The impact of siblings and parenting style on social skill development in young adult females

Genevieve Cordero Arca

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THE IMPACT OF SIBLINGS AND PARENTING STYLE
ON SOCIAL SKILL DEVELOPMENT
IN YOUNG ADULT FEMALES

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Psychology:
Life-Span Development Psychology

by
Genevieve Cordero Arca
June 2001
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June 2001

Approved by:
Laura Kamptner, Chair, Psychology
Sharon Ward
Amanda Wilcox-Hertzog

6-6-01 Date
ABSTRACT

The purpose of the current study was to examine the effects of parenting style and having vs. not having siblings on social skill development. It was hypothesized that: 1) individuals raised with an authoritative parenting style would demonstrate better social skills than individuals raised with an authoritarian parenting style; 2) "onlys" (i.e., individuals without siblings) would demonstrate less effective social skills compared to those who have siblings; and 3) parenting style and the quality of the sibling relationship would interact to influence social skill development (i.e., individuals with authoritative parents and/or a supportive sibling relationship would score better on social skill development than those with authoritarian parents and/or conflictual sibling relationships). Results showed support for the notion that authoritative was positively and significantly correlated with (global) social skills and that there was a positive and significant correlation between warmth in the sibling relationship and (global) social skills. Contrary to expectations, however, there was no
significant interaction between parenting styles, sibling "status", nor the quality of the sibling relationship. Overall findings provide support for the declarations made by current theories that parent-child and sibling relationships may not be the sole determinants of social skill development.
ACKNOWLEDGEMENTS

Much appreciation is given to Dr. Laura Kamptner for her consistent guidance, time, support, and friendship during the entire process of this study. I would also like to acknowledge my committee members, Dr. Sharon Ward and Dr. Amanda Wilcox-Herzog for their time and encouragement they provided me in completing this thesis. In addition, I would like to thank my family and friends for their help and reassurance. Without all the support I received, my work would have been undeniably more difficult. They have, without question, made this thesis possible.
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CHAPTER ONE

INTRODUCTION

A growing number of researchers have demonstrated that the attainment of effective social skills is very important to the healthy development of an individual (Riggio, 1986). Research shows that adequate social skills lead to a variety of critical outcomes in life, including obtaining positive peer relations, self management, compliance, and assertion (Caldarella & Merrell, 1997). Conversely, deficits in social skills have been associated with placing children and adolescents at risk for developing antisocial and violent behavior patterns (Walker, Colvin, & Ramsey, 1995), and increasing the number of problems related to academic performance and self-control (McCollock & Gilbert, 1991). The purpose of the present study is to examine influences on the development of effective social skills, specifically, the relative effects of parenting styles and siblings on social skill development in young women.
Influences on the Development of Social Skills

Researchers have found that various factors can impact the development of successful and effective social skills (Cicirelli, 1995; Falbo & Poston, 1993; Riggio, 1999). The type of parenting style an individual experiences and the presence of siblings, for example, have been found to impact the quality of social skills an individual attains (Howarth, 1980; Riggio, 1999; Stocker, 1993). Each of these is discussed below.

Parenting Style  Research on parenting style has shown that the quality and type of parenting style has a major impact on social skill development. Authoritative parenting is characterized by parental warmth, and while it encourages children to be independent, parents still place limits on their actions (Santrock, 1995). This parenting style also encourages verbal give-and-take and uses an inductive method of discipline. The authoritative parenting style has been shown through research to be optimal with regards to social skill development (Herz, 1999). For example, children from authoritative homes show high levels of social competency and adjustment, and are more likely to show the following: self-reliance, high self-esteem, prosocial
behavior, and a high sense of self-worth (Herz, 1999; Hill, 1995; Santrock, 1995). These factors, in turn, enable the children to create positive social environments. Conversely, authoritarian parenting has been linked to poor social adaptation because of the constant intrusiveness and insensitivity of the parents (Volling & Belsky, 1992). Authoritarian parents also tend to lack nurturance, to be excessively controlling, voice constant disapproval, and be psychologically unavailable, which reduces positive social outcomes (Blatt & Homann, 1992). Authoritarian parents do not foster many positive interactions or social skills and actually may encourage increased amounts of aggressive and impatient behaviors (Harralson & Lawler, 1992).

Moreover, children with authoritarian parents tend to lack social competence with peers, withdraw instead of initiating social interactions, have lower self-esteem, and have negative self-perceptions with regards to social competencies (Santrock, 1995).

In addition to the above, children most often perceive their parents as role models, and they use what they learn by observing parental behavior then and generalize those skills to their relationships with
others (Parke, MacDonald, Beitel, & Bhavnagri, 1988). The earliest and most basic social skills are usually learned from parents (Hill, 1995) and, consequently, they become a key factor in how a child’s social skills influence later relationships. Therefore, parents strongly influence a child’s early social skills and later social relationships due to this “generalization” phenomenon.

Sibling “Status” Many researchers have focused on the impact of sibling “status” (i.e., having vs. not having siblings) on the development of social skills (e.g., Falbo & Poston, 1993; Hall, 1987; Mendelson, Aboud, & Lanthier, 1994; Meredith, Abbot, & Fuming, 1992; Riggio, 1999; Stormshak, Bellanti, & Bierman, 1996; Thompson, 1974). The following studies discuss the advantages and disadvantages of each of these sibling “statuses” regarding social skill development.

The only child is typically stereotyped as being socially disadvantaged and less competent because of the lack of sibling interactions (Meredith, Abbott, & Fuming, 1992). For example, studies suggest that only children are more likely to be socially inadequate, self-centered, self-willed, temperamental, anxious, generally unhappy,
and more unlikable compared to those with siblings due to the lack of sibling interactions (e.g., Meredith, Abbott, Fuming, 1992; Thompson, 1974). Some teachers have found that only children tend to not be well-liked, and to be less modest, less helpful, and more shy or timid (Zhang, 1998). They also tend to be more conceited than children with siblings (Hall, 1987). In studies focusing on interactions among peers, only children are seen as acting according to their own interests, and to be more impatient, more dependent on others, and lacking in perseverance (Jiao, Ji, & Jing, 1986). Another study found that some of the challenges that onlies faced included not having a sibling confidant, seeking undivided attention from others, feeling pressure to succeed, and feeling difficulty in connecting and negotiating with peers (Roberts, 1998). Only children have been found to report feelings of loneliness (Zhang, 1998), feeling different, and feeling confused about why they do not have siblings as some of their age mates do (Annunziata, Nemiroff, & Scott, 1998). Some researchers have even questioned whether a child without siblings will be able to learn the social skills needed to develop healthy relationships with peers. A study by Riggio
(1999) mentions that the development of social skills seems to be more affected by the presence or absence of siblings than by individual personality traits. Studies of only children have found that they score lower on measures of peer prestige, behavioral control, cooperation, and overall social competencies than children with siblings (Jiao, Ji, & Jing, 1986). Also, onlies tend to be more egocentric, to think and communicate differently (Zhong, 1996), and have much less need for affiliation with others (Falbo & Polit, 1986). These characteristics stereotype the only child as being socially disadvantaged and incompetent because of the lack of sibling interactions (Meredith, Abbott, & Fuming, 1992).

