to assess sociability include Eysenck's (1958) introversion-extraversion scale and the sociability subscale of the California Psychological Inventory (Gough, 1956). Pepinsky et.al. (1952) used group participation as an index of sociability and Dyer (1945) utilized the Bell Adjustment Inventory to address the issue of sociability. Other more indirect methods have been used to assess sociability as specifically related to birth order. For example, Claudy et.al. (1976) and Falbo (1981) consider hobbies and group membership to determine how sociable individuals are depending on their relative involvement in group versus solitary activities. Miller and Maruyama (1976) use sociometric techniques to determine sociability of grade school individuals by observing which children were chosen most frequently as someone they would like to sit by. Furthermore, Falbo (1976) simply asked individuals how many friends her respondents had in an effort to
indirectly measure sociability and frequency of interaction with others.

While these techniques have all been successfully employed in the past to address sociability, they were not deemed appropriate for this research. Some scales were too long and complex to be included on a mailed questionnaire, while others were too subjective to be easily interpreted by both the respondent and the researcher.

Thus, the scale chosen for this research was a Likert type scale consisting of ten item statements regarding sociability. Table 2 displays the actual wording of item statements as well as the mean response and standard deviations. The scale is a subscale of the Student Activities Inventory from Project TALENT. Project TALENT was a large-scale research project conducted by a research team at the University of Pittsburgh concerning personal, social and psychological characteristics of American high school students as they relate to life goals and accomplishments (Flanagan et al., 1964). These researchers considered previous efforts in measuring personality when designing their instrument. Through theoretical analysis of past efforts at personality measurement they defined broad categories of behavior and listed adjectives to describe the behavior. For example, impulsiveness was typified by
<table>
<thead>
<tr>
<th></th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like to spend a good deal of time by myself.</td>
<td></td>
<td>12.0</td>
<td>25.7</td>
<td>33.0</td>
<td>23.0</td>
<td>6.3</td>
<td>2.9</td>
<td>1.1</td>
</tr>
<tr>
<td>2. I'd rather be with a group of friends than at home by myself.</td>
<td></td>
<td>14.9</td>
<td>29.9</td>
<td>30.1</td>
<td>21.0</td>
<td>4.1</td>
<td>2.7</td>
<td>1.1</td>
</tr>
<tr>
<td>3. People consider me the quiet type.</td>
<td></td>
<td>9.3</td>
<td>16.3</td>
<td>16.8</td>
<td>25.9</td>
<td>31.7</td>
<td>3.5</td>
<td>1.3</td>
</tr>
<tr>
<td>4. I couldn't get along without having people around me most of the time.</td>
<td></td>
<td>3.0</td>
<td>10.5</td>
<td>15.9</td>
<td>36.2</td>
<td>34.4</td>
<td>3.9</td>
<td>1.1</td>
</tr>
<tr>
<td>5. I enjoy getting to know people.</td>
<td></td>
<td>31.0</td>
<td>34.8</td>
<td>24.9</td>
<td>7.0</td>
<td>2.3</td>
<td>2.2</td>
<td>.05</td>
</tr>
<tr>
<td>6. I like to be with people most of the time.</td>
<td></td>
<td>11.5</td>
<td>25.6</td>
<td>37.8</td>
<td>21.5</td>
<td>3.6</td>
<td>2.8</td>
<td>.05</td>
</tr>
<tr>
<td>7. I go out of my way to be with friends.</td>
<td></td>
<td>10.2</td>
<td>21.0</td>
<td>31.8</td>
<td>25.3</td>
<td>11.7</td>
<td>3.1</td>
<td>.06</td>
</tr>
<tr>
<td>8. I prefer reading a good book to going out with friends.</td>
<td></td>
<td>.9</td>
<td>5.2</td>
<td>14.0</td>
<td>29.1</td>
<td>50.6</td>
<td>4.2</td>
<td>.04</td>
</tr>
<tr>
<td>9. People consider me good-natured.</td>
<td></td>
<td>30.8</td>
<td>49.8</td>
<td>16.5</td>
<td>2.0</td>
<td>.9</td>
<td>1.9</td>
<td>.04</td>
</tr>
<tr>
<td>10. I am friendly.</td>
<td></td>
<td>38.5</td>
<td>44.8</td>
<td>14.5</td>
<td>1.8</td>
<td>.5</td>
<td>1.8</td>
<td>.04</td>
</tr>
</tbody>
</table>

ew - extremely well  nvw - not very well
qw - quite well  x - mean
fw - fairly well  s - slightly
hasty and rash, while sociability was characterized by friendly, outgoing and good-natured. Item statements such as "I enjoy being with others," and "I'd rather read a good book than be with friends," were then derived from the adjectives and categorized into subscales. The scales were pre-tested, and revisions made. The final Sociability Index consisted of ten statements. Respondents indicated whether the statement described them extremely well, quite well, fairly well, slightly or not very well. Each response is then assigned a numerical value of one to five and these values are totaled to obtain a scale score ranging from ten to fifty. The higher the score, the higher the degree of sociability.

In social research, one must always be concerned with issues of reliability and validity of the measuring instrument. Reliability refers to the consistency of measurement and validity determines the extent to which differences in scores reflect true differences among respondents. Cronbach's alpha, a coefficient of reliability for additive scales, was .79. This score indicates that the scale has adequate internal consistency.

However, a scale can be reliable and still lack validity. Validity of the sociability index was tested by correlating the sociability scale scores with the
number of friends the respondent reported having. This is a type of criterion validity which uses a second measure of a concept as a criterion by which the new measure can be checked. As an indicator of sociability, number of friends has face validity and past researchers (Falbo, 1981) have used this as a measurement of sociability. Thus, it is assumed that the more friends an individual has, the higher his or her sociability score. The Pearson Product Moment Correlation computed using number of friends was .112 (p = .009) suggesting a positive relationship between the variables that is not due to chance. These results are suggestive of concurrent validity of the sociability scale.

The Independent Variable: Sibling Status

This research is primarily concerned with only versus nononly children and the development of sociability. Thus the measurement of family size and sibling status is a critical issue.

Family size has been used as a variable in research on almost every topic conceivable of in the social sciences (see, for example, Terhune, 1974). As Adams (1972) suggests, birth order is an appealing variable because it can be easily measured. Kammeyer (1967) concurs with the idea that birth order is readily accessible as data, but warns the researcher about
attaching too much significance to birth order and family size variables. Nevertheless, past research has accorded considerable significance to family size and the social development of family members. Therefore, in order to take a closer look at whether or not the presence of siblings affects sociability it is necessary to determine family composition. This variable was assessed by simply asking a brief series of questions as to the number, sex and age of the respondent's siblings.

Throughout this research, family size will be measured in two ways. The data will be analyzed utilizing family size as a continuous variable to assess whether the number of brothers and sisters has an impact on parental brokering and sociability. Secondly, family size will be assessed with a dichotomous variable by categorizing respondents into only and nononly children. This will allow us to determine whether the actual number of siblings in the family or the presence or absence of siblings is more important when considering parental involvement in brokering activities and adult sociability.
The Intervening Variable: Parental Brokering

This study argues that it is not the presence or absence of siblings or the number of siblings that affects the sociability of children; rather, it is the amount of parental involvement in their children's lives that determines how sociable they will become. Keniston (1977) calls this "coordinating" and Farber (1964) and Elkin and Handel (1984) refer to parental involvement in a child's activities as sponsored independence. This researcher shall use the term brokering to describe the situation in which parents take an active role in activities of their children.

Previous research this researcher is familiar with has only discussed the concept of brokering on a theoretical level, and no efforts have been made to operationalize brokering for use in quantitative analysis. Thus, this study attempts to create indicators of brokering that can be used to explain how parental interaction can affect sociability of children.

An analysis of the previous discussions related to brokering suggested questions to include on the survey. The questions addressed the issue of what parents did for their children as they were growing up. Respondents were asked to recall their childhood up until age twelve since twelve is usually viewed as the end of childhood
and the beginning of adolescence (Elkin & Handel, 1984). Four dimensions of brokering were assessed. These include: 1) provision of peer companionship, 2) parental companionship, 3) lessons taken as a child, and 4) group activities involved in as a child.

Provision of peer companionship was measured by asking whether or not the respondent had attended preschool, day care or summer camp. These are all settings in which children would be exposed to others of the same age in a structured environment. Parents could also provide peer companionship by encouraging the child to take a friend along while traveling and by introducing the child to other children his or her age.

A second brokering action by parents could be in the form of actual parental companionship. Perhaps parents help their children develop social skills by doing activities with them. For example, parents taking a child to the theater, shopping, or out to eat would teach the child social skills necessary to be a sociable individual in later life.

