

California State University, San Bernardino

CSUSB ScholarWorks

Theses Digitization Project

John M. Pfau Library

1989

Continuity of sibling relationships: A descriptive profile of "close" vs. "not-close" sibling relationships

Donna Staab Vanderwall

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Family, Life Course, and Society Commons](#), and the [Psychology Commons](#)

Recommended Citation

Vanderwall, Donna Staab, "Continuity of sibling relationships: A descriptive profile of "close" vs. "not-close" sibling relationships" (1989). *Theses Digitization Project*. 132.

<https://scholarworks.lib.csusb.edu/etd-project/132>

This Thesis is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

CONTINUITY OF SIBLING RELATIONSHIPS:
A DESCRIPTIVE PROFILE OF
"CLOSE" VS. "NOT-CLOSE" SIBLING RELATIONSHIPS

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

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
in
Psychology

by
Donna Staab Vanderwall

June, 1989

CONTINUITY OF SIBLING RELATIONSHIPS:
A DESCRIPTIVE PROFILE OF
"CLOSE" VS. "NOT-CLOSE" SIBLING RELATIONSHIPS


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

by
Donna Staab Vanderwall
June, 1989

Approved:


N. Laura Kamptner, Chair, Psychology


Charles Hoffman


Ellen N. Junn

5-23-89
Date

In Memory of
BETTY JO CAIN
my friend
my hiking buddy

ABSTRACT

The purpose of this exploratory study was, first, to identify characteristics of "close" vs. "not-close" childhood sibling relationships and second, to investigate the extent to which "close" sibling relationships in childhood continued into adulthood (and why). Subjects were 104 adults (27 males, 77 females) with two or more siblings who were 18 years of age or older who completed a questionnaire. Results showed that the siblings whom subjects felt closest to during childhood were close in age to the subject, and were perceived as easy to talk to, get along with, and similar in values, interests, and temperament with the subject. In contrast, the siblings that subjects felt "least-close" to were perceived by the subject as being dissimilar in values, interests, and temperament, and subjects lacked feelings of intimacy with them. Finally, subjects who "changed" which sibling they were close to in adulthood did so because of a sense of increasing dissimilarity between the subject and the childhood "close" sibling coupled with a perceived increase in similarity between subject and the new close sibling in adulthood.

ACKNOWLEDGEMENTS

I would like to express my gratitude to Dr. N. Laura Kamptner for her understanding, guidance, support, creativity, and especially for her friendship through out this long arduous thesis-writing process. I would also like to thank Dr. Ellen Junn and Dr. Chuck Hoffman for their encouragement, support, and advice.

To my dear friend, Maggie Dragna, "Thank you" for sharing your computer expertise and statistical knowledge without which this thesis would have been so much more difficult to complete. Especially, I thank you for your always available reframing of my consternations and for your loving and caring friendship.

I want to thank my daughter-in-law, Tricia, who typed and retyped this manuscript with expertise, humor, and love. You are, indeed, a special blessing.

To Van, my husband and friend, I thank you for your loving concern, sense-of-humor, caring support, and personal sacrifices through the past four years. And to my family, a special "thank you" for your continued encouragement, loving support, and understanding of the many times that I was not available for you.

TABLE OF CONTENTS

Title Page.....	i
Signature Page.....	ii
Dedication.....	iii
Abstract.....	iv
Acknowledgements.....	v
Table Of Contents.....	vi
List Of Tables.....	ix
Introduction.....	1
Uniqueness Of Sibling Relationships.....	2
Impact Of "Close" Sibling Relationships.....	5
Childhood.....	6
Adolescence.....	6
Adulthood.....	7
Impact Of "Not-Close" Sibling Relationships.....	9
Childhood.....	10
Adolescence.....	14
Adulthood.....	16
Factors Influencing Sibling Relationships.....	19
Birth Order.....	19
Age-Spacing.....	22

Sex.....	25
Continuity vs. Discontinuity Of Sibling Relationships.....	28
Summary And Purpose Of Study.....	31
Method.....	36
Subjects.....	36
Measures.....	37
Sibling Relationship Inventory (SRI).....	37
Demographic information.....	38
Procedure.....	38
Results.....	39
"Close", "Least-Close" And "Other" Sibling Relationships: Childhood.....	39
"Close" sibling relationships.....	39
"Least-close" sibling relationships.....	42
Sibling relationships: Rivalry, joint activities, conflict, and warmth (childhood).....	44
Parental favoritism (childhood).....	50
Summary.....	52
Continuity vs. Discontinuity Of "Close" Sibling Relationships From Childhood To Adulthood.....	52
Why subjects changed to a different adult "close" sibling in adulthood.....	54
Parental favoritism.....	58

Summary.....	61
Discussion.....	62
Why Subjects Felt "Close" To And Distant From "Least-Close" Sibling In Childhood.....	62
Continuity vs. Discontinuity Of "Close" Sibling Relationships From Childhood Into Adulthood,....	68
Implications Of Results.....	69
Parenting.....	69
Siblings.....	71
Limitations Of Exploratory Research.....	72
Areas Of Future Research.....	73
Appendix A. Sibling Relationship Inventory.....	76
References.....	81

LIST OF TABLES

Table 1.	Why Subjects Felt Closest To "Close" Sibling In Childhood.....	40
Table 2.	Activities Subjects Engaged In With "Close" Sibling In Childhood.....	43
Table 3.	Why Subjects Felt Distant From "Least- Close" Sibling In Childhood.....	45
Table 4.	What Bothered/Irritated Subjects Most About "Least-Close" Siblings In Childhood.....	46
Table 5.	T-Test Results Of Rivalry, Joint Activities, Conflict, And Warmth Experienced By Subjects And "Close" vs. Subjects And "Least-Close" Siblings (Childhood).....	48
Table 6.	T-Test Results Of Rivalry, Joint Activities, Conflict, And Warmth Experienced By Subjects And "Close" vs. Subjects And "Other" Sibling(s) (Childhood).....	49
Table 7.	T-Test Results Of Rivalry, Joint Activities, Conflict, And Warmth Experienced By Subjects And "Least-Close" vs. Subjects And "Other" Sibling(s) (Childhood).....	51

Table 8. Occurrence Of Parental Favoritism Toward "Close" Siblings, "Not-Close" Siblings, And Subjects.....	53
Table 9. Why Subjects Became "Close" To A Sibling In Adulthood Who Was Different From Their Childhood "Close" Sibling (Note: Table only includes those who changed).....	55
Table 10. Why Subjects Did Not Keep Their Childhood "Close" Sibling In Adulthood.....	57
Table 11. T-Test Comparison Of Rivalry, Joint Activities, Conflict, And Warmth Experienced In Childhood By Subjects And "Childhood Close Siblings" Who Were Replaced In Adulthood vs. Subjects And "New Adult Close" Siblings.....	59
Table 12. T-Test Comparison Of Rivalry, Joint Activities, Conflict, And Warmth Experienced In Childhood By Subjects And "Childhood Close Siblings" Who Continued Into Adulthood vs. Subjects And "Childhood Close Siblings" Who Were Subsequently Replaced.....	60

INTRODUCTION

While quite a bit has been written about childhood sibling relationships, the lifelong impact of the quality of these sibling relations, has been virtually ignored (Adams, 1981; Allan, 1977; Bank & Kahn, 1975; Cicirelli, 1980c; Irish, 1964). The purpose of this study is, in general, to examine the continuity of the emotional quality experienced between siblings from childhood to adulthood. The issues that will be specifically addressed include, first, identifying components of "close" vs. "not-close" (i.e., "least-close" and "other"-neither "close" nor "least-close") sibling relationships in childhood, and second, investigating the extent to which these components may predict or mediate "close" (vs. "not-close") sibling relations in adulthood. In other words, to what extent does emotional quality perceived in childhood sibling relations (i.e., "close" vs. "not-close") permeate and impact the subsequent adult sibships? Through such insight the long-term impact of early family dynamics may be better understood, and more effective therapeutic intervention may be successfully applied to brothers and sisters who are in a difficult sibling relationship--regardless of what lifestage

they are in (Bank & Kahn, 1975).

Uniqueness of Sibling Relationships

An adult sibling relationship is a unique first-hand experience for 80-90% of American adults (Cicirelli, 1980c, 1982; Dunn, 1985). This uniqueness is addressed by many researchers and is the focus of numerous studies on sibling interactions over the lifespan (Adams, 1981; Bank & Kahn, 1982a; 1982b; Brubaker, 1985; Cicirelli, 1982, 1987; Dunn, 1985; Dunn & Kendrick, 1982b; Rubin, 1985; Schneider, 1968; Shanas, 1980).

There are several ways in which sibling relationships are unique to other familial (e.g., parent-child; spousal; cousins) and nonfamilial adult relationships. First, a sibling relationship is potentially the longest relationship that one may experience (Bank & Kahn, 1975; Brubaker, 1985; Bryant, 1982; Cicirelli, 1982; Troll, 1982). It begins at the birth of a brother or sister and lasts until the death of one of the siblings, a possible duration of 70-80 or more years.