Similarly, the literature on children who have siblings posits that the sibling relationship is important to the development of social skills. It has traditionally been thought to be one of the most significant influences on peer relationships because siblings are a source of companionship, entertainment, and support, and they involve stable, intimate, and emotional interactions (Stromshak, Bellanti, & Bierman, 1996; Mendelson, Aboud, Lanthier, 1994). Also, the
sibling relationship is thought to be the foundation for social relationships once siblings venture outside of the home (Parke & Ladd, 1992). In addition, many studies have supported the theory that having siblings can help foster interactional skills and prosocial behaviors (Mendelson, Aboud, & Lanthier, 1994; Stormshak, Bellanti, & Bierman, 1996). As previously stated, skills and roles developed in one context can generalize to another context (Parke, MacDonald, Beitel, & Bhavnagri, 1988); therefore, the relationship that a younger sibling has with an older sibling may serve as a model for later social relationships. Thus, these interactional skills learned from siblings can transfer to peers and others (Mendelson, Aboud, & Lanthier, 1994). Sibling relationships that are considered as positive or supportive can foster prosocial behaviors, providing a chance to learn how to negotiate, regulate, and control behavior (Stormshak, Bellanti, & Bierman, 1996). A supportive sibling relationship consists of high warmth with low conflict (Stormshak, Bellanti, & Bierman, 1996). Siblings can provide support and affection for each other as they transition through normal developmental transitions, such as developing a career, getting
married, raising children, and in some instances, caring for aging parents (Stocker, Lanthier, & Furman, 1997).

Although many studies report the positive effects of having a sibling on social development (Jiao, Ji, & Jing, 1986; Mendelson, Aboud, Lanthier, 1994), other studies have discussed the possible negative effects of having siblings, particularly if the sibling relationship is conflictual (Stormshak, Bellanti, & Bierman, 1996; Volling & Belsky, 1992). A conflictual relationship consists of high conflict and low warmth between the siblings (Stormshak, Bellanti, & Bierman, 1996). When this type of relationship exists between siblings, it can be seen as a training ground for the development of aggressive social behaviors, poor peer relations, and behavioral problems at school (Stormshak, Bellanti, Bierman, 1996). Also, conflictual sibling relationships can lead to feelings of low self-esteem, depression, anxiety, and poor psychological functioning (Stocker, Lanthier, & Furman, 1997).

Some studies have also found that only children have some advantages in comparison to those who have siblings because parents usually give them more time and attention which can truly help develop positive social development.
advantages discovered in being an only child included no sibling rivalry, the freedom to spend time alone, an appreciation of being the only recipient of parents' emotional and financial resources, and the development of a closer relationship with parents (Roberts, 1998).

In addition, Polit & Falbo's (1980) reviews have suggested that onlies may not differ in comparison to non-onlies in terms of their personal adjustment or sociability. Earlier reviews by Polit and Falbo (1986) have indicated that onlies were found to have more character (i.e., maturity and cooperativeness) in comparison to non-onlies. Moreover, onlies were found to have more of a sense of personal control compared to non-onlies (Polit & Falbo, 1987). Although inconsistent with many studies, Polit & Falbo have also suggested that only children were never found to be at a disadvantage compared to individuals who had siblings, and in fact, showed some advantages with regards to achievement motivation (Polit & Falbo, 1987).
moderate the impact of the sibling relationship and thus affect social skill development in ways that diverge from those discussed above.

For example, an only child with authoritative parents may be better off than a child who is in a conflictual relationship with his/her sibling(s). The more positive the relationship a parent has with their only child, the more desirable the developmental outcome (Falbo & Polit, 1986). In one-child families, the parent-child relationship is more isolated and is the primary source of socialization that the child receives (Riggio, 1999). In some studies of only-child families, it has been shown that only children may have more of a sense of personal control if parents respond accordingly to their child’s behavior, which is characteristic of an authoritative parenting style (Polit & Falbo, 1987). A child may be better off being an only child because of the amount of positive parental attention and affection received from authoritative parents as compared to having a conflictual sibling relationship. Having a conflictual sibling relationship is highly correlated with increasing children’s aggressive social behavior. If the parent-child relationship is positive, which is a characteristic
of authoritative parenting, a child may be better off without these negative sibling interactions (Stormshak, Bellanti, & Bierman, 1996).

Alternatively, if children have a less supportive relationship with parents, studies have shown that a sibling can "make-up" for, or compensate for this lack, through a protective sibling relationship that provides social support (Bank & Kahn, 1982; Bryant, 1992; Jenkins, 1992). It might be expected, then, that a child involved in a supportive sibling relationship could act as a buffer against authoritarian parenting style in having a positive social impact on social skill development.

Hypotheses and Purpose of Study

America’s traditional nuclear family, a family with two parents and two to four children, has been transformed in recent years (Thompson, 1974). Some of the changes may be due to an increase in the proportion of the population waiting longer to start a family, the number of women now in the work force (Hall, 1987), and the promotion of family planning (Thompson, 1974). These social shifts are resulting in less time for bearing and raising a family, which makes the decision to have only one child more popular than ever (Falbo & Polit, 1986;
Shen & Yuan, 1999). Because of the rise of families having just one child and the negative portrayal of "onlies" (i.e., only children), there has been a growing concern as to what this may mean for future society (Shen & Yuan, 1999).

A review written by Polit and Falbo (1987) asserts that families with one child represents a unique and interesting group for studying theories of personality based on sibling-related effects, since siblings have been seen to be a significant influence on the attainment of social and personality traits. Because only children have no siblings, researchers find that they provide opportunities for a natural comparison group for investigating the effects of siblings on development. Also, the parent-child relationship can be isolated more effectively and can be shown to act as the primary source of socialization. Researchers can take advantage of this natural experiment provided by only children to examine differences in personality traits and social skills of those without siblings and those who have siblings (Riggio, 1999).

With the increasing popularity of having a one-child family and a one child per family policy being
implemented in other countries, more and more studies are being conducted in order to determine the implications of having a high population of onlies. In addition, because of the negative stereotypes of only children and the lack of studies that focus on the positive effects of being an only child, researchers are scrambling to find the implications of having a one-child family.

Who will be socially better off? The interactive effects between parenting style, sibling "status" (only child vs. sibling child), and the quality of the sibling relationship (conflictual vs. supportive) posits attention. The current study is being conducted to answer three questions.

The first hypothesis hopes to distinguish whether individuals (regardless of sibling "status") raised under different parenting styles demonstrate different levels of competency in social skills. The first hypothesis, is, then:

Hypothesis 1: Individuals (regardless of sibling "status") with authoritative parents will show better social skills compared to those with authoritarian parents.

Secondly, will the quality of the sibling relationship (for those who have siblings) affect social
skill development? Research to date suggests that it does. The second hypothesis, is, then:

**Hypothesis 2:** Individuals with siblings who have positive sibling relationships will have more effective social skills than those who have a conflictual relationship with siblings.

The third major question is whether the interaction of parenting style (authoritative vs. authoritarian) and type of sibling relationship (supportive vs. conflictual) will have an impact on social skills and if so, how?