Lessons taken as a child are another aspect of parental brokering. Even though taking lessons may be the choice of the child, the parents must serve as a mediator between the child and lesson provider. Additionally, parents may give their child(ren) lessons in the hopes they will expand the child's cultural and
social experiences. Thus, the more lessons a child takes, the more active parents are in the brokering role.

Finally, organizations and group activities of children indicate the extent of parental brokering. Organized activities such as Girl/Boy Scouts, community sports and church groups enable a child to develop sociability by being in an environment of peers. Furthermore, these activities require some actions on the part of parents which makes it possible for the children to be involved. Parents must often provide transportation to functions, help their child complete projects, and sometimes serve as leaders, advisers or chaperones.

In summary, brokering refers to how involved parents are in their children's activities. Brokering entails parents making an effort to develop sociability in their child(ren) by providing them opportunities to develop social skills and interact with others their same age. Provision of companionship, actual parental companionship, lessons, and group activities were utilized in this study to assess the amount of parental brokering.
Background Variables: Demographic Characteristics

Several questions were asked to serve as control variables. Age, gender and race of the respondents were collected as well as the parent's occupation, educational level and ages when the respondent was born. Family intactness was also assessed since this could affect the amount of potential parental brokering.

Data Preparation

Since this research was concerned with the effects of siblings on development of sociability, only surveys from single children and youngest children were analyzed at this time. Youngest children were selected for study since they always had siblings and were never in the position of an only child. Eldest children were not chosen for analysis because they were in essence an only child for part of their lives. In theory, then, eldest children would have received extensive parental brokering while they were in the position of an only. Since brokering is a key variable in this analysis, in order to maximize the range of brokering, youngest children who never had the exclusive attention of their
parents, and only children, who have always been the focus of parental attention, were chosen for comparison. A total of 443 cases were processed. Sixty only children and 383 youngest siblings were included in the research.
The focus of this research deals with the relative effects of sibling status and parental brokering on adult sociability, but one cannot consider the relationship between these variables without taking the demographic variables into account. This chapter will address the impact of the demographic variables on the key dependent and independent variables—family size, parental brokering, and adult sociability.

However before proceeding with the results of this research, it is necessary to indicate how the variables were scaled for analysis. Table 3 displays a summary of the means, standard deviation, number of cases and intercorrelations of the demographic variables. Age of respondent was measured in years, with the average age being 23.2 years. Gender is represented by a dummy variable coded "1" for men and "0" for women. The mean of 0.53 shows the proportion of male respondents. Race is also measured by a dummy variable. In this case,
| Respondent Age | 1.000 | Gender | .032 | 1.000 | Race | .016 | -.034 | 1.000 | Mother's Education | -.161 | .011 | -.106 | 1.000 | Father's Education | -.247 | .013 | -.034 | .548 | 1.000 | Mother's Occupation | .079 | -.004 | -.418 | -.098 | -.066 | 1.000 | Father's Occupation | .134 | .069 | .045 | -.039 | -.038 | .100 | 1.000 | Family Intactness | .081 | -.056 | .024 | -.058 | .009 | -.1074 | -.013 | 1.000 | Mean | 23.18 | .53 | .94 | 3.181 | 3.720 | 2.950 | 3.205 | .921 | Standard Deviation | 5.32 | .50 | .23 | 1.458 | 1.672 | 2.209 | 2.394 | .270 | Totals | 440 | 443 | 430 | 430 | 429 | 210 | 410 | 443 |
white is "1" and nonwhite is "0". The mean of 0.93 suggests the high percentage of white respondents. Parent's education was measured on a scale of "1" to "6"; "1" representing a grade school education and "6" standing for a post graduate degree. Parent's occupational level was measured by the United States' Bureau of the Census Socioeconomic Index. Scores range from "1" professionals to "11" laborers. Age of parents when the respondent was born was also measured in years. The mean age of parents was 32.7 years for mothers and 33.0 for fathers. Family intactness was represented by a dummy variable scored "1" for the presence of both parents in the home and "0" for a single parent home.

Family size was collected and analyzed as a continuous variable by asking the number of living brothers and sisters the respondent had. Average family size was slightly over three children. Then for the purpose of this research, family size was recoded into a dichotomous variable. Zero stands for respondents with no siblings or only children and "1" represents children with at least one sibling or nononlies. This coding scheme was adopted because in this analysis the research questions concern the effects of having siblings versus not having siblings as well as how the total number of siblings in the family affects the development of
sociability. There are 60 only children or 13.5% of the sample and 383 nononly children. Table 4 summarizes responses regarding number of siblings.

**TABLE 4**

*Current Number of Siblings*

<table>
<thead>
<tr>
<th>Number of Siblings</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>60</td>
<td>13.5</td>
</tr>
<tr>
<td>1</td>
<td>124</td>
<td>28.0</td>
</tr>
<tr>
<td>2</td>
<td>113</td>
<td>25.5</td>
</tr>
<tr>
<td>3</td>
<td>83</td>
<td>18.5</td>
</tr>
<tr>
<td>4</td>
<td>36</td>
<td>8.1</td>
</tr>
<tr>
<td>5 or more</td>
<td>27</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Total only children 60 13.5
Total nononly children 383 86.5

mean = 1.982; standard deviation = 1.374

Parental brokering was measured by four variables. The first one considered whether or not the child attended preschool, day care, or summer camp, if the respondent took friends along while traveling, and whether or not the parents of the respondent introduced the child to others their age in an effort to help the child make friends. This variable is referred to as provision of peer companionship. A yes response was coded "1" and a no response was coded "0". The responses for the five items were then tallied to yield a single score ranging from "0" to "5" with five being
the highest level of parental activity. The mean score was 1.9.

Secondly, brokering was measured by a variable referred to as parental companionship. This was assessed by asking the respondent whether his or her mother and father provided him or her with companionship by doing activities with the respondent when they were children. Once again these responses were coded as dummy variables and then totaled. Possible scores ranged from "0 - 2" on the parental companionship variable. The average score was 1.64.

The third way brokering was measured was by totaling the number of lessons the respondent took as a child. Total number of lessons ranged from 0 to 12, with the mean number being 2.3. Finally, brokering was assessed by tallying the number of organizations and group activities the respondent was involved in as a child. The total number of activities ranged from 0 to 9, and the average number of childhood activities was three.

The dependent variable, sociability, was measured by the sociability index previously discussed in Chapter 3. Respondents scored from 13 to 50 on the index. The mean sociability score was 32.214 with a standard deviation of 6.185.
Demographic Characteristics and Family Size

The decision of how many children to have is a complex and personal one, but literature indicates that there is a relationship between family size and demographic characteristics. A literature review suggests that the most consistent demographic predictors of family size are age of the mother, social class and marital intactness. Chapter 2 has addressed more completely which demographic variables have an impact on completed family size. In general, the higher the socioeconomic status, the fewer the number of children in a family.

In order to assess the impact of demographic traits on family size, a single multiple regression equation was used. This permits us to evaluate the independent effects of each background variable on family size, controlling for their correlations with one another. This technique also allows us to estimate the amount of variance in family size accounted for by the demographic characteristics.

The regression equation was first calculated using family size as a continuous variable. Table 5 presents the multiple regression of demographic variables and family size. The unstandardized and standardized
TABLE 5
Demographic Characteristics as Predictors of Number of Siblings in Family

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>BETA</th>
<th>( R^2 ) Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-.253</td>
<td>-.182b</td>
<td>.030c</td>
</tr>
<tr>
<td>Gender</td>
<td>.007</td>
<td>.001</td>
<td>.000</td>
</tr>
<tr>
<td>Race</td>
<td>-.011</td>
<td>-.002</td>
<td>.001</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>-.143</td>
<td>-.164b</td>
<td>.007</td>
</tr>
<tr>
<td>Father's Education</td>
<td>.065</td>
<td>.082</td>
<td>.010</td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>.017</td>
<td>.027</td>
<td>.009</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>.031</td>
<td>.060</td>
<td>.000</td>
</tr>
<tr>
<td>Mother's Age</td>
<td>-.265</td>
<td>-.220b</td>
<td>.111b</td>
</tr>
<tr>
<td>Father's Age</td>
<td>.184</td>
<td>.174</td>
<td>.012</td>
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<tr>
<td>Family Intactness</td>
<td>-.258</td>
<td>-.054</td>
<td>.004</td>
</tr>
<tr>
<td>Constant</td>
<td>1.095</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared .185b

a \( p < .01 \)
b \( p < .05 \)
c \( p < .10 \)
regression coefficients for each demographic as well as the R-squared and R-squared change.

This equation demonstrates that the respondent's age is the strongest predictor of family size (Beta = .1824). The younger the respondent the greater the number of siblings. This does not go along with the trend toward smaller American families, but is most probably a statistical artifact since only youngest children with siblings and single children were included in the analysis.