Second, siblings experience a very similar developmental background since they share the same family-of-origin environment more so than any other familial or nonfamilial relationship (Brubaker, 1985; Bryant, 1982; Dunn, 1985; Kennedy, 1986; Lamb, 1982; Scarr & Grajek, 1982). Because of their common environment, siblings often learn similar

interpersonal communication skills, values, behavioral standards, and schemas. Shared growing-up experiences include such things as family traditions regarding holidays; ascribed roles and scripts; and proscribed interpersonal dynamics around the expression of anger, aggression, love, hate, conflict resolution, and parenting styles. Finally, there is the sharing of crises and transitions of a family of origin's vicissitudes (e.g., divorce, deaths, financial reversal, etc.) (Dunn, 1985).

Third, in contrast to nonfamilial relationships, siblings do not choose one another (Cicirelli, 1982; Markus, 1981). Who one's sibling(s) is/are can truly be considered a "luck of the draw" phenomenon. Not only does one not have a choice, but this particular family relationship is promoted, fostered, and encouraged--by parents, relatives, and society in general--to be one of love, closeness, warmth, and friendliness simply by virtue of being siblings (Dunn, 1985; Dunn & Kendrick, 1982b; Jones, 1968; Rubin, 1985; Strean & Freeman, 1988). In other words, "closeness" is the idealized norm and is the measure of healthy and "good" sibling relationships (Dunn, 1985).

The fourth area of sibling uniqueness is that our culture recognizes no formal dissolution of this relationship (other than death) (Allan, 1977; Dunn, 1985; Rubin, 1985). How adult siblings respond to a belief that there is no sanctioned means to dissolve a less-than-satisfactory

sibship was of interest to Ross and Milgram (1982). They asked siblings who were enmeshed in unhappy and/or hostile sibships why they did not simply discontinue these negative affect-laden relations. They wrote:

...our participants were stunned. Most seemed to assume that sibling relationships are permanent. Some tried to explain, but did not get far beyond blood ties and family bonds. Very few, almost wistfully, realized that the question implied a choice--but the reality did not (p. 231).

It is posited that an adult sibling perceives a sibling relationship as a continuous, unbreakable, and unending "blood-tie" that is an enduring and culturally-mandated socially active relationship (e.g., family get-togethers, keeping in touch, remembering holidays, birthdays, and special occasions) (Allan, 1977; Dunn, 1985; Jones, 1968; Mead, 1972; Rubin, 1985). A sibling's failure to comply with such a culturally universal mandate often results in his or her feelings of guilt (Jones, 1968).

In summary, four components have been identified as unique to sibling vs. other familial and nonfamilial dyads. These components suggest that sibling relationships are: 1) potentially the longest relationships one experiences; 2) mediated by shared childhood experiences within the family-of-origin; 3) without choice of who one's brother or sister is (coupled with the expectation that this relationship will be one of love, closeness, warmth, and friendliness); and 4) assumed to be permanent in that there is no familial or culturally acceptable method of dissolving a sibling relation-

ship. The question to be addressed next is how (or if) these components might impact one's experience of a "close" vs. "not-close" sibling relationship across the lifespan.

Impact of "Close" Sibling Relationships

Bank and Kahn (1975) and Lamb (1982) identified a number of benefits that siblings may derive from "close" sibling relationships throughout a lifetime. They suggest that "close" siblings may be a source of support during times of emotional stress, that they may provide companionship, and that they may serve as primary confidantes. Additionally, "close" siblings are recognized as powerful and dynamic socializing agents for each other throughout one's lifetime. "Close" brothers and/or sisters, for example, may help one another to clarify and maintain his or her values and personal standards of behavior through modeling and advice-giving from childhood through late adulthood (Bank & Kahn, 1975; Bryant, 1982; Cicirelli, 1982; Dunn, 1985; Pepler, Abramovitch, & Corter, 1981). Finally, it is suggested that a "close" sibling relationship provides a nonthreatening milieu within which siblings develop and practice familial and culturally acceptable cooperation tactics, negotiation skills, rules of competition, and overall social-interpersonal skills (Lamb, 1978b, 1982; Nadelman & Bagun, 1982). A review of the literature that addresses conceptualized benefits as a function of siblings'

"closeness" at different lifestages follows.

Childhood. "Close" sibling benefits at this age often include emotional support by brothers or sisters who become primary confidantes during the pre-adolescence years (Bryant, 1982; Dunn, 1985; Dunn & Kendrick, 1982b; Lamb, 1982). For example, a "close" sibling relationship may facilitate feelings of self-worth by providing opportunities to be listened to, nonjudgemental advice, and words of comfort; assuming an advocacy role. A "close" sibling may also model appropriate behavior for a distressed sibling who, for example, did not make a team, is having trouble with a school bully, or who was experiencing difficulties with parental constraints. Lamb (1982) suggested that siblings' exchange of the mutually supportive behaviors described about (e.g., being a primary confidante and a source of emotional support) usually continues into adolescence and early adulthood.

Adolescence. It is during the period of adolescence that emotionally-laden issues of sexuality, drugs, value clarification, emancipation, and career choices first arise. Lamb (1982) suggested that it is during this volatile life-stage that "close" siblings provide the most "reliable and consistently-supportive relationship" (p. 5) because brothers and sisters perceive one another as being easier to talk to and more trustworthy in keeping confidences than either friends (of both sexes) and parents. In other words,

sibling "closeness" during this lifestage often provides sufficient emotional support to facilitate an adolescent's willingness to explore many age-appropriate issues (e.g., value clarification and/or identity questions) (Cicirelli, 1980a).

Adulthood. Studies of "close" siblings during adulthood suggest that these relationships may provide emotional support in ways similar to those identified during adolescence (Bank & Kahn, 1975; Cicirelli, 1980c; Dunn, 1985; Lamb, 1982). "Close" adult siblings often focus supportive advice-giving and socializing behavior on such adult issues as sexual identity, marriage, divorce, childrearing, career commitments, geographic moves, and retirement plans (Lindbergh, 1978; Mead, 1972; Shanas, 1980; Troll, 1982). Troll (1982) suggested that because brothers and/or sisters often follow parallel developmental paths, "close" siblings find it easy to empathize and provide meaningful physical (e.g., financial and material aid) and emotional (e.g., caring and nonjudgemental advice) support for one another.

"Close" siblings in early adulthood typically experience a lessening of the quantity--not the quality--of supportive behavior (Cicirelli, 1980a; Lamb, 1982; Lindbergh, 1978; Mead, 1972; Troll, 1982). Cicirelli (1980c) and Lamb (1982) suggested that the diminished emotional intensity and number of interpersonal interactions between "close" siblings during the early adult (as well as

middle adult) lifestages is a natural consequence of siblings leaving the parental home (i.e., the increased physical distance from one another, and the fact that one's time and energy tend to be redirected towards the more salient lifestage tasks of establishing one's career, marriage, and family.). However, Lamb (1982) did report evidence that "close" siblings often continue to provide one another with some emotional support and also to function as confidantes for one another during this lifestage.

"Close" siblings continue to be a reliable source of emotional support and comfort during middle adulthood (Allan, 1977; Cicirelli, 1980c; Lindbergh, 1978; Troll, 1982). Often, this takes the form of material assistance (e.g., financial aid, helping with a move, repairing a house, or running errands). Cicirelli (1980c) also described beneficial but less tangible behavior such as promoting and arranging family get-togethers for holidays, birthdays, and special occasions which provide "close" siblings an opportunity to maintain feelings of warmth and closeness, a sense of family continuity, and familial identity.

Laverty (1962) suggested that the quality of sibling "closeness" previously discussed (e.g., emotional support, caring, value clarification, sense of companionship) is also evident in late adulthood. Cicirelli (1977) described problems and concerns of the elderly (e.g., financial,

social isolation, self-worth, etc.) as ameliorated by having a "close" sibling upon whom they relied. For example, a "close" sister may assume a caretaking role for a widowed brother. Conversely, a "close" brother often assists a widowed sister in making business and financial decisions. In another study, Cicirelli (1980b) found that subjects between the ages of 60-90 years who often spent pleasant and agreeable time with a "close" sibling believed that they had better control over their lives (i.e., a greater internal locus of control) and, as a result, were happier with their lives. Finally, through reminiscing, elderly "close" siblings may well provide the major source of lifespan validation for each other for their overall sense of self-worth and of how well one has lived his/her life (Adams, 1981; Brubaker, 1985; Butler, 1963; Cicirelli, 1977, 1980b, 1980c, 1982, 1987; Clark & Anderson, 1967; Hagestad, 1987; Riley, 1983; Scott, 1983; Shanas, 1980; Sherman, 1987; Troll, 1971, 1982).

Impact of "Not-Close" Sibling Relationships

Historically, the lifespan impact upon brothers and/or sisters of "not-close" sibling relationships was eclipsed by research focusing on the parental causes of siblings' hostility towards one another (Dunn, 1985; Dunn & Kendrick, 1982a, 1982b; Irish, 1964; Koch, 1956, 1960). In other

words, poor sibling relationships were perceived to be the consequences of poor parenting, while the contributions, if any, of siblings dynamics were virtually ignored (Bigner, 1985; Dunn, 1985; Dunn & Kendrick, 1980, 1981; Lamb, 1978b). For example, studies of families examined, blamed, exhorted, and charged beleaguered parents with the task of learning better parenting skills. Whether sibling jealousy or hostility was kept at a tolerable level or allowed to erupt was posited to be dependent upon parental attitudes toward acceptable sibling behavior and the expression of hostile emotions (Ginott, 1969).