The following six hypotheses, based on the literature reviewed above are as follows:

**Hypothesis 3:** Individuals with authoritative parents and a supportive sibling relationship will score higher on social skills than both onlies with authoritative parents and individuals involved in conflictual sibling relationships and have authoritative parents;

**Hypothesis 4:** Individuals with authoritative parents engaged in a conflictual sibling relationship will score lower on social skills than both onlies with authoritative parents and individuals with supportive sibling relationships and authoritative parents;
Hypothesis 5: Individuals with authoritarian parents and a supportive sibling relationship will score higher on social skills than both onlies with authoritarian parents and those with conflictual sibling relationships and authoritarian parents;

Hypothesis 6: Individuals with authoritarian parents and a conflictual sibling relationship will score lower than both onlies with authoritarian parents and those with supportive sibling relationships and authoritarian parents;

Hypothesis 7: For those onlies with authoritative parents, those individuals will score higher on social skills than those with authoritative parents and a conflictual sibling relationship, but score lower than individuals with authoritative parents and a supportive sibling relationship;

Hypothesis 8: For those onlies with authoritarian parents, those individuals will score lower on social skills than individuals with authoritarian parents and engaged in supportive sibling relationships, but will score equally compared to those individuals with authoritarian parents and engaged in conflictual sibling relationships.
CHAPTER TWO

METHOD

Participants

One hundred sixty-three females with at least one sibling and seventy-four females without siblings from intact families were assessed. Participants ranged in age from 20 to 35 years of age (mean=23.2) and were recruited from undergraduate classes at a mid-sized southwestern university. The ethnicity of the participants was as follows: 39.5% Caucasian, 31.5% Hispanic, 11.3% Asian, 6.7% Black, and 10.9% “other”. Participants were primarily from middle- to lower-middle socio-economic backgrounds as indicated by their reported mother and father educational levels. All participants were treated in accordance with the Ethical Principles of Psychologists and Code of Conduct (American Psychological Association, 1992).

Materials

The following scales were compiled into a questionnaire: a measure of adult sibling relationships,
a measure of parenting style, a measure of social skills, and a scale assessing background information.

Adult Sibling Relationship Questionnaire (ASRQ).
The ASRQ (Stocker, Lanthier, & Furman, 1997) was used to assess the quality of the sibling relationship (Appendix A). The ASRQ was originally developed to assess qualitative features of the sibling relationship in young adulthood and beyond.

The questionnaire consists of 81 items spread over the following 14 scales: Intimacy (i.e., communication regarding things that are important to one another, such as feelings of personal issues, and whether siblings understand one another on various issues, e.g., “How much do you and this sibling have in common?”), Affection (i.e., friendship, closeness, and caring between siblings, e.g., “How much does this sibling think of you as a good friend?”), Knowledge (i.e., knowledge about one another pertaining to relationships and ideas, e.g., “How much does this sibling know about you?”), Acceptance (i.e., acceptance of personality, lifestyle, and ideas, e.g., “How much does this sibling accept your personality?”), Similarity (i.e., how similar siblings are to one another in general, including how similar
their personalities and lifestyles are to one another, e.g., "How much do you and this sibling have in common?"), Admiration (i.e., admiration of one another in general, and how proud siblings are of each other’s accomplishments, e.g., "How much do you talk to this sibling about things that are important to you?"), Emotional Support (i.e., being there for one another in times of need, stress, and during important personal decisions, e.g., "How much does this sibling try to cheer you up when you are feeling down?"), Instrumental Support (i.e., help with non-personal problems, practical advice, and financial assistance, e.g., "How likely is it this sibling would go to this sibling if you needed financial assistance?") Dominance (i.e., control, bossiness, and superiority, ), Competition (i.e., jealousy and performance, e.g., "How competitive are you with this sibling?") Antagonism (i.e., irritation and anger with one another and demeaning one another, e.g., "How much do you irritate this sibling?") Quarrelling (i.e., criticism and disagreements, e.g., "How much do you and this sibling argue with each other?") Maternal Rivalry (i.e., favoritism, support, and closeness, e.g., "Do you think your mother favors you or this sibling more?") and
Paternal Rivalry (i.e., favoritism, support and closeness). These 14 scales are combined to form 3 higher-order factors: Warmth, Conflict, and Rivalry. Warmth includes the following subscales: Intimacy, Admiration, Affection, Acceptance, Similarity, Knowledge, and Support. Conflict includes Quarrelling, Dominance, Antagonism, and Competition. Finally, maternal rivalry was measured with 6 items. Although the scale measures rivalry for both mother and father, only the scales for the mother were used in the current study. This factor assesses the extent to which participants feel that their mother treats them and their sibling fairly or favor one sibling over the other.

For all ASRQ items (except rivalry items), participants rate how characteristic each item is of themselves and of their sibling using a 5-point Likert scale (1=hardly at all, 5=extremely much). Maternal rivalry items are rated on 5-point Likert scales (1=participant is usually favored, 5=sibling is usually favored).

Discriminant validity was assessed by examining the cross-rater correlations of the 14 scales. Cronbach’s coefficient alpha values were as follows: .88 for
Acceptance, .83 for Admiration, .92 for Affection, .90 for Antagonism, .85 for Competition, .74 for Dominance, .90 for Emotional Support, .91 for Intimacy, .76 for Instrumental Support, .88 for Knowledge, .85 for Maternal Rivalry, .86 for Quarrelling, and .83 for Similarity. Test-retest reliabilities for this scale were .84 for Acceptance, .87 for Admiration, .93 for Affection, .78 for Antagonism, .88 for Competition, .75 for Dominance, .90 for Emotional Support, .92 for Intimacy, .86 for Instrumental Support, .89 for Knowledge, .85 for Maternal Rivalry, .84 for Quarrelling, and .83 for Similarity (Stocker, Lanthier, & Furman, 1997).

Parental Authority Questionnaire (PAQ). The PAQ (Buri, 1991) was used to assess the type of parenting style that participants were reared with (Appendix B). This scale was developed to measure Baumrind’s permissive, authoritarian, and authoritative parental authority prototypes for both mother and father. For the present study, only the authoritarian and authoritative scales for the mother were used.

Authoritarian parenting is defined as controlling, dictatorial, punitive parental behavior that restrict a child’s sense of individual importance and potential for
personal contribution within the family. Authoritative parenting is defined as consisting of clear and demanding parental direction moderated by an emphasis on open communication, allowing for children to discuss and participate in the planning, decisions, and policies of the family (Buri, 1991). The Authoritarian scale includes 10 items (e.g., "Even if her children didn't agree with her, my mother felt that it was for our own good if we were forced to conform to what she thought was right"). The Authoritative scale also includes 10 items (e.g., "As I was growing up, once family policy had been established, my mother discussed the reasoning behind the policy with the children in the family").

Subjects responded to each item on a 5-point Likert scale (1=strongly disagree, 5=strongly disagree). Each of these scores is derived from the phenomenological appraisals of the parents' authority by their son or daughter.

Cronbach’s coefficient alpha values were as follows: .85 for mother’s Authoritarianism and .82 for mother’s Authoritativenss. Test-retest reliabilities for this scale were as follows: .86 for mother’s Authoritarianism and .78 for mother’s Authoritativenss (Buri, 1991).
Social Skills Inventory (SSI). The SSI (Riggio, 1989) was used to assess the quality of participants’ social skills (Appendix C). This scale was originally designed as a short but comprehensive self-report measure to assess basic social communication skills. The SSI consists of 90 items grouped into the six scales with 15 items comprising each scale. The SSI has a total of six scales which measure social communication skills: Emotional Expressivity measures the ability with which individuals communicate nonverbally. Persons who are highly expressive emotionally are animated and emotionally charged and are able to arouse or inspire others from their ability to transmit feelings (e.g., “I am able to liven up a dull party”). Emotional Sensitivity measures skills in receiving and interpreting the nonverbal communication of others. Those who are highly sensitive emotionally may be susceptible to becoming emotionally aroused by others, empathically experiencing their emotional states (e.g., “I sometimes cry at sad movies”). Emotional Control measures one’s ability to control and regulate emotional and nonverbal displays. Persons whose scores are very high on this scale may tend to control against the display of felt
emotions (e.g., "I am easily able to make myself look happy one minute and sad the next"). Social Expressivity assesses skill in verbal expression and the ability to engage others in social discourse. High scores on this scale are associated with verbal fluency in individual who appear outgoing and gregarious and who are skilled in initiating and guiding conversations on just about any subject (e.g., "When telling a story, I usually use a lot of gestures to help get the point across"). Social Sensitivity assesses ability to interpret the verbal communication of others. Persons who are socially sensitive are attentive to social behavior and are conscious and aware of the appropriateness of their own actions (e.g., "Sometimes I think that I take things other people say to me too personally"). Social Control assesses skill in role-playing and social self-presentation. Persons whose social control skills are well developed are generally adept, tactful, and self-confident in social situations and can fit in comfortably in just about any type of social situation (e.g., "I am usually very good at leading group discussions").