Mother's age and educational level are also statistically significant when related to family size. An inverse relationship exists between mother's age and educational level and the number of siblings in the family. This is consistent with the previous research suggesting that more educated women frequently postpone childbearing to a later age and consequently have fewer children.

In addition to considering BETAs when determining the importance of independent variables in explaining the dependent variables, the R-squared statistic can also be useful. R-squared is the proportion of the dependent variables variance shared with the optimally weighted independent variable and can be used as an indication of the amount of variance explained by the independent variables. Overall, the demographic
variables account for 18.5 percent of the variance in family size (p=.013). The age of the mother makes the most significant contribution to the variance explained, while the respondent's age is also statistically significant. The remaining demographics help to increase the R-squared, but have no statistical significance.

Similar analyses were performed categorizing the dependent variable, family size into a dichotomous distribution of only and nononly children (see Cohen and Cohen, 1976, pp. 229-230 for a discussion of using dichotomous variables as a dependent variable in regression analysis). Once again the effects of demographic traits were assessed in a single multiple regression equation. Table 6 summarizes the results of the regression analysis.

The background variables explained only 8.6% of the variance between families with only children and those with more than one child (p=.015). This explained variance was considerably less than when family size was measured as a continuous variable. The strongest predictor variables were also different in some areas. The BETAs indicate that the respondent's age was the strongest indicator of the presence of siblings, but once again, this is most likely due to a statistical artifact. Younger respondents were more likely to have
<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>BETA</th>
<th>R² Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-.066</td>
<td>-.190b</td>
<td>.032b</td>
</tr>
<tr>
<td>Gender</td>
<td>-.102</td>
<td>-.151b</td>
<td>.024b</td>
</tr>
<tr>
<td>Race</td>
<td>.116</td>
<td>.091</td>
<td>.000</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>.022</td>
<td>.100</td>
<td>.010</td>
</tr>
<tr>
<td>Father's Education</td>
<td>.008</td>
<td>.040</td>
<td>.005</td>
</tr>
<tr>
<td>Mother's Occupation</td>
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<td>-.166c</td>
<td>.004</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>.004</td>
<td>.028</td>
<td>.000</td>
</tr>
<tr>
<td>Mother's Age</td>
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<tr>
<td>Family Intactness</td>
<td>.078</td>
<td>.065</td>
<td>.003</td>
</tr>
<tr>
<td>Constant</td>
<td>.53360</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared .036c

a p < .01
b p < .05
c p < .10

table 6
Demographic Variables as Predictors of Only/Nononly Child Sibling Status
siblings than older respondents. The gender of the individual also appears to affect the likelihood of having brothers and sisters. Females are more likely to have siblings than males are. There is a strong preference for male children in American society, and apparently couples are less willing to stop with just one child when the first one is a girl than when it's a boy. Mother's occupation was also a statistically significant predictor of only or nononly sibling status. The higher the occupation level of the mother, the more likely the respondent was an only child. Perhaps the mother is career oriented and chooses to limit family size so her family life will interfere minimally with career goals.

The changes in R-squared also suggest that the respondent's age and gender are the only variables that contribute in a statistically significant manner to the explained variance. They account for approximately 5.6% of the variance, while the remaining demographics explain only 3% of the variance when family size is a dichotomous variable.

Overall, this analysis of the effects of the demographic characteristics suggests that certain variables do indeed affect the number of children in a family. However, in this research, the demographic variables were not as strongly related to family size as
past research would lead us to believe they should be. Many variables that had been previously correlated to family size such as parent's educational and occupational levels and marital intactness were not significant in this study. Once again, this might be due to the sampling frame. Since all respondents are students at The Ohio State University and all middle and oldest children were omitted from the study, they are more likely to share more similar backgrounds than the general population. These findings also indicate that background variables are more predictive of how many children are in a family than whether or not an individual is an only child.

DEMOGRAPHIC VARIABLES AND BROKERING

Since parental brokering as a concept has only recently been discussed, there have been no studies systematically relating background variables to brokering. However, common sense and a sociological insight would indicate some probable connections. For example, individuals with higher educational and occupational levels would be more likely to become aware of the opportunities for brokering as well as be better able to afford it. Similarly, older parents might be in a better financial position to perform brokering
activities, but less physically able to offer actual companionship. If both parents are in the home, there should be more parental brokering. Employment status could affect brokering in several ways. If both parents work, the children would be more likely to attend day care and nursery school, so provision of peer companionship would be high. But on the other hand, if only one parent works, the parent in the home can devote more time to the child(ren) and actual parental companionship might be increased.

So theoretically, there should be some associations between the background variables and the extent of parental brokering. Multiple regression equations were used to assess these relationships, and this section will report the findings.

Provision of Companionship

Table 7 presents the multiple regression of demographic variables and provision of peer companionship. The demographic characteristics do not appear to have a significant impact of the provision of companionship. The only variable that is statistically significant is mother's educational level, and this only at the .10 level. The demographic variables only explain less than 5% of the variance in provision of peer companionship (p=.54).
TABLE 7
Demographic Variables as Predictors of Provision of Peer Companionship

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>BETA</th>
<th>R² Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-.039</td>
<td>.076</td>
<td>.001</td>
</tr>
<tr>
<td>Gender</td>
<td>-.026</td>
<td>-.006</td>
<td>.000</td>
</tr>
<tr>
<td>Race</td>
<td>.249</td>
<td>.031</td>
<td>.001</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>.231</td>
<td>.182c</td>
<td>.012</td>
</tr>
<tr>
<td>Father's Education</td>
<td>-.112</td>
<td>-.096</td>
<td>.004</td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>-.022</td>
<td>-.025</td>
<td>.017c</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>-.079</td>
<td>-.104</td>
<td>.005</td>
</tr>
<tr>
<td>Mother's Age</td>
<td>-.288</td>
<td>-.165</td>
<td>.004</td>
</tr>
<tr>
<td>Father's Age</td>
<td>.151</td>
<td>.098</td>
<td>.001</td>
</tr>
<tr>
<td>Family Intactness</td>
<td>.523</td>
<td>.076</td>
<td>.006</td>
</tr>
<tr>
<td>Constant</td>
<td>1.711</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared: .049

a p < .01
b p < .05
c p < .10
Parental Companionship

The regression statistics assessing the relationship between background variables and actual parental companionship are displayed in Table 8. Once again, the demographic variables are not a powerful predictor of parental companionship. They explain only 8% of the variance (p=.13). The strongest predictor is the intactness of the home. There is a direct relationship (BETA = .19086) between the presence of both parents in the home and provision of parental companionship. The father's educational level is also positively related to the amount of parental companionship. Perhaps more highly educated fathers spend time with their children because they hold more egalitarian sex role attitudes and do not see childrearing as solely the mother's responsibility.

Lessons

Lessons taken as a child were also considered as an aspect of parental brokering. Table 9 displays the results of the regression analysis with demographic characteristics and number of lessons. The gender of the respondent was the most powerful predictor of the number of lessons taken as a child. Girls take
<table>
<thead>
<tr>
<th>Demographic Variables as Predictors of Parental Companionship</th>
<th>B</th>
<th>BETA</th>
<th>R²</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-.001</td>
<td>-.002</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.024</td>
<td>-.018</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>.141</td>
<td>.059</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td>Mother's Education</td>
<td>-.066</td>
<td>-.157</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>Father's Education</td>
<td>.076</td>
<td>.199c</td>
<td>.020c</td>
<td></td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>-.026</td>
<td>-.086</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>.008</td>
<td>.032</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Mother's Age</td>
<td>.041</td>
<td>.070</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Father's Age</td>
<td>-.048</td>
<td>-.096</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>Family Intactness</td>
<td>.434</td>
<td>.190b</td>
<td>.036b</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.14244</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>.082</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a p < .01  
b p < .05  
c p < .10
TABLE 9  
Demographic Variables as Predictors of Lessons

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>BETA</th>
<th>R²</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-0.187</td>
<td>-0.082a</td>
<td>0.135a (p &lt; 0.01)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-1.626</td>
<td>-0.369</td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>-1.044</td>
<td>-0.126c</td>
<td>0.043c (p &lt; 0.10)</td>
<td></td>
</tr>
<tr>
<td>Mother's Education</td>
<td>0.244</td>
<td>0.170c</td>
<td>0.022</td>
<td></td>
</tr>
<tr>
<td>Father's Education</td>
<td>0.093</td>
<td>0.071</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>-0.113</td>
<td>-0.111</td>
<td>0.097a (p &lt; 0.01)</td>
<td></td>
</tr>
<tr>
<td>Father’s Occupation</td>
<td>-0.084</td>
<td>-0.097</td>
<td>0.018</td>
<td></td>
</tr>
<tr>
<td>Mother’s Age</td>
<td>-0.122</td>
<td>-0.062</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>Father’s Age</td>
<td>0.172</td>
<td>0.091</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Family Intactness</td>
<td>0.709</td>
<td>0.090</td>
<td>0.008</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.50375</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared                      | 0.336a \(p < 0.01\) |
significantly more lessons than boys. Also statistically significant, but with significance levels of only .10, are the respondent's race and mother's education. Approximately 34% of the variance in number of lessons can be explained by the demographic variables (p=.0000). Lessons were the aspect of brokering that the background variables had the strongest impact upon.