Bank and Kahn (1982b) suggested that negative feelings are generated between siblings as they perceive one another to be a threat to the "identity niche" (e.g., the smartest, most athletic, funniest, or best-looking sibling) that each has established in the family as well as in society as a whole. Bank and Kahn (1982b) and Cicirelli (1982) suggested that behavior which negatively impacts sibling relationships is difficult to identify because discrete behaviors vary by age and lifestage. A review of the literature that addresses the negative consequences from "not-close" sibling relationships by lifestages follows.

Childhood. Dunn and Kendrick (1982b) recently published results from a study that examined sibling dynamics (e.g., behavior and affect) in forty families over the course of the first six years starting at the time of birth

of the second child. They found that the birth of a sibling and the accompanying changes in the first-born's environment (e.g., sharing parental attention) were sufficient to cause much unhappiness, resentment, and anger in the first-born child. This despair was aptly conveyed by one four-year-old who asked his mother "Why have you ruined my life?" (p. 1). Based on the results from this study of two-sibling families, Dunn and Kendrick (1980, 1981, 1982a, 1982b) argued that in every case, the arrival of a new sibling was greeted with ambivalence. In other words, a negative response to the arrival of a perceived rival is ubiquitous. The usurped sibling struggles to receive as much parental attention as the newborn receives. The attention-getting behavior may be aggressively acted out in "naughty" ways as well as regressing to baby-like behaviors (e.g., tantrums, misbehaving, bed-wetting, soiling, baby talk, wanting a bottle, etc.). They concluded that the arrival of a new sibling is sufficient to elicit negative, aggressive feelings and a diminished sense of worth and loveability in an older brother or sister. To what extent these same feelings are experienced by siblings in larger families when a third or fourth--or more--brother or sister is born has not been established.

Hostile interactions observed between young siblings include hitting, pinching, biting, taking of toys from each other, and deliberate attempts to disrupt an interaction

between the brother/sister and a parent (Dunn & Kendrick, 1982a, 1982b). The bulk of the childhood sibling relationship literature (e.g., Bank & Kahn, 1975, 1982b; Baskitt, 1985; Bigner, 1985; Dunn, 1985; Ginott, 1969; Koch, 1956; Lamb, 1978a; Mead, 1972; Pepler, et al., 1981; Rubin, 1985; Strean & Freeman, 1988) suggests that these behaviors are necessary but not sufficient for a brother or sister to earn a label of "not-close" (Dunn, 1985, 1986; Mead, 1972; Rubin, 1985; Strean & Freeman, 1988). Instead, they suggest that it is when one sibling perceives unfairness in the rules, regulations, or method of conflict resolution that favors "the other" brother or sister that a judgmental label of a "not-close" sibling relationship ensues. Dunn (1985) found that "favoritism" contributed to the "victimized" sibling feeling a diminished sense of self-worth, discounted, and a lack of trust in authority figures. This in turn often led to the suppression or displacement of resentment, frequently resulting in an increase in acting-out behaviors (e.g., "naughty", bedwetting, bad-tempered, anger, depression, etc.). In sum, it is a sibling's perception of having his or her worth and needs compared to a sibling's--and found wanting--that often results in a "not-close" sibling relationship.

Social and familial comparisons of siblings may thus be the crux and cornerstone of identified "not-close" sibling relationships (Brickman & Bulman, 1977). For example,

parental favoritism may be experienced by a sibling when he or she is compared with another sibling on various behavioral or affective dimensions (e.g., energy level, docility, and/or academic, athletic, or social accomplishments) even though the parent may have only been neutrally acknowledging observed sibling differences and uniqueness. Any comparative evaluation, then, appears to threaten a sibling's naturally developing identity and sense of acceptable self-worth, and rivalry thus ensues (Abramovitch, Pepler, & Corter, 1982; Brickman & Bulman, 1977; Bryant, 1982; Ross & Milgram, 1982; Streat & Freeman, 1988; Viorst, 1986).

Pfouts (1976) argued that sibling rivalry flourishes during middle childhood for two reasons: 1) competition for parental praise, and 2) competition for individuality vis a vis familial standards established primarily by older siblings. Though the struggle for parental favor per se becomes less important to school-aged--compared to preschool-aged--siblings, it is at this age that social comparison is experienced in an expanded arena of home, neighborhood and school on an ever-widening range of athletic, academic and social attitudes, and personal attributes (Bryant, 1982). Pfouts (1976) found that when siblings differed significantly on a familial- or culturally-valued attribute, the one who comes up short experiences resentment and ill-will towards the "superior"

sibling. Conversely, the more "able" or "superior" child reports experiencing feelings of discomfort and increased ambivalence within the relationship with the "inferior" sibling--a sibship within which "closeness" becomes increasingly difficult to attain and where rivalry and negative feelings become the norm. The resulting behaviors often include fighting or withdrawal by one or both siblings from the relationship. Neither alternative is conducive to a "close" relationship (Dunn, 1985; Mead, 1972; Rubin, 1985; Strean & Freeman, 1988).

Withdrawing physically and/or emotionally from a threatening sibling comparison is an observable process which is facilitated during middle childhood, adolescence, and adulthood by an expanded environment described above. The contacts and interests outside the family-of-origin provide increased opportunity to safely distance oneself from the threat of sibling comparison. A sibling may accomplish successful withdrawal by actively seeking out and selecting a safer milieu outside of the family context within which to develop (Scarr & Grajeck, 1982).

Adolescence. An adolescent sibling who is compared to a brother or sister and who perceives himself or herself as not measuring up to established familial or social expectations is dealt a potentially devastating blow to his or her developing ego, and subsequent confusion may ensue as the adolescent attempts to master the major tasks of this devel-

opmental stage (e.g, finding one's identity and sexuality as well as developing personal values and behavioral standards) (Bryant, 1982; Cicirelli, 1982, 1987; Constantine, 1986; Strean & Freeman, 1988). When an adolescent is unable to discuss age-appropriate issues with parents (because parents are not comfortable discussing the issue, are not receptive, or they use other siblings as the measure of what is acceptable) and a "close" sibling relationship is not available to them (as when siblings are perceived as hostile or dangerous), family attachment is severely threatened and often results in premature emancipation (Strean & Freeman, 1988).

Perceived parental favoritism continues to be an area in which brothers and/or sisters experience negative feelings between one another. Favoritism may be experienced, for example, through the establishment of different rules, curfews, or car privileges based on a sibling's sex or age. Such bias may be internalized as a value judgement of being better or worse and, thus, being more or less valued by the family (or society). Adolescents who experience a lack of parental and sibling support often face difficulty in working through age-appropriate developmental tasks and are often left with much "unfinished business" in the way of unresolved sibling anger, hostility, and conflict. These siblings may be, therefore, less prepared for an adult life of healthy autonomy (Bigner, 1985).

Adulthood. In a study of working adults, Form and Geschwender (1962) found that brothers often measured job satisfaction in terms of how they compared to a brother. On the other hand, Mead (1972) observed that many females judged how successful they were by comparing themselves to a sister on such external factors as size of house, size of bank account, and how successful their respective children were. Troll (1971) concluded that adults continue to use their siblings as "measuring sticks" by which to evaluate their own success and happiness--or lack thereof. In other words, when a sibling to which one is compared is perceived as being successful in attaining more of what is valued by internalized familial and/or societal standards, the sibling relationship suffers.

Because of the stigma attached to admitting to adult sibling rivalry, adult siblings often solve the "problem" of undesired contacts with a "not-close" sibling by simply disassociating themselves from that sibling psychologically, emotionally, and/or physically (Ross and Milgram, 1982). Another relatively effective means by which to avoid feelings of rivalry is an:

...apparent tacit agreement between siblings not to talk about their rivalries... Admitting sibling rivalry may be threatening and experienced as equivalent to admitting maladjustment. Furthermore, to reveal feelings of rivalry to a brother or sister who is perceived as being stronger or as having the upper hand in the relationship increases one's vulnerability in an already unsafe situations (Ross & Milgram, 1982, pp. 236-237).

Early adulthood may be a time when sibling rivalry becomes less overt because siblings no longer have daily contact with each other as they once did in the family-of-origin (Bryant, 1982; Cicirelli, 1980c, 1982; Viorst, 1986). In other words, with greater physical distance, there is a reduced chance of overt family and social comparison. However, Rubin (1985) argued that "not-close" siblings strive for more than the normal diminishing of sibling contact. In her study of adult siblings, she noted that "not-close" siblings report making a conscious effort to avoid situations such as family get-togethers and sharing one's life (e.g., one's accomplishments, disappointments, fears, and failures) with his or her family for fear of being unfavorably compared with one's "not-close" brother and/or sister one more time and--one more time--falling short.