(According to the literature, expressivity refers to skills which individuals use to communicate; sensitivity
refers to skills which individuals use to interpret communication messages of others; and control refers to skills which individuals use which enable them to regulate the communication process in a social situation, Riggio, 1989).

Subjects respond to each item on the SSI on a five-point Likert scale (1=not at all like me, 5=exactly like me). Alpha coefficients for the SSI scales range from .62 to .87. Test-retest reliabilities for the six subscales range from .81 to .96.

Background Information. A background information sheet was also included (Appendix D). Participants were asked to record their age, gender, marital status, parents’ highest level of education attained, ethnicity, and sibling information (whether they had siblings and the age(s) and sex(es) of siblings).

Procedure

Questionnaires were distributed to females in undergraduate psychology classes. Participants were offered extra credit for completing the surveys. Participants were allowed to take the questionnaires home.
and were instructed to return the surveys to the author by a certain date.
CHAPTER THREE

RESULTS

Preliminary Analyses

The means and standard deviations for the major factors used in this study are shown in Table 1.

Table 1. Means and Standard Deviations for the Parental Authority Questionnaire (PAQ), the Social Skill Inventory (SSI) (Global Scores), and the Adult Sibling Relationship Questionnaire (ASRQ)

<table>
<thead>
<tr>
<th></th>
<th>Participants With Siblings (n=162)</th>
<th>Participants Without Siblings (n=73)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>PAQ:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarian</td>
<td>31.43</td>
<td>6.98</td>
</tr>
<tr>
<td>Authoritative</td>
<td>34.47</td>
<td>7.12</td>
</tr>
<tr>
<td>SSI:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Skills (global)</td>
<td>247.82</td>
<td>34.58</td>
</tr>
<tr>
<td>ASRQ:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling Warmth</td>
<td>132.07</td>
<td>21.51</td>
</tr>
<tr>
<td>Sibling Conflict</td>
<td>67.13</td>
<td>10.64</td>
</tr>
</tbody>
</table>

Pearson correlations were next computed for social skills, parenting, and sibling relationship factors. These results are presented in Table 2.
Table 2. Pearson Correlation Between Parenting Styles, Social Skills (Global), and Sibling Relationships

<table>
<thead>
<tr>
<th></th>
<th>Social Skills (global)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Subjects Combined (N=210)</td>
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<tr>
<td>PAQ:</td>
<td></td>
</tr>
<tr>
<td>Authoritative</td>
<td>.31***</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>-.06</td>
</tr>
<tr>
<td>ASRQ:</td>
<td></td>
</tr>
<tr>
<td>Sibling Warmth</td>
<td>.26**</td>
</tr>
<tr>
<td>Sibling Conflict</td>
<td>.26**</td>
</tr>
</tbody>
</table>

* p ≤ .05
** p ≤ .01
*** p ≤ .001

Analyses

Hypothesis 1. Hypothesis 1 stated that individuals with authoritative parents (regardless of whether or not they had siblings) would show better social skills compared to those with authoritarian parents. As Table 2 shows, there was a positive and significant correlation between authoritative parenting and social skills for all subjects combined. When sibling status was examined, however, results showed that while there was a positive and significant correlation between authoritative
parenting style and social skills for subjects with siblings, there was only a slight, non-significant correlation between these two variables for onlies.

When the subscales of the social skills measure were examined, however, a slightly different picture emerged. For onlies, there was a significant and positive correlation between authoritative parenting and social control, emotional sensitivity, and emotional expressivity; for subjects with siblings, there was a positive and significant correlation of authoritative parenting and social expressivity and emotional sensitivity (Table 3).
Table 3. Pearson Correlation Between Parenting Styles and Social Skills Subscales

<table>
<thead>
<tr>
<th></th>
<th>Without Siblings (n=69)</th>
<th>With Siblings (n=160)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Authoritative</td>
<td>Authoritarian</td>
</tr>
<tr>
<td>Social Sensitivity</td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>Social Expressivity</td>
<td>.20</td>
<td>.15</td>
</tr>
<tr>
<td>Social Control</td>
<td>.33**</td>
<td>-.08</td>
</tr>
<tr>
<td>Emotional Sensitivity</td>
<td>.32**</td>
<td>.16</td>
</tr>
<tr>
<td>Emotional Expressivity</td>
<td>.34**</td>
<td>-.09</td>
</tr>
<tr>
<td>Emotional Control</td>
<td>.02</td>
<td>-.10</td>
</tr>
</tbody>
</table>

* *p < .05
** **p < .01
*** ***p < .001

There was no significant relationship between social skills (global scores) and authoritarian parenting for any of the subjects (Table 2). However, Table 3 shows that for subjects with siblings there was a surprising
positive and significant correlation between authoritarian parenting and social sensitivity.

Hypothesis 2. Hypothesis 2 stated that individuals with siblings who have "positive" sibling relationships (i.e., higher scores on the measure of sibling warmth) will have better social skills (i.e., higher scores on the SSI global measure) compared to those who have a conflictual relationship with siblings. Surprisingly, sibling warmth and sibling conflict were both positively and significantly correlated with the global social skills score (Table 2).

Next, a "median split" was generated to define the following groups: sibling relationships were defined as "high warmth" were those participants who scored greater than or equal to the mean of 132 for the global ASRQ score. Those who scored less than or equal to 131 on the ASRQ were labeled "low warmth". Similarly, sibling relationships were defined as "high conflict" when their global ASRQ score was greater than or equal to the mean score of 67 for this measure, while those who scored less than or equal to 66 were considered "low conflict". Results of an independent samples t-test showed that those who reported higher levels of warmth in their
sibling relationship scored significantly higher on the global measures of social skills compared to those individuals who reported lower levels of warmth with their siblings (Table 4).

Table 4. T-Tests Comparing Sibling Warmth and (Global) Social Skills for Those With Siblings

<table>
<thead>
<tr>
<th>Sibling Warmth</th>
<th>High (n=76)</th>
<th>Low (n=59)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>256.01</td>
<td>238.14</td>
<td>34.31</td>
</tr>
<tr>
<td>SD</td>
<td>34.31</td>
<td>34.26</td>
<td></td>
</tr>
</tbody>
</table>

There was no significant difference between those who had a highly conflictual sibling relationship on (global) social skills compared to those individuals who reported lower levels of conflict in their sibling relationship on (global) social skills scores (Table 5).
Table 5. T-Tests Comparing Sibling Conflict and (Global) Social Skills for Those With Siblings

<table>
<thead>
<tr>
<th>Sibling Conflict</th>
<th>High (n=75)</th>
<th>Low (n=68)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Global)</td>
<td>251.81</td>
<td>241.62</td>
<td>.08</td>
</tr>
<tr>
<td>M</td>
<td>34.13</td>
<td>34.42</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Hypotheses 3, 4, and 7. The third major question of the present study focused on how parenting style (authoritative vs. authoritarian), sibling “status” (having vs. not having siblings) and type of sibling relationship (supportive vs. conflictual) interacted to impact social skills.