Childhood Activities

Childhood activities were the final way that parent brokering was assessed. Demographics had a minimal impact on the respondent's membership in formal organizations as a child. They explained only 6% of the variance (p=.31). The only statistically significant predictor of number of childhood activities was mother's education. Table 10 summarizes the pertinent regression statistics.

In general, the demographic characteristics do not appear to significantly affect the brokering variables. The only variable that consistently appears as a significant predictor was mother's education. This seems likely in that a woman who is highly educated would be more aware of the value of peer socialization outside of the family, and she would be more likely to be aware of brokering opportunities that exist.
# TABLE 10

Demographic Variables as Predictors of
Number of Childhood Activities

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>BETA</th>
<th>R² Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-0.194</td>
<td>-1.057</td>
<td>0.010</td>
</tr>
<tr>
<td>Gender</td>
<td>0.138</td>
<td>0.039</td>
<td>0.001</td>
</tr>
<tr>
<td>Race</td>
<td>0.089</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>0.205</td>
<td>0.177c</td>
<td>0.008</td>
</tr>
<tr>
<td>Father's Education</td>
<td>-0.169</td>
<td>-0.159</td>
<td>0.008</td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>-0.102</td>
<td>-0.124</td>
<td>0.029</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>0.001</td>
<td>0.001</td>
<td>0.002</td>
</tr>
<tr>
<td>Mother's Age</td>
<td>-0.142</td>
<td>-0.089</td>
<td>0.003</td>
</tr>
<tr>
<td>Father's Age</td>
<td>0.053</td>
<td>0.038</td>
<td>0.000</td>
</tr>
<tr>
<td>Family Intactness</td>
<td>0.348</td>
<td>0.055</td>
<td>0.003</td>
</tr>
<tr>
<td>Constant</td>
<td>3.48095</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared: 0.064

\( a \ p < .01 \)
\( b \ p < .05 \)
\( c \ p < .10 \)
Some past research suggests that demographic characteristics (i.e., socioeconomic status and gender) are related to sociability, but this research did not reveal a strong relationship. The results of the regression analysis of demographic variables and sociability are reported in Table 11. The strongest predictor of sociability in this analysis was the respondent's age. The younger the respondent, the higher he or she scored on the sociability index. Perhaps this is due in part to available opportunities to be sociable. Younger college students would be more likely to live in the dormitories or other campus housing which puts them in close proximity to other people. Conversely, older students would be more likely to have a family and be more isolated from campus activities. Father's education and occupation are also slightly ($p < .10$) related to sociability. This is consistent with previous research that has indicated sociability is positively related to socioeconomic status. Taken together, the demographic traits only explain 11% of the variance in sociability scores ($p = .026$).
TABLE 11
Demographic Variables as Predictors of Adult Sociability

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>BETA</th>
<th>R^2 Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-1.463</td>
<td>-.232a</td>
<td>.048a</td>
</tr>
<tr>
<td>Gender</td>
<td>.652</td>
<td>.053</td>
<td>.002</td>
</tr>
<tr>
<td>Race</td>
<td>-2.356</td>
<td>-.103</td>
<td>.010</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>.389</td>
<td>.096</td>
<td>.001</td>
</tr>
<tr>
<td>Father's Education</td>
<td>-.656</td>
<td>-.180c</td>
<td>.006</td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>-.259</td>
<td>-.091</td>
<td>.021</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>-.402</td>
<td>-.167c</td>
<td>.013</td>
</tr>
<tr>
<td>Mother's Age</td>
<td>-1.145</td>
<td>-.209c</td>
<td>.005</td>
</tr>
<tr>
<td>Father's Age</td>
<td>.747</td>
<td>.155</td>
<td>.002</td>
</tr>
<tr>
<td>Family Intactness</td>
<td>1.012</td>
<td>.047</td>
<td>.001</td>
</tr>
<tr>
<td>Constant</td>
<td>41.391</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared .109b

a p < .01
b p < .05
c p < .10
Implications of the Demographic Variables

A review of the literature (see Chapter 2) suggests that demographic traits would have an effect on completed family size, and in this research, the background variables did have a statistically significant, although not an extremely powerful, effect on both number of siblings in a family and the probability of being an only as compared to nononly child. The demographic characteristics were a better predictor of actual family size than whether or not the respondent was an only child.

The demographic variables were also related to the parental brokering variables. The strongest association was between the demographics and the number of lessons followed by parental companionship, organization membership, and provision of peer companionship. Of all the brokering variables, the only statistically relationship was between the background variables and number of childhood lessons. Finally, sociability and the demographic variables were related in a statistically significant manner, but no specific variable was notable as a particularly powerful predictor.
CHAPTER 5
RELATIONSHIPS AMONG FAMILY SIZE, PARENTAL BROKERING AND SOCIABILITY

This chapter will assess the relationships between family size, parental brokering and sociability. Bivariate regression analyses were performed to determine the direct relationships between the variables. Then a series of multiple regression equations were calculated to consider the relative power of family size and parental brokering actions on levels of adult sociability.

Family Size and Sociability

Historically, the idea that siblings are necessary for the development of sociability has been a fairly common belief. In fact, several researchers have suggested that there is a positive relationship between family size and sociability (see Terhune, 1974). However, other researchers have not stressed the number of siblings as being important in the development of sociability. Instead, they have focused on how lack of
siblings socially handicaps an individual (Sutton-Smith and Rosenberg, 1971). Hence, the stereotype of the antisocial only child has developed over time. More recently, though, research has indicated that there is no difference between only and nononly children in sociability levels (Falbo, 1980 and Eiduson, 1976).

One aspect of this research is to assess the relationship between number of siblings and sociability. It is hypothesized that no relationship exists between number of siblings and measures of sociability. In order to assess this prediction, family size was used in two ways. First of all, family size was measured as a continuous variable ranging from 0 (meaning the respondent is an only child) to 5 (the respondent has at least five siblings and there are at least six children in the family). Secondly, family size was measured by a dichotomous variable reflecting only and nononly child status (see Cohen and Cohen, 1976 pp. 62-63 for a discussion of the appropriate use of a dichotomous variable as an independent variable in regression analysis). Measuring family size both ways permits us to conclude whether it is the presence of at least one sibling that affects sociability, or whether the actual number of siblings is more important.
Simple bivariate regression equations were developed using family size as both continuous and dichotomous variables and sociability scores. Table 12 displays the results of the analysis. The results indicate that no direct linear relationship exists between family size and sociability. The presence of a sibling or the number of children in the family explain less than 1% of the variance in sociability scores, and have no statistical significance.

**TABLE 12**
Regression of Family Size and Sociability

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>BETA</th>
<th>T</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Size: Only vs Nononly Children</td>
<td>.19534</td>
<td>.01082</td>
<td>.227</td>
<td>.00012</td>
</tr>
<tr>
<td>Family Size: Number of Siblings</td>
<td>.02193</td>
<td>.00048</td>
<td>.012</td>
<td>.00002</td>
</tr>
</tbody>
</table>
Family Size and Parental Brokering

The previous analysis demonstrated that neither the presence of a sibling nor the number of siblings in a family were directly related to sociability, but perhaps family size indirectly affects sociability through parental brokering. Past research has concluded that family size is inversely related to the amount of parental attention children receive (Knox & Hawke, 1977). Thus, it is logical to assume that parental attention takes the form of brokering at times, and accordingly parents from smaller families broker for their children more than parents from larger families.