During middle adulthood, siblings tend to be occupied with obligations to their own family and work which often results in fewer sibling contacts. "Not-close"--especially "least-close"--siblings continue to consciously use avoidance tactics described for young adult siblings (Cicirelli, 1980c; Dunn, 1985; Lindbergh, 1978; Mead, 1972; Rosenberg & Anspach, 1973; Scott, 1983; Viorst, 1986). During the late portion of the middle adulthood years, sibling interactions and contacts may increase as siblings may be forced to work together to decide on and arrange for

the care of their sick or aging parents. This increased contact often reactivates the previously unresolved sibling rivalry resulting in more frequent quarrels and overt hostility usually more typical of sibling conflict during the childhood and adolescent years (Cicirelli, 1977, 1980b, 1980c, 1982; Troll, 1982).

After reviewing the literature on casework management of the elderly, Laverty (1962) concluded that siblings tend to retain unexpressed anger and hostility towards a "least-close" brother or sister throughout his or her lifetime. Furthermore, when elderly siblings are unable to vent cumulative anger directly towards a "least-close" brother or sister, Laverty argued that they tended to turn the hostility on any convenient object (e.g., young children in the neighborhood, neighbors, friends, caretakers in a facility, or even themselves). This displaced anger is generally perceived by others to be inappropriate and it often translates into an elderly person being labeled as a cantankerous old man, a biddy, an impossible patient, or a depressed and difficult person whom others do not wish to be around. Finally, "not-close" sibling relationships are thought to be a major stumbling block to a successful life review at the close of one's life (Cicirelli, 1977, 1980c, 1982; Erikson, 1968, 1980; Rubin, 1985; Scott, 1983). Scott (1983) posited that it is the sharing of lifelong memories with siblings that serve to validate one's perception of a "lifespan"

self, self-worth, a sense of integrity, and ultimately, an acceptance of one's life as it has been lived. Without such an opportunity, one may end life in despair over what could have been and never was--(Erikson, 1968, 1978, 1980) namely, the social and familial expectation of a "close" sibling relationship with one's brother/sister.

Factors Influencing Sibling Relationships

The most widely researched factors affecting the emotional quality of sibling relationships (i.e., "close" vs. "not-close") include birth order, age-spacing (i.e., the number of years between siblings in a sibling dyad), and sex of the siblings (Dunn, 1985; Dunn & Kendrick, 1982a, 1982b; Lamb, 1982). Historically, studies of childhood sibling relationship examined how these factors affected parental behavior, influenced emotions directed towards a child, and affected the subsequent interaction between the sibling and his or her brother or sister.

Following is a review of the literature which looks at how siblings' birth order, age-spacing, and sex influences sibling relationships.

Birth order. The majority of birth order studies were of two-sibling families, and attempted to identify salient predictive features of birth order effect on the subsequent emotional quality of the sibling relationship (Dunn, 1985). The first-born's emotional and behavioral reactions to a

second-born is often assumed to be an indicator of the subsequent quality experienced by brothers and/or sisters in a sibling relationship. For example, Dunn (1985) cited numerous assumptions that would reasonably account for a first-born's feeling of rivalry, resentfulness, and hatefulness directed towards the birth of a second-born brother or sister. Perhaps the most salient reaction of a first-born upon the birth of a sibling is the ubiquitous feeling of being "dethroned" and "displaced". It is interesting that both Dunn's (1985) and Koch's (1960) study of the amount of attention received by the first and second sibling after the birth of the second child consistently found that more parental attention was given to the first-born rather than the second-born sibling. However, it was noted that this attention was reduced relative to the time before the arrival of the second child. They concluded that it is not the absolute amount of attention given to the second-born that threatens the first-born; rather, it is the decline of attention relative to the exclusive time he or she received before the birth of the second child.

Concerning the first-born's behavior towards the new sibling, Sutton-Smith (1982) and Sutton-Smith and Rosenberg (1970) observed that the elder of two siblings tended to express overt resentment through an physical dominance, power, and cognitive maturity over the younger sibling simply as a function of being older and bigger. Conversely,

the younger sibling typically resorted to more covert power tactics such as sulking, pouting, pleading, crying, and appealing to the parent(s) to counter this power imbalance. Furthermore, in a study of young first- and second-born siblings (six to eight years of age), they found that both siblings concurred that parents consistently and regularly aligned their decisions and judgments in favor of the younger against the older sibling. The siblings also concurred that within this relationship, the oldest was consistently bossier and, therefore, dominated the sibling interactions.

Another possible "close" sibling dynamic evolving from birth order was observed in larger families (four or more siblings). It was noted that the eldest female sibling (or, less frequently, the eldest male) often became a surrogate parent and a caretaker figure to later-born sibling (Baskitt, 1984, 1985; Bossard and Bell, 1956; Brody, Stoneman, MacKinnon, & MacKinnon, 1985; Dunn, 1985; Dunn & Kendrick, 1982a, 1982b; Kalleopuska, 1984; Stewart & Marvin, 1984). These researchers speculated that a subsequent "close" sibling relationship that developed was an artifact of the dynamics observed in a large family as well as a cultural bias for older siblings to assume caretaker roles (rather than this occurring as a result of an older sibling's choice to assume a parental role).

In conclusion, Dunn (1985) argued that although there is an abundance of literature available on the effects of

birth order on the developing and maintenance of "close" vs. "not-close" sibling dyads during childhood, there is no overall agreement as to its predictive mediating effects and ultimate consequence on sibships over the lifespan.

Age-spacing. Lamb (1982) suggested that the effects of age-spacing on the emotional quality of sibling relationships have received much less attention than have the effects of birth order or sex of the sibling. The research on the impact of age-spacing upon brothers' or sisters' relations is similar to the results obtained for birth order effects on the quality of sibling relationships; in both cases, the studies lack consensus.

Though Bossard and Boll (1956) did not clearly differentiate between "small" vs. "large" age-spacing intervals in number of years, they did conclude from their studies of large families that closeness in age was advantageous in promoting the experience of emotional "closeness" between siblings. They suggested that closer age-spacing provided an opportunity for siblings to become "close" through more shared activities and playing together. Similarly, Ross and Milgram (1982) reported that two-thirds of the adults in their sample attributed their current feelings of siblings' "closeness" to their childhood opportunities to play together because they were close in age. Also, Adams (1981) stated that in a study of young adults, forty-five percent of the subjects identified their current "closest" sibling

as the brother or sister who was closest in age--the one who was most often available to play with during their growing-up years. Likewise, based on a study of "close" children and young adults, Bank and Kahn (1982b) concluded that a two year age-spacing between siblings provides a milieu of common lifestage issues which facilitated siblings ability to empathize with one another's concerns and feelings of compatibility. Finally, Strean and Freeman (1988) argued that sibling age-spacing of two years or less results in greater ease of sibling's ability to empathize, identify, and communicate with one another and is identified as a key factor of "closeness" experienced between young brothers and sisters.

Close age-spacing, however, does not guarantee emotional closeness between siblings. For example, several researchers have reported cases of adult sibling rivalry, resentment, and competitiveness among siblings who were close in age (Newson & Newson, 1976; Rubin, 1985; Strean & Freeman, 1988; White, 1975). These results are in contrast to Koch's (1956) findings that young school-aged children experience a more stressful and competitive relationship when there was more than two years between sibling.

In an attempt to identify how age-spacing influences the emotional quality of sibling relationships, Abramovitch, Corter, and Lando (1979) conducted a study of preschool-aged children. The study examined the frequency of agonistic

behaviors (e.g., physical and verbal aggression including tattling and verbal threats) relative to the frequency of prosocial behaviors (e.g., sharing, cooperating, giving comfort, reassuring, and physical affection including patting, hugging, laughing, or smiling). When the frequency of agonistic vs. prosocial behaviors were compared as a function of age-spacing (small age-spacing was defined as two or less years compared to large age-spacing as two to four years), no significant differences were noted. In addition, there was no appreciable difference found in an eighteen-month follow-up study (Abramovitch, Corter, and Pepler, 1980). Likewise, Dunn's (1985) fifteen-month follow-up study of preschool-aged children suggested that age-spacing did not appear to affect the emotional quality of sibling relationships.

Cicirelli (1973) and Koch (1956) suggested that when age-spacing exceeds four years, a subjectively different kind of relationship develops between siblings. The sibling relationship that emerges from such a large age-spacing is more comparable to parent-child dynamics in contrast to a peer relationship that is more often observed between siblings of a closer age-spacing. In a study of adult siblings, Ross and Milgram (1982) noted that if one sibling is considerably older than another, subjects tend to report that they usually had little in common and that often the eldest had left home before a close relationship ever

developed.

Sex. With one exception, there is little agreement on how the sex of a sibling affects the emotional and behavioral development and maintenance of "close" vs. "not-close" sibling relationships. The one exception is the consistently higher frequency of same-sex (as opposed to opposite-sexed) "close" sibling dyads repeatedly identified in sibling studies (Bank & Kahn, 1975, 1982b; Dunn, 1985; Dunn & Kendrick, 1981; Koch, 1960; Rubin, 1985). For instance, in a study of twenty-three young sibling triads, subjects were provided with a choice of either a brother or a sister as a "close" sibling (Bank & Kahn, 1982b). The researchers found that twenty-one of the twenty-three subjects identified a same-sex sibling (as opposed to an opposite-sex sibling) as the one to whom he or she felt "closest".