Hypotheses 3, 4, and 7 stated that individuals with authoritative parents and a supportive sibling relationship (i.e., those high on sibling warmth) (Group 1) would score higher on social skills compared to onlies with authoritative parents (Group 3) and those in a conflictual sibling relationship (Group 2). Additionally, these hypotheses stated that Group 3 would score lower on the SSI measures as compared to Group 2.
The "median split" technique, as described above, was again used to differentiate between the following three groups in order to test out hypotheses 3, 4, and 7: Group 1 was comprised of those high on sibling warmth and high on authoritative parenting (i.e., those who scored greater than or equal to the mean 132 on the ASRQ and greater than or equal to a mean of 34 on the PAQ). Group 2 consisted of those who had scored high on conflictual sibling relationship and high on authoritative parents (i.e., those who scored greater than or equal to the mean of 67 on the ASRQ and greater than or equal to the mean of 34 on the PAQ). Finally, Group 3 consisted of onlies whose score was high on authoritative parenting (i.e., those who scored greater than or equal to the mean of 34 on the PAQ). Results of an exploratory one-way analysis of variance showed that there were no significant differences between the three groups (Table 6).
Table 6. One-Way Analysis of Variance Comparing Those High on Sibling Warmth With Authoritative Parents (Group 1), Those High on Sibling Conflict (Group 2) With Authoritative Parents, and Onlies With Authoritative Parents (Group 3)

<table>
<thead>
<tr>
<th>Group 1: High Sibling Warmth With High Authoritative Parents (n=76)</th>
<th>Group 2: High Sibling Conflict With High Authoritative Parents (n=14)</th>
<th>Group 3: Onlies With High Authoritative Parents (n=64)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Skills</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>(Global)</td>
<td>256.01</td>
<td>34.31</td>
<td>249.30</td>
</tr>
</tbody>
</table>

Hypotheses 5, 6, and 8: Hypotheses 5, 6, and 8 focused on how authoritarian parenting style, sibling "status" (having vs. not having siblings), and type of sibling relationship (supportive vs. conflictual) impacted social skills.

Hypotheses 5, 6, and 8 stated that individuals with authoritarian parents and a supportive sibling...
relationship (i.e., those high on sibling warmth) (Group 1) would score higher on social skills compared to onlies with authoritarian parents (Group 3) and those in a conflictual sibling relationship (Group 2).

Additionally, these hypotheses stated that Group 2 would score equally as compared to Group 3.

The "median split" technique, as described above, was used to differentiate between the following three groups: Group 1 was comprised of those high on sibling warmth and high on authoritarian parents (i.e., those who scored greater than or equal to the mean 132 on the ASRQ and greater than or equal to a mean of 31 on the PAQ). Group 2 consisted of those who had a high conflictual sibling relationship and high on authoritarian parents (i.e., those who scored greater than or equal to the mean of 67 on the ASRQ and greater than or equal to the mean of 31 on the PAQ). Finally, Group 3 consisted of onlies whose score was high on authoritarian parents (i.e., those who scored greater than or equal to the mean of 31 on the PAQ).

Results of an exploratory one-way analysis of variance showed that there were no significant differences between the groups (Table 7). It was also
hypothesized that onlies with authoritarian parents would score equally on (global) social skills compared to those individuals with siblings who were engaged in a conflictual sibling relationship raised by authoritarian parents. Results of an independent samples t-test showed that there was no significant difference between these two groups on social skill scores (Table 7).

Table 7. One-Way Analysis of Variance Comparing Those High on Sibling Warmth With Authoritarian Parents (Group 1), Those High on Sibling Conflict With Authoritarian Parents (Group 2), and Onlies With Authoritarian Parents (Group 3)

<table>
<thead>
<tr>
<th>Group 1: High Sibling Warmth With High Authoritarian Parents (n=37)</th>
<th>Group 2: High Sibling Conflict With High Authoritarian Parents (n=8)</th>
<th>Group 3: Onlies With High Authoritarian Parents (n=36)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Skills (Global)</td>
<td>263.50 37.20</td>
<td>254.50 30.10</td>
<td>259.20 38.70</td>
</tr>
</tbody>
</table>

36
The purpose of the present exploratory study was to examine the individual (and interactional) effects of having versus not having siblings, the quality of the sibling relationship, and parenting style on social skills. In general, results showed support for the overall positive impact of authoritative parenting on social skill scores for subjects with or without siblings, and for the positive effect of having warm sibling relationships on social skills for those who had siblings. However, there was little empirical support for the anticipated interactional effects of having versus not having siblings x the quality of the sibling relationship x parenting style on global social skill scores.

**Hypothesis 1**

The first hypothesis stated that individuals with authoritative parents (regardless of whether or not they had siblings) would show better social skills compared to those with authoritarian parents. Results showed that authoritative parenting had a positive and significant
effect on global social skill scores for the sample as a whole. Many studies support this finding (i.e., Baumrind, 1971; Buri, 1988; Santrock, 1995). Time and time again, authoritative parenting has been shown to be associated with social competence (Buri, 1988; Maccoby & Martin, 1983) because this particular parenting style gives children the freedom to be independent but still places reasonable limits and controls on their actions. Verbal give-and-take is encouraged, parents are democratic in their treatment of children; children are also given reasons for things, and parents are seen as warm and nurturing to the child (Buri, 1988). All of this can translate into teaching children better social skills compared to children who grow up under different circumstances.

Interestingly enough, sibling "status" did seem to have an effect on global social skills when raised by authoritative parents, in contrast to the author's hypothesis. There was a significant correlation between those participants who had authoritative parents and the global social skills, but not for those without siblings. However, when the subscales of the SSI were examined, a different picture emerged. For onlies, there was a
significant correlation between authoritative parenting and social control, emotional sensitivity, and emotional expressivity. When looking specifically at the subscale of social control, onlies may have scored higher because "they [onlies] are more likely to develop a sense of personal control than other children" (Polit & Falbo, 1987) since they are usually under tight watch by their sometimes overbearing parents (Falbo & Polit, 1986). For emotional sensitivity, onlies may have the opportunity to learn at an early age that they can affect their environment (i.e., parents' behaviors) (Polit & Falbo, 1987). Combined with the intense one-on-one attention that they received from their parents and the knowledge that they can affect what goes on around them, it may stimulate their sensitivity to others' emotional states, increasing their chances of communicating effectively with their parents, and later on, with others. Finally, the significant and positive correlation between emotional expressivity (i.e., the skill with which individuals communicate nonverbally and includes the nonverbal expression of attitudes, dominance, and interpersonal orientation (Riggio, 1989) and authoritative parenting suggests that the opportunity to
have so much one-on-one attention with their parents may

give onlies the "practice" needed to read emotions and be
in touch with their emotional expressions.

Individuals with siblings showed a positive and
significant correlation between authoritative parenting
and social expressivity and emotional sensitivity.
Social expressivity is the skill used in verbal
expression and the ability to engage others in social
discourse. A significant correlation between
authoritative parenting and social expressivity was
found. The authoritative parenting style, which
encourages verbal give-and-take (Buri, 1988) coupled with
the "trying out" of social interaction skills with their
siblings may foster this type of social expressivity.
Additionally, there was a positive correlation between
authoritative parenting and emotional sensitivity.
Having interactions with parents and siblings may
encourage these individuals to pay attention to others'
feelings and may foster empathy because of everyday
communication with others. In summary, it seems that
onlies raised by authoritative parents scored higher on
the measures of social control, emotional sensitivity,
and emotional expressivity. These three scales measure
self-regulation (i.e., social control), being able to recognize that an individual has control over their surroundings (i.e., emotional sensitivity), and being in touch with one's own emotional expressions (i.e., emotional expressivity). Onlies may have scored higher on these three scales because most onlies are found to have more personal control when compared to those with siblings (Polit & Falbo, 1987). In contrast, individuals with siblings raised by authoritative parents scored higher on the measures of social expressivity and emotional sensitivity. These scales measure the extent to which one is socially able to carry on a conversation (i.e., social expressivity) and the ability to empathize (i.e., emotional sensitivity). Individuals with siblings may have scored higher on these measures because they may have had more opportunities to "practice" various social interactions with their sibling(s) as compared to onlies.