An analysis of the effects of family size on the four brokering variables was performed and the results are summarized in Tables 13 and 14. Family size does impact some aspects of parental brokering. The number of siblings is a statistically significant predictor of the provision of peer companionship and the number of lessons taken as a child, but number of siblings is not related to parental companionship or childhood activities. Being an only child also leads to increased efforts on the part of the parents to provide same age companionship, but the absence of siblings does not lead to more brokering in the form of parental companionship, lessons or childhood activities. This indicates that
### TABLE 13
Summary of Regressions of Family Size on Brokering Variables: Continuous Variable

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>B</th>
<th>BETA</th>
<th>T</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Companionship</td>
<td>-.143</td>
<td>-.171</td>
<td>-3.583a</td>
<td>.029</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>-.001</td>
<td>-.023</td>
<td>-.486</td>
<td>.001</td>
</tr>
<tr>
<td>Lessons</td>
<td>-.167</td>
<td>-.111</td>
<td>-2.340b</td>
<td>.012</td>
</tr>
<tr>
<td>Activities</td>
<td>-.093</td>
<td>-.074</td>
<td>-1.555</td>
<td>.005</td>
</tr>
</tbody>
</table>

a p < .01  
b p < .05  
c p < .10

### TABLE 14
The Effect of Sibling Status on Parental Brokering: Bivariate Regressions

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>B</th>
<th>BETA</th>
<th>T</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of Peer Companionship</td>
<td>-.932</td>
<td>-.143</td>
<td>-3.036a</td>
<td>.020</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>-.117</td>
<td>-.054</td>
<td>1.126</td>
<td>.003</td>
</tr>
<tr>
<td>Lessons</td>
<td>.002</td>
<td>.000</td>
<td>.006</td>
<td>.000</td>
</tr>
<tr>
<td>Childhood Activities</td>
<td>-.180</td>
<td>-.036</td>
<td>-.750</td>
<td>.001</td>
</tr>
</tbody>
</table>

a p < .01  
b p < .05  
c p < .10
the actual number of children in the family affects parental brokering more than simply whether or not an individual is an only child.

Thus, we have concluded that sibling size does not directly affect sociability, but does affect some aspects of parental brokering. Now the next step in the analysis is to assess the relationship between the brokering variables and sociability scores.

Parental Brokering and Sociability

Theoretically, parental brokering should be positively related to sociability. Brokering activities by parents place children in social settings permitting them to develop social skills. These social skills developed as a child in turn will most likely lead to increased adult sociability. Furthermore, parental brokering provides the child interaction with peers which may take the place of sibling interaction in the development of social skills.

First of all, bivariate regression equations were run for each brokering variable with sociability. As Table 15 indicates, all four brokering variables have a statistically significant impact on sociability scores when considered separately.
TABLE 15
Regression of Parental Brokering with Sociability:
Summary of Bivariate Regression Analysis

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>B</th>
<th>BETA</th>
<th>$r^2$</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Companionship</td>
<td>.347</td>
<td>.256</td>
<td>.066</td>
<td>5.574a</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>.927</td>
<td>.112</td>
<td>.013</td>
<td>2.367b</td>
</tr>
<tr>
<td>Lessons</td>
<td>.492</td>
<td>.164</td>
<td>.027</td>
<td>3.500a</td>
</tr>
<tr>
<td>Activities</td>
<td>.646</td>
<td>.181</td>
<td>.033</td>
<td>3.854a</td>
</tr>
<tr>
<td></td>
<td>a p &lt; .01</td>
<td>b p &lt; .05</td>
<td>c p &lt; .10</td>
<td></td>
</tr>
</tbody>
</table>

However, the brokering variables are not completely independent. Table 16 shows that the four brokering variables have low to moderate positive intercorrelations. Thus, the independent effects of each brokering variable were assessed in a single multiple regression equation. The results are displayed in Table 17. When all parental brokering variables are entered into the equation, all are statistically significant at the .10 level. Provision of peer companionship was the strongest predictor of sociability, followed by childhood activities, lessons and actual parental companionship. The brokering variables explain 7.7% of the variance in sociability scores (p=.00).
<table>
<thead>
<tr>
<th></th>
<th>Peers</th>
<th>Parental Companionship</th>
<th>Lessons</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Companionship</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>.072</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood Lessons</td>
<td>.220</td>
<td>.072</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Childhood Activities</td>
<td>.140</td>
<td>.140</td>
<td>.230</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Mean: 1.977 1.634 2.885 3.061
SD: 2.232 .747 2.060 1.729

Total: 443 443 443 443
TABLE 17
The Effects of Parental Brokering on Sociability: Multiple Regression Equation

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>BETA</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Companionship</td>
<td>.438</td>
<td>.158</td>
<td>3.341a</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>.639</td>
<td>.077</td>
<td>1.663c</td>
</tr>
<tr>
<td>Lessons</td>
<td>.262</td>
<td>.088</td>
<td>1.786c</td>
</tr>
<tr>
<td>Activities</td>
<td>.433</td>
<td>.121</td>
<td>2.496b</td>
</tr>
</tbody>
</table>

a p < .01
b p < .05
c p < .10

Family Size, Parental Brokering and Sociability

When considering adult sociability, the analysis thus far has demonstrated that family size is unrelated to sociability, but parental brokering has a statistically significant impact on sociability scores. Furthermore, family size is inversely related to parental brokering activities. This suggests that brokering has a more important effect on adult sociability than number of siblings in a family. To test these relationships further, regression analysis was performed to compare the relative predictive significance of family size and parental brokering on sociability.
First of all, regression techniques were used to assess the relationship of number of siblings in the family and sociability. Table 18 reports the results of the regression equation. Provision of peer companionship stands out as an important determinant of sociability. The other three brokering variables are also statistically significant predictors of sociability at the .01 level. These findings also indicate that with parental brokering variables controlled the number of siblings in a family is unrelated to adult sociability.

<table>
<thead>
<tr>
<th>TABLE 18</th>
<th>Sociability: Effects of Number of Siblings and Parental Brokering</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
</tr>
<tr>
<td>No. of Siblings</td>
<td>.059</td>
</tr>
<tr>
<td>Peer Companionship</td>
<td>1.415</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>.990</td>
</tr>
<tr>
<td>No. of Lessons</td>
<td>.173</td>
</tr>
<tr>
<td>Childhood Activities</td>
<td>.427</td>
</tr>
</tbody>
</table>

a p < .01  
b p < .05  
c p < .10
Secondly, the parental brokering variables and family size as a dichotomous variable were used to calculate a regression equation. The findings are summarized in Table 19. Again, peer companionship was the most notable predictor of sociability followed by childhood activities, parental companionship and number of lessons. Once more, family size was not significantly associated with sociability.

| TABLE 19 |
| Sociability: The Effects of Having a Sibling vs Not Having a Sibling and Parental Brokering Variables |

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>BETA</th>
<th>T</th>
<th>R² Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sibling Status</td>
<td>-.148</td>
<td>.001</td>
<td>-.170</td>
<td>.000</td>
</tr>
<tr>
<td>Peer Companionship</td>
<td>1.404</td>
<td>.041</td>
<td>5.459a</td>
<td>.065</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>.949</td>
<td>.081</td>
<td>1.715c</td>
<td>.003</td>
</tr>
<tr>
<td>No. of Lessons</td>
<td>.260</td>
<td>.076</td>
<td>1.773c</td>
<td>.013</td>
</tr>
<tr>
<td>Childhood Activities</td>
<td>.421</td>
<td>.118</td>
<td>2.265b</td>
<td>.012</td>
</tr>
</tbody>
</table>

a p < .01
b p < .05
c p < .10
These analyses suggest that parental brokering is more important than family size in determining adult sociability. Overall, peer companionship is the strongest indicator of sociability.

Demographics, Family Size, Parental Brokering and Sociability

Generally, the model proposed in Chapter 1 has been supported. There is an inverse relationship between family size and parental brokering, a positive relationship between brokering and adult sociability, and family size is unrelated to sociability. However, one final question remains. Does the inclusion of the demographic variables in the model significantly alter the results? As discussed in Chapter 2, the demographic variables did not have a particularly strong impact on parental brokering variables, with the exception of lessons. They were, however, statistically significant predictors of family size and sociability.

Therefore, it is necessary to calculate two final regression equations to assess the relative effects of the demographic variables, family size, and parental brokering on sociability. The first equation was computed using family size as a continuous variable. Table 20 displays the results.
TABLE 20
Regression of Demographic Characteristics, Number of Siblings, Parental Brokering on Sociability

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>B</th>
<th>BETA</th>
<th>$R^2$ Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-.193</td>
<td>-.196a</td>
<td>.050a</td>
</tr>
<tr>
<td>Gender</td>
<td>-.115</td>
<td>-.001</td>
<td>.001</td>
</tr>
<tr>
<td>Race</td>
<td>-1.052</td>
<td>-.032</td>
<td>.009</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>-.288</td>
<td>-.067</td>
<td>.001</td>
</tr>
<tr>
<td>Father's Education</td>
<td>.015</td>
<td>.000</td>
<td>.015</td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>-.001</td>
<td>-.026</td>
<td>.014</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>.019</td>
<td>.057</td>
<td>.007</td>
</tr>
<tr>
<td>Mother's Age</td>
<td>-.493</td>
<td>-.092</td>
<td>.005</td>
</tr>
<tr>
<td>Father's Age</td>
<td>.138</td>
<td>.028</td>
<td>.006</td>
</tr>
<tr>
<td>Family Intactness</td>
<td>-.558</td>
<td>-.025</td>
<td>.002</td>
</tr>
<tr>
<td>Family Size</td>
<td>.278</td>
<td>.061</td>
<td>.001</td>
</tr>
<tr>
<td>Peer Companionship</td>
<td>1.125</td>
<td>.208a</td>
<td>.029b</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>.606</td>
<td>.052</td>
<td>.028</td>
</tr>
<tr>
<td>Number of Lessons</td>
<td>.091</td>
<td>.031</td>
<td>.002</td>
</tr>
<tr>
<td>Childhood Activities</td>
<td>.369</td>
<td>.104b</td>
<td>.011b</td>
</tr>
<tr>
<td>Constant</td>
<td>37.869</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared .180a

a p<.01
b p<.05
c p<.10
Of the demographic variables, the only statistically significant predictor is the respondent's age. Additionally, two brokering variables affect sociability at a statistically significant level. Provision of peer companionship stands out as the most powerful predictor of sociability followed by the number of childhood activities. Family size was not importantly related to sociability scores. This suggests that when demographic characteristics and parental brokering are controlled there is no relationship between the number of siblings an individual has and measures of adult sociability.