Numerous studies have investigated how same-sex (e.g., female/female or male/male) vs. opposite-sexed (male/female) sibling relationship compare in terms of emotional quality (Abramovitch, et al., 1980; Abramovitch, et al., 1979; Adams, 1981; Bank & Kahn, 1982b; Caplow, 1968; Festinger, 1954; Hartup, 1983; Kiel, 1983; Koch, 1956, 1960; Schachter, Shore, Feldman-Rotman, Marquis, & Cambell, 1976; Sutton-Smith & Rosenberg, 1970). Regarding the quality of the sibling relationship of same-sex vs. opposite-sex pairs, Dunn (1985) and Dunn and Kendrick (1981) state that even though verbally-expressed feelings of hostility and resent-

ment are more prevalent between same- as opposed to opposite-sex sibling dyads, a greater percent of positive vs. negative (prosocial vs. agonistic) interactions paradoxically are observed. This is in contrast to Buhler's (1940) and Lamb's (1978a, 1978b) assertion that there is no difference in sibling's positive or negative interactions as a function of the sibling's sex composition. It was in the observed dynamics between closely spaced (two or less years) preschool-aged and infant brothers that Abramovitch et al., (1979) noted a greater (although not statistically significant) number of observed occurrences of verbal aggression (e.g., tattling and verbal threats) directed to the younger sibling by the older brother. However, this behavior was no longer observed in a follow-up study conducted eighteen months later (Abramovitch et al., 1980). Their conclusion was that regardless of a sibling dyad's gender composition, no empirical evidence existed for the commonly held belief that girls were genetically more prosocial than boys, who are assumed to be "naturally" more aggressive.

Abramovitch et al. (1979) looked for possible reasons why there are fewer children with "close" opposite-sex vs. same-sex sibling dyads. They observed that mothers interacted differently with a second child who was of the opposite sex compared to the first sibling. They suggested that it was this difference in treatment of opposite-sex

siblings that promoted a child's feelings of parental favoritism and resulted in subsequent feelings of hostility and rivalry between a brother and a sister. In other words, different parental treatment was translated by one or both siblings as evidence of not being as worthy or equal as the other--based on the sex of the sibling. This perceived favoritism is thought to be a primary factor that develops and maintains the hostility and rivalry subsequently identified between "not-close" siblings (Abramovitch et al., 1982; Dunn, 1985; Koch, 1960; Rubin, 1985; Streat & Freeman, 1988). In contrast, it is suggested that same-sex siblings bond more readily with one another because of perceived gender similarity. In support of this hypothesis, Dunn (1985) found in one study that sibling dyads of the same-sex (as opposed to opposite-sex sibling dyads) made five percent more friendly comments regarding their sibling. In another study, Koch (1960) also noted a similar same-sex sibling preference by six-year-olds. For example, children from "close" same-sex sibling relationships reported that they preferred playing with his or her same-sex sibling over playing with a friend of either sex. This is in contrast to opposite-sex siblings who expressed a preference for playing with a friend of the same sex over an opposite-sex sibling.

In adulthood, Rubin (1985) reported that brothers often abdicate to their wives the responsibility of keeping in touch with their siblings. Adult male sibling "contacts"

with sisters, then, often become a function of how well their sisters and their wives relate to one another. On the other hand, same-sex siblings continue to interact with one another on an emotional level much as they did during childhood--though the frequency of contact is often reduced (Mead, 1972; Rubin, 1985; Troll, 1971; Viorst, 1986).

To summarize, research that looks at how the emotional quality of sibling relationships develops and is maintained across the lifespan often focuses on the interactions of three crucial sibling factors (i.e., birth order, age-spacing, and sex). A review of the research results are mixed as to how and if birth order or age-spacing facilitates or hinders adults in experiencing either "close", "least-close", or "other" sibling relationships. However, research results do suggest that siblings who have a choice between the same-sexed (as opposed to an opposite-sexed) sibling tend to be "closest" to a same-sexed sibling.

Continuity vs. Discontinuity of Sibling Relationships

Laverty (1962) argued that it is a myth that siblings outgrow their childhood feelings towards each sibling. She contends that feelings of rivalry and hostility remain qualitatively the same and are just expressed differently as a function of one's lifestage. For example, she describes how a child will physically attack a hated sibling rival with "smarting blows" whereas an adult chooses to attack a

"least-close" sibling with "stinging words" (p. 25). Studies that have looked at lifespan continuity or discontinuity of "close" and "not-close" sibling relationships (e.g., Bank & Kahn, 1975; Dunn, 1985; Eifermann, 1987; Gillman, 1987; Harley, 1986; Irish, 1964; Kennedy, 1986; Laverty, 1962; Ross & Milgram, 1982; Scott, 1983) have found that most adults reported that the feelings experienced within their "close" or "not-close" sibling relationship did not originate in adulthood. These findings support Bank and Kahn's (1982b) view that the emotional quality of a sibling relationship is a lifelong process that originates in childhood within the family-of-origin.

Troll (1982) argued that sibling interaction, regardless of where the sibship falls on the emotional continuum of "close" to "least-close," declines with the siblings' decreased physical availability as one leaves the family-of-origin and with the concurrent active pursuit of salient lifestage tasks of early adulthood (e.g., intimacy, launching one's career, and the start of one's own family) and middle adulthood (e.g., raising a family and strengthening and maintaining one's career). Intensity and frequency of sibling contact, then, reaches a hiatus--even for siblings who were "close" during early and middle childhood (Cicirelli, 1980c; Laverty, 1962; Lindbergh, 1978; Mead, 1972; Scott, 1983; Troll, 1982). Allan (1977) found that limited personal contact between "close" siblings did not

prevent the individuals from keeping track of the other's activities because this information was often obtained indirectly through a family network. However, "least-close" brothers or sisters take the naturally limited adult contacts even further and actively avoid learning of the other's activities through any means, in addition to reducing their level of socializing with the family-of-origin whenever possible (Rubin, 1985; Viorst, 1986).

Evidence for continuity of childhood emotional quality within sibling relationships is observed when siblings are dealing with issues involving parental aging and death. Cicirelli (1982) and Troll (1982) noted that old sibling rivalry often reemerges in the form of quarrels, bickering, and fighting at this point of life. Upon the death of parents, latent childhood bitterness, hostility, and anger again may disrupt the often fragile coexistence of a "least-close" sibling relationship as siblings settle parental estate issues. Using an age of fifty-five years as a marker of when these issues are, on the average, faced by siblings, Rosenberg and Anspach (1973) looked at the frequency of sibling contacts before and after this age. They found that two-thirds of their subjects under fifty-five vs. one-half over fifty-five remained in contact with their siblings. According to Troll (1982) however, this reduction of siblings' contacts with one another appears to be another hiatus rather than a severing of on-going sibling relation-

ships. She stated that as one continues to age, siblings often attempt to renew old family relationships. Siblings, second only to adult offspring, become sources of aid in times of need and providers of permanent homes in old age. It is also suggested that siblings become of particular importance in the well-being of never-married older people (Shanas, Townsend, Wedderburn, Friis, Milhoj, & Stehouwer, 1968).

Summary and Purpose of Study

Researchers of sibling relationship dynamics have identified ways in which sibling relationships are unique from other familial and nonfamilial relationships. Namely, they are a permanent lifelong relationship with a person who is not of one's choosing and of which the perceived emotional quality experienced in adulthood is reported to have originated in childhood experiences--primarily within the family-of-origin. It has been suggested that siblings receive many benefits across the lifespan from a "close" sibling relationship. Perhaps the primary benefit is the shaping and socializing of one's "self" as a function of his or her sibling relationship. Poor sibling relationships are thought to be rooted in the simple fact that a sibling is born. In other words, the phenomenon of two or more siblings establishes the necessary and sufficient arena for family and social comparison of brothers and/or sisters.

Research suggests that this readily translates into siblings' initial and ubiquitous sense of competition for parental time, love, and approval.

Concerning continuity vs. discontinuity of "close" sibling relationships across the lifespan, researchers have found that feelings of closeness experienced between adult siblings are consistently reported as having been influenced by childhood family-of-origin experiences. A review of sibling relationship literature suggests that the impact of birth order and age-spacing of lacks consensus in predicting sibling "closeness". However, given a choice, a preference for a "close" sibling of the same-sex (as opposed to opposite-sexed) has been observed in numerous studies.