The finding of a significant and positive correlation between social sensitivity and authoritarian parents was unexpected since social sensitivity refers to ability to interpret the verbal communication of others. Individuals who are socially sensitive are attentive to social behavior and are conscious and aware of the
appropriateness of their own actions (Riggio, 1986). As mentioned in the introduction, authoritarian parents lack nurturance, tend to be excessively controlling, and voice constant disapproval (Blatt & Homann, 1992). Siblings who were exposed to this type of parenting style may become very self-conscious when interacting with others because they may be hyper-vigilant due to a fear of disapproval of their actions.

Hypothesis 2

The author's findings that both warm and conflictual sibling relationships were both positively and significantly correlated with the SSI do not support previous studies that state that individuals involved in positive sibling relationships will have more effective social skills than those who have a conflictual relationship with siblings (i.e., Dunn & Dale, 1984; Dunn & Munn, 1986; Vollen & Belsky, 1992). However, the research suggests that when a sibling relationship is seen as positive or warm, cooperative and prosocial behaviors often develop (Dunn, 1983). In the current study, sibling warmth was positively correlated with high social skills, but, then again, so was sibling conflict.
Conflictual sibling relationships can be found as training grounds for aggression (Patterson, 1986) and have been found to lead to developmental difficulties such as peer rejection (Dodge, 1983) and later delinquency (Kupersmidt & Cole, 1990). The present study, however, did not find a negative correlation between those who had a conflictual sibling relationship and global social skills.

This may mean that any sibling interaction, regardless of being warm or conflictual, may give ample opportunities for individuals to play out various social roles with their siblings, resulting in more "practice". Having these opportunities may foster better social skills. The makeup of the SSI may also have contributed to this unexpected positive and significant correlation. The SSI measured several subscales, including emotional expressivity which involves skill in communicating affect, attitudes, and status (Riggio, 1986), which may be enhanced by the verbal aspect of a sibling quarrel. Social sensitivity was another subscale which may be fostered by a conflictual relationship. This subscale measures the ability to receive and understand verbal messages, knowledge, and concern for social rules and
norms (Riggio, 1986). Again, conflict may help siblings may be able to better understand verbal messages and concerns for social rules and norms of others because there are many opportunities to practice arguing with their sibling(s). This "practice" may carry on to later social relationships. Furthermore, two additional subscales of the SSI, which concerned control over communication (which included the subscales of emotional and social control), may be impacted by the role of conflict in the sibling relationship. Emotional control is the ability to regulate emotional communications and nonverbal displays. Social control includes role-playing ability regulation of verbal behavior and self-presentational skill (Riggio, 1986). Once again, sibling conflict may be the training grounds for the development of these skills. The prospect of being able to work through arguments and other discord with siblings, may, in fact, help these individuals attain successful social skills. This is contrary to traditional research which states that sibling conflict would decrease chances of the healthy development of social skills (Stormshak, Bellanti, & Bierman, 1996; Volling & Belsky, 1992).
Hypotheses 3 through 8

When analyzing the interactions between parenting styles, sibling "status", and the quality of the sibling relationship, no significant relationships were found for the groups examined. Although the predominant view in the literature is that sibling relationships are important for social skill development in children, the present study (at least for the ways in which these factors were measured) does not generally support this. (This is also evident by examining the means for social skills for participants with siblings vs. those without siblings in Table 1).

Although it is the minority view, other authors have come to the conclusion that the parent-child and sibling relationships may not to be the primary determinants of social skill development. Similarly, the above authors and the present author have found no differences between only children versus those with siblings on measures of different social skill scales. In 1987, for example, Polit and Falbo conducted a quantitative meta-analysis of 141 of the 200 research studies which examined only children. The researchers concluded that neither group suffers as a result of their sibling "status", and that
perhaps parent-child and sibling relationships are compensatory. That is, sibling relationships can compensate for children in multiple-child families for the lack of close parent-child relationships, which can be characteristic of an only-child family, whereas only children may compensate for the lack of siblings through the close and affectionate interactions they may have with their parents.

In addition to the above findings, other authors have come to the same conclusion when studying the differences in social skills of individuals with and without siblings (i.e., Falbo & Polit, 1986; Meredith, Abbott, & Fuming, 1992; Riggio, 1999). Individuals without siblings in these studies seemed not to differ in any way in their social skills compared to those with siblings. Furthermore, the present study’s findings were similar to those of Riggio (1999) in that the SSI total score means of the two groups were remarkably similar. Because no differences were found between the two groups, present findings may strengthen previous theories of compensation. Only children may experience closer interpersonal relationships with parents, which may compensate in the development of social skills for the
lack of siblings. On the other hand, when the parent-child relationship does not promote the positive development of social skills, perhaps close relationships with siblings can serve as an alternative base for the healthy attainment of social skills.

Limitations and Future Research

There were several limitations to this study that must be considered. First, this study may be limited due, in part, to the sample used. Only female undergraduate students from intact families participated, and, therefore, these results may not be generalizable to other samples. Furthermore, the female undergraduates were recruited largely from the field of psychology and human development. These fields call for individuals who are interested in social interactions with others and are most likely to be more empathetic towards others compared to those in other fields. Broadening the recruitment to include other majors would possibly make the findings more generalizable to other college populations. It would also be interesting to use a more diverse population wherein family constellation variables, such as relative age, age spacing, and the two sibling's sexes are considered (Furman & Buhrmester, 1985).
Second, to evaluate the development of social
skills, only parenting style of mothers were used. It
would be enticing to see what effects fathers' parenting
style had on the attainment of social skills. More
recent studies have begun to emphasize the importance of
fathers' roles to an individual's development (Hill, 1995).

The third major limitation was the small sample size
used. Because of the amount of subjects and groups
needed for the study, there was not an equal amount of
participants in each of the six groups to evaluate the
data as thoroughly as the author hoped. In the future, a
higher number of participants should be sought.

Implications and Conclusions

The present study has provided an initial
investigation into the interactional effects of having
versus not having siblings, the quality of the sibling
relationship, and parenting style. The findings in this
study show the following: first, there is a positive and
significant relationship between parenting style and
social skills. These findings have added to the on-going
developmental literature that demonstrates the importance
of appropriate parenting practices and has renewed the
speculation that authoritative parenting is positively and significantly correlated to positive development.

Second, results showed that sibling relationships construed as warm have a positive effect on social skill development. It would seem from the results of this study, that friendly and affectionate sibling interactions should be fostered at an early age in order to attain prosocial behaviors. Furthermore, these warm sibling relationships may compensate, or, act as a buffer when the parent-child relationship is not able to fully facilitate the development of social skills. It may seem, then, that sibling relationships, regardless of the quality (warm vs. conflictual) has a positive and significant impact on social skill development.