The R-squared statistics indicate that 18.7% of the variance in sociability scores was explained by the background traits, number of siblings and brokering activities on the part of the parents. The demographics explain the most variance with an R-squared of .019. The brokering variables account for 7% of the variance. And family size had a minimal impact accounting for only .1% of the variance in sociability scores.

A second equation was computed with family size as a dichotomous variable. As Table 21 indicates, the results do not differ greatly from the previous analysis. Once more, the respondent's age, provision of peer companionship and childhood activities were the only statistically significant variables. The R-squared
TABLE 21
Regression of Demographic Characteristics, Only-Non-only Child Status, and Parental Brokering on Sociability

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>B</th>
<th>BETA</th>
<th>$R^2$ Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent Age</td>
<td>-.208</td>
<td>-.177a</td>
<td>.050a</td>
</tr>
<tr>
<td>Gender</td>
<td>-.162</td>
<td>-.013</td>
<td>.001</td>
</tr>
<tr>
<td>Race</td>
<td>-1.192</td>
<td>-.036</td>
<td>.009</td>
</tr>
<tr>
<td>Mother's Education</td>
<td>-.295</td>
<td>-.069</td>
<td>.001</td>
</tr>
<tr>
<td>Father's Education</td>
<td>.022</td>
<td>.001</td>
<td>.015c</td>
</tr>
<tr>
<td>Mother's Occupation</td>
<td>-.001</td>
<td>-.022</td>
<td>.014c</td>
</tr>
<tr>
<td>Father's Occupation</td>
<td>.019</td>
<td>.058</td>
<td>.007</td>
</tr>
<tr>
<td>Mother's Age</td>
<td>-.423</td>
<td>-.079</td>
<td>.005</td>
</tr>
<tr>
<td>Father's Age</td>
<td>.192</td>
<td>.039</td>
<td>.006</td>
</tr>
<tr>
<td>Family Intactness</td>
<td>-.567</td>
<td>-.025</td>
<td>.002</td>
</tr>
<tr>
<td>Sibling Status</td>
<td>.053</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Peer Companionship</td>
<td>1.098</td>
<td>.203a</td>
<td>.030b</td>
</tr>
<tr>
<td>Parental Companionship</td>
<td>.584</td>
<td>.050</td>
<td>.003</td>
</tr>
<tr>
<td>Number of Lessons</td>
<td>.064</td>
<td>.025</td>
<td>.002</td>
</tr>
<tr>
<td>Childhood Activities</td>
<td>.363</td>
<td>.102c</td>
<td>.028c</td>
</tr>
<tr>
<td>Constant</td>
<td>38.489</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared

| a p < .01 |
| b p < .05 |
| c p < .10 |
of .169 was a bit lower in this equation, suggesting that perhaps the actual number of siblings is a slightly better predictor of sociability than whether or not an individual is an only child. Again, the demographics accounted for the largest amount of variance (10.5%), followed by the brokering variables (6.3%) and lastly family size (.1%).

This chapter has reported the results of the statistical analyses. The next chapter will be devoted to a summary of the overall findings, discussion of the results and implications this research has for future studies.
CHAPTER 6
REVIEW OF THE FINDINGS, DISCUSSION AND IMPLICATIONS FOR FURTHER RESEARCH

Many studies have been conducted to assess the relationship between family size and sociability. It appears that much of this research was inspired by the idea that children learn to "get along with others" through interaction with siblings. Accordingly, some researchers suggested a positive relationship between the number of siblings and sociability, and the stereotype of the maladjusted, antisocial only child became quite prevalent.

Empirical studies relating family size and sociability have yielded contradictory findings. Early researchers posited a positive relationship between number of siblings and measures of sociability, and found minimal support for their contentions. However, current research on family size and sociability generally does not support the view that siblings are necessary to get along with others. Only children appear to be as socially outgoing and popular as their
nononly counterparts.

This study re-evaluated the relationship between family size and sociability, but with some refinements over past efforts. First of all, most past research studied children, but this research utilized adult subjects to ensure family completeness and to capture the total maturational effects of growing up in a family of a given size. Secondly, birth order effects were controlled by only using youngest children as the control group. Most past research has not separated birth order from family size effects. Finally, instead of simply focusing on the direct relationship between family size and sociability, consideration was given to family socializing practices that theoretically might influence sociability, and how those practices were affected by family size.

Specifically, this study hypothesized that there would be no direct relationship between family size and sociability. Rather, family size influences socialization practices by parents, which in turn has a positive effect on measures of adult sociability. The data were collected with a mailed survey methodology (N = 443). Family size was assessed in two ways. Respondents were categorized into only or nononly children and family size was measured according to the
number of brothers and sisters the respondent has. This dual method of measuring family size allowed us to determine if the lack of siblings or actual number of siblings in the family is a more important influence on parental brokering and sociability. Provision of peer companionship, parental companionship, number of childhood lessons and membership in youth organizations represented parental brokering. A ten item Likert scale was administered to measure adult sociability.

As predicted, there was no significant relationship between family size and sociability regardless of how family size was assessed. This indicates that interaction with siblings apparently does not positively affect sociability as sibling influence theory has maintained.

Thus, other explanations must be found to account for differing levels of sociability among individuals. This research is suggesting that interaction with others is important to the development of adult sociability, but siblings are not the only source of peer interactions. Extensive opportunities exist for children to become involved with same age companions outside of the nuclear family. However, in order to take advantage of these possibilities for peer socialization, parents must become involved in mediating their child(ren)'s contact with potential socialization
agents other than the immediate family.

It has been repeatedly supported through empirical research, that the smaller the family the more attention each child receives. Therefore, it makes sense to assume that parents of fewer children will take on a more active brokering role than parents with several children. Family size would be inversely related to parental brokering because when siblings are not available within the family unit for companionship, parents seek playmates for their child(ren) from sources outside of the familial unit.

This study assessed the relationship between family size and extent of parental brokering actions. Family size did impact some aspects of parental brokering. Fewer number of siblings and being an only child led to increased efforts on the part of parents to provide peer companionship. These findings suggest that peer companionship is viewed as a valued activity that will be actively sought if not readily available from siblings within the family. The number of siblings also influenced number of lessons taken as a child. There was a statistically significant inverse relationship. Since lessons are often taken on an individual basis, they do not directly offer companionship with others. Nevertheless, lessons might influence sociability indirectly by teaching an individual useful social
skills. However, this association between family size and number of lessons might also be due to financial considerations. Lessons can be quite expensive and accordingly it is easier to afford lessons for one or two children than three or four. Number of lessons was positively correlated ($r = .34$) with father's occupation supporting the idea that economic well-being determines how many lessons are taken.

Parental companionship was not related to family size. To some extent, this was not surprising since by the nature of the parental role, parents, especially mothers, are expected to spend time with their children. The amount of parental companionship was uniformly high. Eighty-six percent of the respondents recalled doing activities with their mother, and seventy-six percent reported that they did activities with their fathers. Only eight percent said they never did anything with either parent and 70% responded that both parents provided them with companionship. Likewise, family size did not affect the number of childhood activities. There was considerable variance in the number of youth organizations respondents belonged to, but perhaps variables such as place of residence (rural or urban location) or availability of opportunities to join impact involvement rather than family size.
Since bivariate regression analysis demonstrated no relationship between family size and sociability as well as indicated that family size is quite strongly related to some dimensions of parental brokering, a multiple regression equation was calculated to determine the independent effects of family size and each brokering variable on sociability with the other variables held constant. Regardless of how family size was measured, it was not a significant predictor of adult sociability. The brokering variables did have a statistically significant impact on sociability scores albeit not an extremely powerful one. Provision of peer companionship had the most impact on sociability followed by childhood activities, parental companionship and number of lessons. Taken together, parental brokering actions explained more than six times the variance in sociability than family size.