Continued research on the origin of and mediating factors of "close" adult siblings is important because the literature has suggested that the consequences for siblings (across the lifespan) as a function of the emotional quality experienced within sibling dynamics are substantial. For example, benefits derived from "close" sibling relations may include support and validation of one's self-worth and identity. In contrast, brothers and sisters involved in a "least-close" sibling bond frequently report a stressful experience and often mutual feelings of hatefulness, anger, resentment, and hostility with the brother and sister, and tend to feel unworthy or unsuccessful when compared by parents to a "not-close" sibling. For example, Rubin (1985)

reflected upon siblings she repeatedly listened to in her clinical practice--men and women who struggle with lifelong friction with a brother or sister. A "not-close" sibling relationship can result in long therapy hours that are spent in attempts to resolve anger, to learn ways to successfully cope with guilt, and often just to accept the fact that a particular sibling may never be "close". In fact, Viorst (1986) stated that virtually every adult sibling who enters psychoanalytic therapy ultimately comes to deal with the negative aspect of a "least-close" sibling relationship. It is because there is evidence that the residual effects of a negative sibling relationship tend to reverberate throughout one's life that research that focuses on identifying and differentiating the factors in childhood that contribute to "close" vs. "least-close" adult sibling relationships become so important.

To date, findings on what makes for "close", "least-close", or "other" sibling relationships (i.e., siblings who are neither "close" nor "least-close") are primarily based on siblings' birth order, sex, and/or age spacing and are controversial. Second, birth order and sex of siblings are not--for all intents and purposes--controllable variables. Likewise, age spacing of siblings often comes as a surprise to parents. Researchers have not attempted to categorize or differentiate other characteristics of sibling relationships (e.g., siblings' shared activities in childhood; experience

of rivalry, conflict and perceived warmth within sibling relationships while growing up; and the impact of parental favoritism of one sibling over another).

The purpose of this study is, first, to describe and compare characteristics (identified above) within "close", "least-close", and "other" sibling relationships in childhood. A second goal is to systematically examine the extent to which these attributes may predict or mediate whether a "close" childhood sibling relationship continues into adulthood. First, concerning characteristics of childhood sibling relationships, it is hypothesized that subjects will report experiencing less rivalry and conflict, greater perceived warmth, and more joint activities with "close" vs. "least-close" siblings. Because of probable interference and/or bias in the direction of a favored brother or sister an overt "close" or "least-close" sibling relationship may become too difficult to develop or maintain. As a consequence, it is hypothesized that siblings who are parental favorites are more likely to be labeled as "other" than identified as a "close" or a "least-close" brother or sister. Second, concerning if childhood "close" siblings continue to be "close" or are subsequently replaced by another "close" sibling, it is hypothesized that a greater percentage of childhood "close" siblings remain "close" into adulthood.

It is hoped that this study may identify differentiat-

ing characteristics for "close" or "least-close" sibling relationships and, ultimately, that this information will provide a basis for teaching improved parenting skills that encourages "close" sibling relations. The results reported here are part of a larger study looking at sibling relationships across the lifespan.

METHOD

Subjects

A total of 527 adults (over eighteen years of age) from a campus community located in a medium-sized southwestern city participated in this study. The participants were individuals who volunteered in response to a general request for volunteers from undergraduate psychology classes. One hundred and seventeen subjects (approximately twenty percent of the original sample) met the criteria for inclusion in the present study--i.e., the subject's and siblings' ages were eighteen years of age or older, the subject had at least two siblings; the subject grew up in an intact family-of-origin, and both parents were still alive. An additional thirteen of the 117 participants (12.5%) were eliminated from the final analyses because of incomplete questionnaire responses.

The final sample was comprised of twenty-seven males (26.0%) and seventy-seven females (74.0%). The subjects ranged in age from eighteen to fifty-four years of age ($M=29.4$; $SD=7.9$ years) and were predominantly Caucasian (83%). Ninety-three percent of the subjects self-classified their family-of-origin's socio-economic status as middle-

class. The average total number of siblings in each family-of-origin (including subject) was 4.3 (SD=1.35).

Measures

Sibling Relationship Inventory (SRI). Portions of a Sibling Relationships Inventory (SRI) developed for use in a larger study of sibling relations across the lifespan were used in the current study. The current study included items from the questionnaire that were designed to: 1) identify attributes of siblings relationships in childhood, and 2) address continuity of sibling relations from childhood to adulthood (see Appendix A). First, to examine characteristics of "close" vs. "least-close" sibling relationships, subjects were asked to identify which sibling they had felt closest to while growing up, and why. Subjects were also asked to list what they enjoyed doing with this sibling. Subjects were also asked to identify which sibling they had felt "least-close" to (and why). Subjects were then asked to list some of the things that particularly bothered and/or irritated them about this "least-close" sibling. Subjects were then asked to describe on a Likert-type scale (1=all the time, 4=never) how they perceived their relationship with each of their siblings for the following attributes: amount of rivalry, amount of joint activities, degree of conflict, and perceived warmth. Subjects also were asked about their perception of parental favoritism of certain

siblings over others (e.g., "While growing up, do you think your parents favored one child over the other? If so, who?").

Second, concerning the continuity of "close" sibling relationships from childhood to adulthood, our adult subjects were asked if they had the same "closest" sibling as they had identified as their childhood "close" sibling. If subjects did not retain the same "close" sibling, they were asked to identify who their new "closest" sibling was, and what they thought prompted this change.

Demographic information. Subjects were also asked to identify their age, sex, birth order, ethnicity, and family-of-origin's socio-economic status.

Procedure

The SRI was administered at prearranged testing sessions and it took approximately 30 to 60 minutes to complete.

RESULTS

"Close", "Least-Close" and "Other" Sibling Relationships: Childhood

The first goal of this study was to assess attributes of "close", "least-close", and "other" sibling relationships in childhood. Responses were computed for the total group and also by sex since the initial examination of the raw data suggested a difference in responses by sex.

"Close" sibling relationships. We first asked subjects which sibling they felt closest to in childhood--and why. Subjects could list up to five reasons in any order. A content analysis was performed on these responses. When asked why they felt closest to a particular sibling, subjects as a total group most frequently indicated Closeness in Age (20.2%), Intimacy (e.g. sibling was easy to talk to, was supportive, affectionate, and shared confidences) (18.1%), and Similarity (e.g., subject and "close" sibling were similar in values, interests, and temperament) (15.5%) (Table 1). There were slight differences according to sex in the order of importance and percentage of responses with males tending to most often name Similarity (20.4%), Close in Age (16.3%), and Intimacy (16.3%) while females named

Table 1

Why Subjects Felt Closest To "Close" Sibling In Childhood

Reason	Definition	Responses		
		Total Group N=104 %	Sex Male n=27 %	Female n=77 %
1. Close in Age		20.2	16.3	21.5
2. Intimacy	Easy to talk to/ get along with; supportive; affectionate; shared confidences	18.1	16.3	18.8
3. Similarity	Similar values, interests, and temperament	15.5	20.4	13.9
4. Far Apart in Age		9.3	8.2	9.7
5. Shared Activities	Spent time together; did things together; shared same bedroom	9.3	8.2	9.7
6. Subject Pseudo-parent to Sibling	Subject acted more as sibling's parent than as a brother or sister	7.7	10.0	6.9
7. Subject and Sibling were Same Sex		6.2	4.1	6.9
8. By Default	No one else was available	5.7	6.1	5.6
9. Sibling was Pseudo-parent to Subject	Sibling acted more as subject's parent than as brother or sister	4.1	8.2	2.8

Table 1 Continued

<u>Reason</u>	<u>Definition</u>	<u>Responses</u>		
		<u>Total</u> Group N=104 %	<u>Sex</u> Male n=27 %	Female n=77 %
10. Sibling was Role Model	Subject looked up to sibling	2.1	2.1	2.1
11. Sibling's Sense of Humor	Sibling was funny; made subject laugh	1.6	0.0	2.1

Close in Age (21.5%), Intimacy (18.8%), and, finally, Similarity (13.9%).

Next, subjects were asked to list activities they engaged in with their closest sibling in childhood. A content analysis was performed on up to five responses for each subject. For the total group, subjects most often reported Shared Activities (e.g., going to the movies, attending church, school, and social events together; and playing dolls and board games) (43.9%). Subjects also listed Athletics/Sport Activities (e.g., frisbee, outdoor games, and camping) (29.2%), and, finally, Talking Together (10.6%) (Table 2). Again, slight sex differences were observed in the ordering of activities and percentages of responses. Males named Athletics/Sports Activities (41.0%), Shared Activities (31.2%), and Talking Together (13.1%), most often, while females named Shared Activities (47.8%), Athletics/Sport Activities (25.6%), and Communication (9.8%).