Finally, findings in this study showed some inconsistencies with the author’s third major question (or hypotheses). The overall results of the present study showed empirical support for the declarations made by current theories that, indeed, parent-child and sibling relationships may not be primary determinants of social skill development. However, these findings are exploratory, and in no means conclusive; therefore, more
research needs to be conducted to corroborate and add to the validity of these results.
APPENDIX A

ADULT SIBLING RELATIONSHIP QUESTIONNAIRE
Appendix A

Adult Sibling Relationship Questionnaire

Instructions: Please rate how characteristic each item is of yourself and of your sibling(s) in general. In the column titled "then", write in the number of the response that best describes your relationship with your sibling(s) during your middle childhood years. In the column titled "now", write in the number of the response that best describes your relationship with your sibling(s) now.

<table>
<thead>
<tr>
<th>hardly</th>
<th>at all</th>
<th>a little</th>
<th>somewhat</th>
<th>very much</th>
<th>extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

then       now

1. How much did/do you and your sibling(s) have in common?
2. How much did/do you talk to your sibling(s) about things that are important to you?
3. How much did/does your sibling(s) talk to you about things that are important to them?
4. How much did/do you and your sibling(s) argue with each other?
5. How much did/does your sibling(s) think of you as a good friend?
6. How much did/do you think of your sibling(s) as a good friend?
7. How much did/do you irritate your sibling(s)?
8. How much did/does your sibling(s) irritate you?
9. How much did/does your sibling(s) admire you?
10. How much did/do you admire your sibling(s)?
11. Did/Do you think your mother favors your sibling(s) or you more?
12. Did/Does your sibling(s) think your mother favors them or you more?
13. How much did/does your sibling(s) try to cheer you up when you are feeling down?

52
<table>
<thead>
<tr>
<th>hardly at much all then</th>
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<th>somewhat</th>
<th>very much</th>
<th>extremely</th>
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<tr>
<td>now</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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14. How much did/do you try to cheer your sibling(s) up when they are feeling down?
15. How competitive were/are you with your sibling(s)?
16. How competitive was/is your sibling(s) with you?
17. How much did/does your sibling(s) go to you for help with non-personal problems?
18. How much did/do you go to your sibling(s) for help with non-personal problems?
19. How much did/do you dominate your sibling(s)?
20. How much did/does your sibling(s) dominate you?
21. How much did/does your sibling(s) accept your personality?
22. How much did/do you accept your sibling’s personality?
23. How much did/does your sibling(s) know about you?
24. How much did/do you know about your sibling(s)?
25. How much did/do you and your sibling(s) have similar personalities?
26. How much did/do you discuss your feelings or personal issues with your sibling(s)?
27. How much did/does your sibling(s) discuss their feelings or personal issues with you?
28. How often did/does your sibling(s) criticize you?
29. How often did/do you criticize your sibling(s)?
30. How close did/do you feel to your sibling(s)?
31. How close did/does your sibling(s) feel to you?
32. How often did/does your sibling(s) do things to make you mad?
33. How often did/do you do things to make your sibling(s) mad?
34. How much did/do you think that your sibling(s) has
<table>
<thead>
<tr>
<th>hardly at all</th>
<th>a little</th>
<th>somewhat</th>
<th>very much</th>
<th>extremely much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

35. How much did/does your sibling(s) think that you have accomplished a great deal in life?
36. Did/Does your sibling(s) think your mother supports them or you more?
37. Did/Do you think your mother supports you or your sibling(s) more?
38. How much could/can you count on your sibling(s) to be supportive when you were/are feeling stressed?
39. How much could/can your sibling(s) count on you to be supportive when they were/are feeling stressed?
40. How much did/does your sibling(s) feel jealous of you?
41. How much did/do you feel jealous of your sibling(s)?
42. How much did/do you give your sibling(s) practical advice? (e.g., household or car advice)
43. How much did/does your sibling(s) give you practical advice?
44. How much was/is your sibling(s) bossy with you?
45. How much were/are you bossy with your sibling(s)?
46. How much did/do you accept your sibling’s lifestyle(s)?
47. How much did/does your sibling(s) accept your lifestyle?
48. How much did/do you know about your sibling’s relationships?
49. How much did/does your sibling(s) know about your relationships?
50. How much did/do you and your sibling(s) think alike?
<table>
<thead>
<tr>
<th>hardly at all</th>
<th>a little</th>
<th>somewhat</th>
<th>very much</th>
<th>extremely much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

then now

51. How much did/do you really understand your sibling(s)?
52. How much did/does your sibling(s) really understand you?
53. How much did/does your sibling(s) disagree with you about things?
54. How much did/do you disagree with your sibling(s) about things?
55. How much did/do you let your sibling(s) know you care about them?
56. How much did/does your sibling(s) let you know they care about you?
57. How much did/does your sibling(s) put you down?
58. How much did/do you put your sibling(s) down?
59. How much did/do you feel proud of your sibling(s)?
60. How much did/does your sibling(s) feel proud of you?
61. Did/Does your sibling(s) think your mother is closer to them or you?
62. Did/Do you think your mother is closer to you or your sibling(s)?
63. How much did/do you discuss important personal decisions with your sibling(s)?
64. How much did/does your sibling(s) discuss important personal decisions with you?
65. How much did/does your sibling(s) try to perform better than you?
66. How much did/do you try to perform better than your sibling(s) ?
67. How likely is it you would have gone/go to your sibling(s) if you needed financial assistance?
68. How likely is it your sibling(s) would have gone/go to you if he or she needed financial assistance?
69. How much did/does your sibling(s) act in superior ways to you?
70. How much did/do you act in superior ways to your sibling(s)?
71. How much did/do you accept your sibling’s ideas?
72. How much did/does your sibling(s) accept your ideas?
73. How much did/do you know about your sibling’s ideas?
74. How much did/does your sibling(s) know about your ideas?
75. How much did/do you and your sibling(s) lead similar lifestyles?
Appendix B

Parental Authority Questionnaire

Instructions: For each of the following statements, write in the number from the 5-point scale that best describes how that statement applies to you and your mother. Try to read and think about each statement as it applies to you and your mother during your years of growing up at home. There are no right or wrong answers, so don’t spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

strongly disagree disagree neutral agree agree
1 2 3 4 5

1. While I was growing up my mother felt that in a well-run home the children should have their way in the family as often as the parents do.

2. Even if her children didn’t agree with her, my mother felt that it was for our own good if we were forced to conform to what she thought was right.

3. Whenever my mother told me to do something as I was growing up, she expected me to do it immediately without asking any questions.

4. As I was growing up, once family policy had been established my mother discussed the reasoning behind the policy with the children in the family.

5. My mother has always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable.

6. My mother has always felt that what the children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.
7. As I was growing up my mother did not allow me to question any decision she had made.

8. As I was growing up my mother directed the activities and decisions of the children in the family through reasoning and discipline.

9. My mother has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to.

10. As I was growing up my mother did not feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them.

11. As I was growing up I knew what my mother expected of me in my family, but I also felt free to discuss those expectations with my mother when I felt that they were unreasonable.

12. My mother felt that wise parents should teach their children early just who is boss in the family.

13. As I was growing up, my mother seldom gave me expectations and guidelines for my behavior.

14. Most of the time as I was growing up my mother did what the children in the family wanted when making family decisions.

15. As the children in my family were growing up, my mother consistently gave us direction and guidance in rational and objective ways.

16. As I was growing up my mother would get very upset if I tried to disagree with her.

17. My mother feels that most problems in society would be solved if parents would not restrict their children’s activities, decisions, and desires as they are growing up.
18. As I was growing up my mother let me know what behavior she expected of me, and if I didn’t meet those expectations, she punished me.

19. As I was growing up my mother allowed me to decide most things for myself without a lot of direction from her.

20. As I was growing up my mother took the children’s opinions into consideration when making family decisions, but she would not decide for something simply because the children wanted it.