Although prior analysis indicated that the demographic variables did not have a notable effect on sociability scores in this research, a final equation was calculated incorporating them into the model since previous literature had demonstrated their importance. The entire equation explained approximately 18% of the variance in sociability and was statistically significant at .0000 level. However, one must be careful when drawing conclusions by solely considering
statistical significance. With the sample size that is used in this analysis, there is the likelihood that even small deviations in measures will appear statistically significant.

The results of this research are consistent with past studies that found no relationship between family size and indicators of sociability. Furthermore, the findings suggest that peer interaction positively affects the development of sociability, and children from smaller families apparently have more opportunities for contact with others similar in age because of parental brokering activities. Parents of children from smaller families brokered more for their children—especially in the form of providing peer companionship—than parents from larger families did.

The idea that an individual needs siblings to be well adjusted and sociable has been fairly commonplace. However, as postulated earlier, perhaps it is not just sibling interaction that is necessary to become social human beings. Instead, it is any social interaction with similar others that allows one to practice social skills and become comfortable in social settings that influences the development of sociability. This research provides support for this contention. Since there was no relationship between family size and sociability scores, and there was an inverse
relationship between family size and parental brokering, it is possible to assume that children from large families interact with siblings and develop sociability while children from smaller families are provided with more opportunities for contact with age-mates outside of the nuclear family. This suggests that possibly all children are involved in roughly equal amounts of peer interaction. If it is not available within the family, it will be sought elsewhere.

Unfortunately, this research did not assess the amount of sibling interaction the respondents had as a child. It was only assumed that if a respondent had siblings, they would inevitably interact with each other and subsequently influence one another's social development. Thus future research must be performed in which the extent of sibling interaction is measured more specifically, and then related to family size and sociability scores. The researcher could then better compare the effects of peer interaction obtained via parental brokering to that acquired from siblings, and this would help to clarify the relationship between various forms of peer interaction as a child and levels of adult sociability. Given the results of this analysis, it is plausible that the source of peer interaction is not significant--only the amount of contact with similar others.
While each link within the model used in this research were all at least minimally supported, the model itself is not a very powerful one. Hence, future research must be conducted considering additional variables that might be related to both family size and sociability. Adding the concepts of intelligence and self-esteem as intervening variables between family size and sociability would be a valuable task. High self-esteem and high intelligence have all been related to small family size and increased levels of sociability in the past. Theoretically, they could make a significant contribution to the explanatory capabilities of the model.

It might also be useful to somehow incorporate social skills or competence into the analysis. As suggested previously, one must possess adequate social skills in order to become a sociable individual, and social skills could conceivably be related to family size. A large family would foster the growth of social skills because there would be plenty of opportunities to practice them.

It would also be beneficial to utilize a more representative sample. The use of college students may have diminished the effects of the demographic variables, and college students are in an environment that is conducive to being social.
One method of improving the model is to include additional variables, but it might also be worthwhile to study family configuration in more detail. This research considered the difference in using family size as actual number of siblings or by only/nononly sibling status. Although actual number of siblings is a more precise variable, there was no significant difference in the results depending on how family size was measured. This does not mean that family configuration does not affect the development of its members. Perhaps the gender or age spacing of the children are more important influences on social growth. Do same gender siblings affect each other more than opposite gender ones? Is it better to have children close in age so they can share experiences? Or does this create too much sibling rivalry, so that a wide age gap is "better" in which the younger sibling can learn from the older one? As of now, this researcher is aware of no research linking family size, gender of siblings and age spacing to sociability. These variables have been linked to intelligence, and found to be significant. Therefore, it is reasonable to speculate they might also be associated with sociability and accordingly are issues that future research should address.
In summary, this research has examined the relationship between family size and adult sociability as mediated through parental brokering opportunities. Sociability scores were unrelated to family size. But family size was inversely related to parental brokering, which was positively related to sociability. This suggests that peer interaction impinges upon the development of sociability. In large families this type of interaction is usually experienced with siblings, but if siblings are not available as in the case of smaller families, parents will broker for their children to provide them with peer socialization opportunities outside of the family. Social activities outside of the family can apparently counterbalance a lack of siblings in providing an environment conducive to the development of sociability. Thus the contention that only children lack sociability because they have no siblings is unfounded. Further research is needed to determine just what link, if any, family size and sociability might have as mediated by other variables.
Adams, Bert M.  

Altus, William D.  

Arlow, J.A.  

Babbie, Earl  

Babbie, Earl  

Bailey, Kenneth D.  

Bayer, Alan E.  

Belmont, Lillian and Francis A. Marolla  

Berschied, Ellen and Elaine Walster  

Blake, Judith  
Blake, Judith

Bohannon, E.W.

Bonjean, Charles

Bonney, Merl E.

Bossard, James H.S. and Eleanor S. Boll

Bréland, Hunter

Brozan, Nadine

Burke, Maurice

Cherlin, Andrew J.

Chun, Ki-Taek, Sidney Cobb and John R.P. French Jr.

Claudy, J.G., W.S. Farrell Jr. and C.W. Dayton
Cohen, Jacob and Patricia Cohen  

Cutts, Norma and Nicholas Mosely  

Davis, Edith  

Dillman, Don A.  

Douglas, J.W.B. and Bloomfield, J.M.  

Dyer, Dorothy T.  

Eiduson, B.T.  

Elkin, Frederick and Gerald Handel  

Eysenck, H.J.  

Falbo, Toni  

Falbo, Toni  

Falbo, Toni  
Falbo, Toni

Falbo, Toni

Falbo, Toni

Falbo, Toni

Farber, Bernard

Fenton, Norman

Flanagan, John C., Frederick B. Davis, John T. Dailey, Marion F. Shaycoft, David B. Orr, Isadore Goldeberg, and Clinton A. Neyman

Garbarino, James

Guilford, R.B. and D.A. Worcester

Gough, Harrison G.

Goyder, John C.
Griffith, Janet

Hawke, Sharryl and David Knox

Hawke, Sharryl and David Knox

Heberlein, Thomas A. and Robert Baumgartner,

Heise, David R. and Essie P.M. Roberts

Hilton, Irma

Houseknecht, Sharon K.

Huber, Joan and Glenna Spitze

Kammeyer, Kenneth

Keniston, Kenneth

Landis, Paul H.

Miller, N. and G. Maruyama,
Moore, Bernice Milburn and Wayne H. Holtzman
1965 Tomorrow's Parents: A Study of Youth and Their Families. Austin, TX: University of Texas Press.

Mott, Frank L. and R. Jean Haurin

Neal, E.

Oberlander, Mark and Noel Jenkins

Peck, Ellen

Pepinsky, H.B., L. Siegel and E.L. VanAtta

Placek, Paul J. and Rebecca Placek

Polit, Denise

Rosen, Bernard C.

Scott, Christopher

Sears, Robert R.

Sears, Robert R., Eleanor R. Maccoby and Harry Levine
1957 Patterns of Childrearing. Evanston, IL: Row, Peterson.
Snow, M.E., C.N. Jacklin and E.E. Maccoby

Stokes, C. Shannon and Nan E. Johnson

Stuart, John

Sutton-Smith, B. and B.G. Rosenberg

Terhune, Kenneth

Thompson, Vaida A

Toman, Walter and Eleonore Toman

Waite, Linda and Signe Wetrogan

Ward, A.

Witty, Paul A.

Youniss, James
Zajonc, R.B.

Zajonc, R.B. and Gregory B. Markus
1975 "Birth Order and Intellectual Development."
Psychological Review 82:74-88.
APPENDIX A
DATA COLLECTION INSTRUMENT

First of all, I would like to ask some general questions about your family size.

Q-1 How many children would you like to have in your family? _______ CHILDREN

Q-2 Please indicate why you answered the previous question the way you did.

Q-3 From the time you were born until age 12, how many brothers and sisters did you have? _______ (INCLUDE STEPSIBLINGS)

Q-4 How many living brothers and sisters do you currently have? _______ (INCLUDE STEPSIBLINGS)

Q-5 Please list them by sex and age. (DO NOT INCLUDE YOURSELF)

SEX  AGE  SEX  AGE
SIBLING #1 ____________________ SIBLING #4 ____________________
SIBLING #2 ____________________ SIBLING #5 ____________________
SIBLING #3 ____________________ SIBLING #6 ____________________

Q-6 What is your present age? _______ YEARS

Q-7 What is your sex? (CIRCLE NUMBER)
1. MALE
2. FEMALE

My next questions are about activities when you were growing up. When answering the following questions, please think about your life up until age 12.

Q-1 Who do you feel influenced you the most while you were growing up?