"Least-close" sibling relationships. Next, we asked subjects which sibling they felt "least-close" to in childhood--and why. A content analysis was performed on the frequency of up to five responses for each subject. Subjects as a total group most frequently named Far Apart in Age (27.7%), Dissimilarity (i.e., differences in values, interests, and temperament) (26.6%), and Lack of Intimacy (i.e., subject and sibling did not get along; they argued

Table 2

Activities Subjects Engaged In With "Close" Sibling In Childhood

Reason	Definition	Responses		
		Total Group N=104 %	Sex Male n=27 %	Female n=77 %
1. Shared Activities	Went to the movies, church, school, social event together; played dolls, board games together	43.9	31.2	47.8
2. Athletics/Sports Activities	Played outdoor sports, and went camping together	29.2	41.0	25.6
3. Talking Together	Talked with one another	10.6	13.1	9.8
4. Socialized Together	Double-dated; had same friends, played together with neighborhood kids	9.1	8.2	9.4
5. Shared Family Time	Did things together as a family, (i.e., reading; listening to music; singing; family outings)	3.8	1.6	4.4
6. Other	Fighting; drinking; smoking; drugs; doing "things" together	2.3	4.9	1.5
7. Did Chores Together		1.1	0.0	1.5

and fought with one another; sibling acted immaturely and was mean, selfish, and/or manipulative; subject and sibling shared mutual feeling of hostility and resentment) (17.9%) (Table 3). Nonsignificant sex differences were again noted in percentages and ordering of importance. Males named Dissimilarity (32.6%), Far Apart in Age (24.0%), and Lack of Intimacy (15.2%) in contrast to females who named Far Apart in Age (29.1%), Dissimilarity (24.4%), and lastly, Lack of Intimacy (18.9%).

When asked what bothered or irritated them the most about a "least-close" sibling, subjects most often cited responses similar to the answers listed above (Table 4): Lack of Intimacy (42.1%), Dissimilarity (26.4%), and Parental Favoritism (9.0%) (Table 4). Males and females indicated a similar ordering of responses for Lack of Intimacy (males = 36.6%, females = 43.8%), Dissimilarity (males = 34.2%, females = 24.1%), while males named "Just Happened" (14.6%) and females cited Parental Favoritism of the "least-close" sibling (11.7%) as the third reason for a brother or sister to be labeled as "least-close".

Sibling relationships: Rivalry, joint activities, conflict, and warmth (childhood). To assess subject's relationships with "close", "least-close", and "other" siblings (i.e., siblings who were neither "close" nor "least-close"), subjects were asked to describe on a Likert-type scale (1 = all the time, 4 = never) the degree of

Table 3

Why Subjects Felt Distant From "Least-Close" Sibling In Childhood

Reason	Definition	Responses		
		Total Group N=104 %	Sex Male Female n=27 n=77 % %	
1. Far Apart in Age		27.7	24.0	29.1
2. Dissimilarity	Different values, interests, and temperament	26.6	32.6	24.4
3. Lack of Intimacy	Didn't get along; fought; argued; sibling acted immaturely, was mean, selfish and manipulative; subject and sibling had mutual feelings of hostility and resentment	17.9	15.2	18.9
4. Little Shared Activities	Little time spent with sibling; sibling not around much	14.5	13.0	15.0
5. Parental Favoritism	Parental favoritism toward sibling	4.6	8.6	3.1
6. Subject and Sibling were Opposite Sex		4.6	4.3	4.7
7. Sibling was Pseudo-parent to Subject	Sibling acted more as subject's parent than as a brother or sister	2.9	2.2	3.1
8. Close in Age		0.6	0.0	0.8

Table 4

What Bothered/Irritated Subjects Most About "Least-Close"
Siblings In Childhood

Reason	Definition	Responses		
		Total Group N=104 %	Sex Male Female n=27 n=77 % %	
1. Lack of Intimacy	Didn't get along; fought; argued; sibling acted immaturely,, was mean, selfish, manipulative, mutual feelings of hostility and resentment	42.1	36.6	43.8
2. Dissimilarity	Different values, interests, and temperament	26.6	34.2	24.1
3. Parental Favoritism	Parental favoritism toward sibling	9.0	0.0	11.7
4. Just Happened	No reason given; nothing particular that subject can remember	7.3	14.6	5.1
5. Far Apart in Age		5.1	2.4	5.8
6. Sibling was Pseudo-parent to Subject	Sibling acted more as subject's parent than as a brother or sister	5.1	4.9	5.1
7. Little Shared Activities	Little time spent with sibling; sibling not around much	2.8	4.9	2.2

rivalry, amount of joint activities, degree of conflict, and degree of perceived warmth with each sibling during childhood.

The results of "close" vs. "least-close" sibling relationships in childhood are presented in Table 5. Concerning the degree of rivalry, in general subjects reported almost identical degrees of rivalry with their "close" and with their "least-close" sibling. Next, subjects reported that there was a significantly greater amount of joint activities with a "close" as opposed to a "least-close" sibling $t(196) = -10.72, p < .001$. In general, subjects reported experiencing less conflict, $t(192) = 1.86, p < .05$ with their "close" sibling compared to their "least-close" sibling. Finally, the majority of subjects reported significantly more feelings of warmth with their "close" sibling compared to their "least-close" brother or sister $t(196) = -7.79, p < .001$.

The result of "close" vs. "other" (i.e., siblings who were neither "close" nor "least-close") sibling relationships in childhood is presented in Table 6. First, concerning the degree of rivalry, subjects reported feeling a slightly greater (though nonsignificant) degree of rivalry with their "close" as opposed to their "other" siblings. Next, a majority of subjects reported significantly more joint activities with their "close" sibling compared to "other" siblings in the family $t(227) = -5.41, p < .001$.

Table 5

T-Test Results Of Rivalry, Joint Activities, Conflict, And Warmth Experienced By Subjects And "Close" vs. Subjects And "Least-Close" Siblings (Childhood)

	<u>M^a</u>	<u>SD</u>	t-value (df) (two-tailed)	
1. Rivalry				
"Close"	2.73	0.99		
vs.				
"Least-Close"	2.90	0.15	- 1.62	(194)
2. Joint Activities				
"Close"	1.80	0.15		
vs.				
"Least-Close"	2.98	0.81	-10.72***	(196)
3. Conflict				
"Close"	2.67	0.87		
vs.				
"Least-Close"	2.41	1.05	1.86	(192)
4. Warmth				
"Close"	1.65	0.72		
vs.				
"Least-Close"	2.55	0.90	- 7.79*	(196)

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

a. Mean ratings reflect a scale of 1 = all the time, 4 = never.

Table 6

T-Test Results Of Rivalry, Joint Activities, Conflict, And Warmth Experienced By Subjects And "Close" vs. Subjects And "Other" Sibling(s) (Childhood)

	<u>M^a</u>	<u>SD</u>	t-value (df) (two-tailed)
1. Rivalry			
"Close"	2.73	0.99	
vs.			
"Other"	2.96	0.88	- 1.84 (229)
2. Joint Activities			
"Close"	1.80	0.74	
vs.			
"Other"	2.37	0.83	- 5.41*** (227)
3. Conflict			
"Close"	2.67	0.87	
vs.			
"Other"	2.80	0.87	- 1.10 (224)
4. Warmth			
"Close"	1.65	0.72	
vs.			
"Other"	1.91	0.79	- 2.60** (230)

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

a. Mean ratings reflect a scale of 1 = all the time, 4 = never.

Subjects reported slightly more (though nonsignificant) conflict with their "close" than with their "other" siblings. Finally, subjects reported experiencing significantly greater warmth with their "close" sibling as opposed to their "other" brother(s) or sister(s), $t(230) = -2.60, p < .001$.

Finally, the results of comparing components reported in sibling relationships between subjects and "least-close" siblings in contrast to subjects and "other" siblings are presented in Table 7. In general, subjects reported a greater degree of rivalry with their "least-close" as opposed to their "other" siblings, although this difference was not significant. Concerning the amount of joint activities, subjects reported participating in significantly less joint activity with their "least-close" sibling compared to their "other" siblings $t(227) = 7.45, p < .001$. Subjects reported significantly greater conflict with their "least-close" sibling compared to their "other" siblings $t(224) = -3.02, p < .01$. Finally, subjects reported experiencing significantly less perceived warmth with their "least-close" sibling compared to their "other" brother(s) or sister(s) $t(230) = 4.93, p < .001$.

Parental favoritism (childhood). Seventy-eight of the one hundred and four participants in this study reported a total of one hundred and fifteen occurrences of parental favoritism during childhood of one sibling over another

Table 7

T-Test Results Of Rivalry, Joint Activities, Conflict, And Warmth Experienced By Subjects And "Least-Close" vs. Subjects And "Other" Sibling(s) (Childhood)

	<u>M^a</u>	<u>SD</u>	t-value (df) (two-tailed)
1. Rivalry			
"Least-Close"	2.90	0.15	
vs.			
"Other"	2.96	0.88	- 0.72 (229)
2. Joint Activities			
"Least-Close"	2.98	0.81	
vs.			
"Other"	2.37	0.83	7.45*** (227)
3. Conflict			
"Least-Close"	2.41	1.05	
vs.			
"Other"	2.80	0.87	- 3.02** (224)
4. Warmth			
"Least-Close"	2.55	0.90	
vs.			
"Other"	1.91	0.79	4.93*** (230)

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

a. Mean ratings reflect a scale of 1 = all the time, 4 = never.

(Table 8). Of those identified as "parental favorites", 20.9% were subjects' "close siblings, and a total of 54.7% were "not-close" (i.e., 21.7% "least-close" and 33.0% "other" siblings). Twenty-four percent of subjects also stated that they had been a favored sibling in childhood.