21. My mother did not view herself as responsible for directing and guiding my behavior as I was growing up.

22. My mother had clear standards of behavior for the children in our home as I was growing up, but she was willing to adjust those standards to the needs of each of the individual children in the family.

23. My mother gave me direction for my behavior and activities as I was growing up and she expected me to follow her direction, but she was always willing to listen to my concerns and to discuss that direction with me.

24. As I was growing up my mother allowed me to form my own point of view on family matters and she generally allowed me to decide for myself what I was going to do.

25. My mother has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don’t do what they are supposed to as they are growing up.

26. As I was growing up my mother often told me exactly what she wanted me to do and how she expected me to do it.

27. As I was growing up my mother gave me clear direction for my behaviors and activities, but she was also understanding when I disagreed with her.
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<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>neutral</th>
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28. As I was growing up my mother did not direct the behaviors, activities, and desires of the children in the family.

29. As I was growing up I knew what my mother expected of me in the family and she insisted that I conform to those expectations simply out of respect for her authority.

30. As I was growing up, if my mother made a decision in the family that hurt me, she was willing to discuss that decision with me and to admit it if she had made a mistake.
APPENDIX C

SOCIAL SKILLS INVENTORY
Appendix C

Social Skills Inventory

Instructions: On the following pages are 90 statements that indicate an attitude or behavior that may or may not be characteristic or descriptive of you. Read each statement carefully. Then, using the scale shown below, decide which response will most accurately reflect your answer and write in the appropriate number. Keep in mind that there are no right or wrong answers. Mark only one response for each statement. It is important to try to respond to every statement.

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1. It is difficult for others to know when I am sad or depressed.
2. When people are speaking, I spend as much time watching their movements as I do listening to them.
3. People can always tell when I dislike them no matter how hard I try to hide my feelings.
4. I enjoy giving parties.
5. Criticism or scolding rarely makes me uncomfortable.
6. I can be comfortable with all types of people-young and old, rich and poor.
7. I talk faster than most people.
8. Few people are as sensitive and understanding as I am.
9. It is often harder for me to keep a “straight face” when telling a joke or humorous story.
10. It takes people quite a while to get to know me well.
11. My greatest source of pleasure and pain is other people.
12. When I’m with a group of friends, I am often the spokesperson for the group.
13. When depressed, I tend to make those around me depressed also.

14. At parties, I can immediately tell when someone is interested in me.

15. People can always tell when I am embarrassed by the expression on my face.

16. I love to socialize.

17. I would much rather take part in a political discussion than to observe and analyze what the participants are saying.

18. Sometimes I find it difficult to look at others when I am talking about something personal.

19. I have been told that I have expressive eyes.

20. I am interested in knowing what makes people tick.

21. I am not very skilled in controlling my emotions.

22. I prefer jobs that require working with a large number of people.

23. I am greatly influenced by the moods of those around me.

24. I am not good at making prepared speeches.

25. I usually feel uncomfortable touching other people.

26. I can easily tell what a person's character is by watching his or her interactions with others.

27. I am able to conceal my true feelings from just about anyone.

28. I always mingle at parties.

29. There are certain situations in which I find myself worrying about whether I am doing or saying the right things.

30. I find it very difficult to speak in front of a large group of people.

31. I often laugh out loud.
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32. I always seem to know what peoples' true feelings are no matter how hard they try to conceal them.
33. I can keep a straight face even when friends try to make me laugh or smile.
34. I usually take the initiative to introduce myself to strangers.
35. Sometimes I think that I take things other people say to me too personally.
36. When in a group of people, I have trouble thinking of the right things to talk about.
37. Sometimes I have trouble making my friends and family realize just how angry or upset I am with them.
38. I can accurately tell what a person's character is upon first meeting him or her.
39. It is very hard for me to control my emotions.
40. I am usually the one to initiate conversations.
41. What others think about my actions is of little or no consequence to me.
42. I am usually very good at leading group discussions.
43. My facial expression is generally neutral.
44. One of my greatest pleasures in life is being with other people.
45. I am very good at maintaining a calm exterior even if I am upset.
46. When telling a story, I usually use a lot of gestures to help get the point across.
47. I often worry that people will misinterpret something I have said to them.
48. I am often uncomfortable around people whose social class is different from mine.
49. I rarely show my anger.
__50.__ I can instantly spot a “phony” the minute I meet him or her.

__51.__ I usually adapt my ideas and behavior to the group I happen to be with at the time.

__52.__ When in discussions, I find myself doing a large share of the talking.

__53.__ While growing up, my parents were always stressing the importance of good manners.

__54.__ I am not very good at mixing at parties.

__55.__ I often touch my friends when talking to them.

__56.__ I dislike it when other people tell me their problems.

__57.__ While I may be nervous on the inside, I can disguise it very well from others.

__58.__ At parties I enjoy talking to a lot of different people.

__59.__ I can be strongly affected by someone smiling or frowning at me.

__60.__ I would feel out of place at a party attended by a lot of very important people.

__61.__ I am able to liven up a dull party.

__62.__ I sometimes cry at sad movies.

__63.__ I can make myself look as if I’m having a good time at a social function even if I’m not really enjoying myself at all.

__64.__ I consider myself a loner.

__65.__ I am very sensitive of criticism.

__66.__ Occasionally I’ve noticed that people from different backgrounds seem to feel uncomfortable around me.

__67.__ I dislike being the center of attention.

__68.__ I am easily able to give a comforting hug or touch to someone who is distressed.

__69.__ I am rarely able to hide a strong emotion.

__70.__ I enjoy going to large parties and meeting new people.
not at all  a little  like me  very much  exactly
like me like me like me like me like me

1 2 3 4 5

71. It is very important that other people like me.
72. I sometimes say the wrong thing when starting a conversation with a stranger.
73. I rarely show my feelings or emotions.
74. I can spend hours just watching other people.
75. I can easily pretend to be mad even when I am really feeling happy.
76. I am unlikely to speak to strangers until they speak to me.
77. I get nervous if I think that someone is watching me.
78. I am often chosen to be the leader of a group.
79. Friends have sometimes told me that I talk too much.
80. I am often told that I am a sensitive, understanding person.
81. People can always “read” my feelings even when I’m trying to hide them.
82. I tend to be the “life of the party.”
83. I’m generally concerned about the impression I’m making on others.
84. I often find myself in awkward social situation.
85. I never shout or scream when angry.
86. When my friends are angry or upset, they seek me out to help calm them down.
87. I am easily able to make myself look happy one minute and sad the next.
88. I could talk for hours on just about any subject.
89. I am often concerned with what others are thinking of me.
90. I can easily adjust to being in just about any social situation.
APPENDIX D

BACKGROUND INFORMATION
Appendix D
Background Information

Instructions: Please fill in each item below.

1) Your age: _____

2) Your gender (circle one): Male  Female

3) What is your ethnic background? (check one):  ___ Asian
       ___ Black
       ___ Caucasian
       ___ Hispanic
       ___ other (___)

4) If your biological parents were separated/divorced or widowed, how old were you when this occurred? ______

5) What was the highest grade in school (or level of education) your mother completed? ________________

6) What was the highest grade in school (or level of education) your father completed? ________________

7) Please describe any child care settings and the approximate duration of time you spent there during your early childhood years (i.e., preschool; 5 hours per day for 3 days out of the week for 6 months, I was 3 ½ years old).

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APPENDIX E

ADDITIONAL QUESTION FOR

INDIVIDUALS WITH SIBLINGS
Appendix E

Additional Question for Individuals With Siblings

Now we would like some information about your siblings
DO NOT INCLUDE YOURSELF HERE

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REFERENCES


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