Q-2 Did you attend nursery school before entering kindergarten? (CIRCLE NUMBER)
1. YES
2. NO

Q-3 Did you attend a day care center before entering kindergarten or during the summer months? (CIRCLE NUMBER)
1. YES
2. NO

Q-4 Did you ever attend summer camp as a child? (CIRCLE NUMBER)
1. YES
2. NO
Q-5 Did you take vacations with your family when you were a child? (CIRCLE NUMBER)

1. YES
2. NO
   IF NO SKIP TO Q-7

Q-6 Did you ever take a friend along while traveling?

1. YES
2. NO

Q-7 As a child, did your mother provide you with companionship by doing things with you herself? (CIRCLE NUMBER)

1. YES
2. NO
   IF NO OR NOT APPLICABLE
3. NOT APPLICABLE
   SKIP TO Q-9

Q-8 Please list the two most common activities you did together.

__________________________________________________________

Q-9 As a child, did your father provide companionship for you by doing things with you himself? (CIRCLE NUMBER)

1. YES
2. NO
   IF NO OR NOT APPLICABLE
3. NOT APPLICABLE
   SKIP TO Q-11

Q-10 Please list the two most common activities you did together.

__________________________________________________________

Q-11 Did your parents help you to make friends by introducing you to others your own age? (CIRCLE NUMBER)

1. YES
2. NO

Q-12 Now I'm interested in the types of lessons you might have taken as a child. Please circle the number beside each of the lessons you took as a child up to the age of 12. Circle all that are appropriate.

1. NO LESSONS
2. PIANO/ORGAN
3. BAND/ ORCHESTRA
4. GUITAR
5. TAP DANCE
6. BALLET
7. SOCIAL DANCING
8. BATON
9. GYMNASTICS
10. SWIMMING
11. MARTIAL ARTS
12. HORSEBACK RIDING
13. GOLF
14. PHOTOGRAPHY
15. SINGING
16. COOKING
17. SEWING
18. TENNIS
19. ART
20. OTHER (PLEASE SPECIFY)

over ->
APPENDIX A CONTINUED

Q-13 How please indicate which of the following activities you were involved in as a child up to 12 years old. Circle the number of all that are appropriate.

1. NO ACTIVITIES 6. CHURCH GROUPS 11. MUSICAL ORGANIZATIONS
2. GIRL/BOY SCOUTS 7. PEEWEE FOOTBALL 12. 4-H
3. BROWNISS 8. PEEWEE CHEERLING 13. YMCA/YWCA
4. CUB SCOUTS 9. LITTLE LEAGUE 14. OTHER (PLEASE SPECIFY)
5. CAMPFIRE GIRLS 10. OTHER ORGANIZED SPORTS

Next, I would like to ask you about your present activities.

Q-1 How many people of the same sex do you consider to be a close friend? __________

Q-2 How many people of the opposite sex do you consider to be a close friend? __________

Q-3 List any organisation you are presently a member of. __________

Q-4 Please circle the number beside any of the following hobbies or leisure activities you currently do.

1. NO HOBBIES 14. MAKING MODELS 27. GARDENING
2. DRAWING 15. WOODWORKING 28. HUNTING
3. SCULPTING 16. SEWING 29. FISHING
4. PAINTING 17. KNITTING 30. BICYCLING
5. ACTING 18. CROCHETING 31. SKIING
6. SINGING 19. EMBROIDERING 32. HORSEBACK RIDING
7. DANCING 20. COOKING 33. READING
8. STAMPS 21. PLAYING BASEBALL 34. LISTENING TO MUSIC
9. COINS 22. PLAYING FOOTBALL 35. PLAYING MUSIC
10. ROCKS 23. RACQUET SPORTS 36. ATTENDING CONCERTS/PLAYS
11. PHOTOGRAPHY 24. SWIMMING 37. OTHER (PLEASE SPECIFY)
12. GOLF 25. BASKETBALL
13. BOWLING 26. RUNNING

Q-5 Following are ten statements that describe how you might feel about yourself. Think about statements a through j, and circle the number that is most appropriate.

Circle 1 if the statement describes you extremely well;
Circle 2 if the statement describes you quite well;
Circle 3 if the statement describes you fairly well;
Circle 4 if the statement describes you slightly;
Circle 5 if the statement describes you not very well.
APPENDIX A CONTINUED

a. I like to spend a good deal of time by myself.
   1 2 3 4 5
b. I'd rather be with a group of friends than at home by myself.
   1 2 3 4 5
c. People consider me the quiet type.
   1 2 3 4 5
d. I couldn't get along without having people around me most of the time.
   1 2 3 4 5
e. I enjoy getting to know people.
   1 2 3 4 5
f. I like to be with people most of the time.
   1 2 3 4 5
g. I go out of my way to be with friends.
   1 2 3 4 5
h. I prefer reading a good book to going out with friends.
   1 2 3 4 5
i. People consider me good-natured.
   1 2 3 4 5
j. I am friendly.
   1 2 3 4 5

Finally, I would like to ask you a few questions about yourself to help interpret the results.

Q-1 Did both parents live in the home during your childhood? (CIRCLE NUMBER)
   1. YES ———- [IF YES SKIP TO Q-4]
   2. NO

Q-2 Was your single parent home due to (CIRCLE NUMBER)
   1. DEATH
   2. DIVORCE
   3. OTHER (PLEASE SPECIFY) ______________________

Q-3 At what age did your household become a single parent home? _______ YEARS

Q-4 When you were growing up, was your father employed full-time? (CIRCLE NUMBER)
   1. YES
   2. NO ———- [IF NO OR NOT APPLICABLE]
   3. NOT APPLICABLE ———- [SKIP TO Q-6]

Q-5 What was his occupation? (BE SPECIFIC) ______________________
Q-4 When you were a child, was your mother employed outside the home? (Circle number)

1. Yes
2. No
3. Not applicable

Q-7 What was her occupation? (Be specific)

Q-8 What is the highest level of education your father has completed?

1. Grade School
2. High School
3. Technical School or 2 Year College
4. Some College
5. 4 Year College
6. Post Graduate Degree

Q-9 What is the highest level of education your mother has completed?

1. Grade School
2. High School
3. Technical School or 2 Year College
4. Some College
5. 4 Year College
6. Post Graduate Degree

Q-10 How old were your parents when you were born? If you are not certain, please make an approximate guess.

Mother _______ years old
Father _______ years old

Q-11 Which of the following categories best describes your racial or ethnic identification? (Circle number)

1. White
2. Black
3. Oriental
4. Native American
5. Chicano
6. Other (Please specify)

Q-12 Please circle the number next to your class rank as of Spring 1984.

1. Freshman
2. Sophomore
3. Junior
4. Senior
5. Graduate Student
6. No longer affiliated with OSU
7. Other (Please specify)

Thank you for your cooperation.
Dear Fellow OSU Student:

The American family is currently undergoing rapid changes. One recent trend has undoubtedly been toward smaller families. The presence of smaller families in American society affects everyone and your answers to the enclosed questionnaire will help determine what some of these effects might be. The results of this study will be used to complete my graduate work at the Ohio State University and have implications for counselors, teachers and family policy-makers.

You are one of a small number of OSU students asked to take part in my research. Your name was selected at random from the 1983-84 student directory. In order that my results will be truly representative, it is important that each questionnaire be completed and returned. Even if you have graduated or are no longer affiliated with OSU, it is still important for you to fill out and return the questionnaire. It should take only about ten minutes of your time.

I can assure you complete confidentiality. The questionnaire has been given a number for mailing purposes only, and your name will never be attached to the results.

I would be happy to answer any questions you might have. Please write or call me at my academic adviser, Dr. Alfred C. Clarke - telephone number 614/422-6681.

Thank you for your assistance.

Sincerely,

Barbara E. Johnson
Ph.D. Candidate
Department of Sociology

Enclosure
Dear Fellow OSU Student:

Several weeks ago I sent you a brief survey regarding some aspects of the American family. If you have not yet responded, please take a few moments to complete and return the enclosed questionnaire.

Your answers will be kept completely confidential, and your prompt response is important to the successful completion of my research. This study is being used to complete my graduate education at The Ohio State University and has implications for family policy makers.

I would be happy to answer any questions you might have. Please contact me through the Department of Sociology 614/422-6681.

Your cooperation is greatly appreciated.

Sincerely,

Barbara L. Johnson
Ph. D. Candidate
Department of Sociology

Enclosure
Dear Fellow OSU Student:

A few weeks ago I mailed you a brief questionnaire pertaining to some aspects of the American family. If you have not yet returned the survey, please take a few minutes to do so immediately. Your answers are very important to the outcome of my research. If you have misplaced the questionnaire, please write or call me at the Department of Sociology (614/422-6681) for a replacement.

Thank you for your assistance.

Barbara E. Johnson
Ph. D. Candidate
Department of Sociology
300 Bricker Hall
The Ohio State University
Columbus, Ohio 43210