Summary

In general, subjects indicated that the reason they were "close" to a particular brother or sister in childhood was because they were "close in age", and because they did things together. In contrast, siblings identified as "least-close" were frequently far apart in age from subjects and the relationship with these siblings was characterized by feelings of hostility and resentment. Overall, subjects experienced significantly, greater degree of warmth, and more shared activities with "close" than with "least-close" siblings. Reported differences in rivalry and conflict experienced within "close" vs. "least-close" sibling relationships were nonsignificant. Parental favoritism was most frequently observed in "other" siblings (i.e., neither a "close" nor "least-close" brother or sister.

Continuity vs. Discontinuity Of "Close" Sibling

Relationships From Childhood To Adulthood

The second issue addressed by this study was why some childhood "close" sibling relationships continue into

Table 8

Occurrence Of Parental Favoritism Toward "Close" Siblings, "Not-Close" Siblings, And Subjects

Favored Sibling	Parental Favoritism		
	Total Group n=115 %	Father n=61 %	Mother n=54 %
1. "Close"	20.9	21.3	20.4
2. "Not-Close"	54.7	50.8	59.1
("Least-Close")	(21.7)	(18.0)	(25.9)
("Other")	(33.0)	(32.8)	(33.3)
3. Subject	<u>24.4</u> 100.0	<u>27.9</u> 100.0	<u>20.4</u> 100.0

Note. N=104. Seventy-eight subjects (75%) reported 115 incidents of parental favoritism.

adulthood and others do not. This study found that fifty-nine percent of childhood "close" siblings remained "close" into adulthood in contrast with forty-one percent of "close" childhood siblings who were subsequently replaced by a different "close" brother or sister in adulthood. Reasons for why this occurred are examined below.

Why subjects changed to a different adult "close" sibling in adulthood. We first asked subjects which sibling they currently felt "closest" to--as adults. If this sibling was different than their childhood "close" brother or sister, subjects were asked what prompted this change. Subjects could list up to five reasons. A content analysis was performed on their responses. Subjects as a total group most frequently indicated that a change to the new adult "close" sibling was due to Similarity (i.e., this sibling was perceived to be more like the subject in interests, values, temperament) compared to the replaced childhood "close" sibling (30.6%), "Just Happened" (i.e., that this change just happened with age) (25.0%), and Intimacy (i.e., the new "close" sibling was easier to talk to, was more understanding and accepting) compared to the childhood "close" sibling (19.4%) (Table 9).

Sex differences were noted in the reasons cited by order of importance and percentages. Males were more apt to indicate that the change to the new "close" sibling "just happened" (25.0%), that they experience greater intimacy

Table 9

Why Subjects Became "Close" To A Sibling In Adulthood Who Was Different From Their Childhood "Close" Sibling (Note: Table only includes those who changed)

Reason	Definition	Responses		
		Total Group n=72 %	Sex Male n=20 %	Female n=52 %
1. Similarity	Adult "close" sibling is more similar to subject in interests, values, and temperament	30.6	15.0	36.5
2. "Just Happened" With Age		25.0	25.0	25.0
3. Intimacy	Adult "close" sibling is easier to talk to, more understanding and accepting of subject	19.4	20.0	19.2
4. Physical Proximity	Adult "close" sibling is geographically closer to subject than childhood "close" sibling is	8.3	10.0	7.7
5. Same "Lifestage"	Adult "close" sibling is at similar lifestage as subject	8.3	15.0	5.8
6. "Close" Sibling Left	Childhood "close" sibling moved from parental home	6.9	10.0	5.8
7. Other	New choice was baby of family; "no reason"	1.5	5.0	0.0

with the new adult "close" brother or sister (20.0%), and that there was a greater similarity of interests, values and temperament (15.0%) with the new sibling than currently experienced with their childhood "close" sibling. On the other hand, females said that they changed to the new adult "close" sibling because of greater similarity with that sibling (36.5%), that it just happened (25.0%), and that they felt greater intimacy with the new sibling (19.2%) than presently experienced with their childhood "close" sibling.

Next, in contrast to the above question (i.e., why subjects became "close" to a new sibling in adulthood who was different than their "close" childhood sibling) we asked subjects why they changed from their particular childhood "close" sibling. A content analysis was performed on up to five responses for each subject (Table 10). The majority of subjects reported that they changed from the childhood "close" brother or sister because of Differences (i.e., differences in interests and experiences, personality changes, and "growing apart" from one another) (59.3%), Physical Proximity (i.e., an increase of geographic distance from one another, "went away to college", or subject and/or sibling "got married") (25.9%), and Other (i.e., it "just happened", subject and sibling fought, parents forbade subject and sibling from doing things together) (14.8%). There were no sex differences in the order of responses although the percentages among the reasons varied slightly with sex.

Table 10

Why Subjects Did Not Keep Their Childhood "Close" Sibling
In Adulthood

Reason	Definition	Responses		
		Total Group n=27 %	Sex Male n=6 %	Female n=21 %
1. Differences	Different interests and experiences; grew apart; personality changes	59.3	50.0	61.9
2. Physical Proximity	Subject and/or sibling moved; went away to college; got married and moved away	25.9	33.3	23.8
7. Other	Just happened; fought; parents forbid subject and sibling to doing things together	14.8	16.7	14.3

To assess a comparison of the nature of the relationships with childhood "close" siblings who were replaced vs. the new adult "close" brother or sister (as a child), data on the degree of rivalry, joint activities, degree of conflict, and perceived warmth experienced by subjects with these siblings in childhood were re-examined (Table 11). These data indicated that there were significantly more shared activities $t(80) = -4.30, p < .001$ and greater perceived warmth $t(94) = -2.72, p < .001$ as children with the "childhood close sibling" than with the "new adult close sibling". However, subjects reported no significant differences in their experiences of conflict $t(74) = 0.12, p > .05$ or rivalry $t(76) = -0.74, p > .05$ with the "childhood close" than with the "new adult close" brother or sister.

Finally, t-tests were performed on characteristics reported in childhood sibling relationships of "close" siblings who continued to be "close" in adulthood in contrast to childhood "close" siblings who were subsequently replaced in adulthood with a different brother or sister (Table 12). Subjects reported no significant differences in degree of rivalry, joint activities, degree of conflict, or degree of warmth as perceived in these childhood sibling relationships.

Parental favoritism. Parental favoritism of childhood "close" vs. new adult "close" sibling was negligible. For

Table 11

T-Test Comparison Of Rivalry, Joint Activities, Conflict, And Warmth Experienced In Childhood By Subjects And "Childhood Close Siblings" Who Were Replaced In Adulthood vs. Subjects And "New Adult Close" Siblings

	<u>M_a</u>	<u>SD</u>	t-value (df) (two-tailed)
1. Rivalry			
"Childhood Close"	2.56	1.10	
vs.			
"New Adult Close"	2.74	1.04	- 0.74 (76)
2. Joint Activities			
"Childhood Close"	1.68	0.61	
vs.			
"New Adult Close"	2.41	0.89	- 4.30*** (80)
3. Conflict			
"Childhood Close"	2.61	0.92	
vs.			
"New Adult Close"	2.58	1.03	0.12 (74)
4. Warmth			
"Childhood Close"	1.67	0.66	
vs.			
"New Adult Close"	2.13	0.95	- 2.70** (94)

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

a. Mean ratings reflect a scale of 1 = all the time, 4 = never.

Table 12

T-Test Comparison Of Rivalry, Joint Activities, Conflict, And Warmth Experienced In Childhood By Subjects And "Childhood Close Siblings" Who Continued Into Adulthood vs. Subjects And "Childhood Close Siblings" Who Were Subsequently Replaced

	<u>M_a</u>	<u>SD</u>	t-value (df) (two-tailed)	
1. Rivalry				
"Unchanged Close"	2.84	0.90		
vs.				
"Replaced Close"	2.56	1.10	1.36	(94)
2. Joint Activities				
"Unchanged Close"	1.88	0.82		
vs.				
"Replaced Close"	1.68	0.60	1.30	(97)
3. Conflict				
"Unchanged Close"	2.72	0.82		
vs.				
"Replaced Close"	2.61	0.92	0.73	(93)
4. Warmth				
"Unchanged Close"	1.65	0.77		
vs.				
"Replaced Close"	1.67	0.66	0.12	(94)

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

a. Mean ratings reflect a scale of 1 = all the time, 4 = never.

example, of forty "close" childhood siblings who were replaced, eight had been favored by parents in contrast to nine favored siblings who first became "close" to subjects as adults.

Summary

The majority of subjects (59%) reported no change in the designated childhood "close" in contrast to forty-one percent of subjects who changed their "close" (childhood) sibling in adulthood. As adults, subjects most often reported more perceived similarity between themselves and their new adult "close" sibling as well as an increased dissimilarity between themselves and their childhood "close" sibling. No significant differences were observed between a "close" childhood sibling who was replaced vs. a newly designated adult "close" sibling in the degree of rivalry or conflict experienced as children. There was significantly greater perceived warmth and joint activities experienced by subjects and their childhood "close" brother or sister than the subject had experienced with the new adult "close" sibling--while growing up. Overall, parental favoritism did not appear to have influenced whether a sibling remained "close", was replaced, or became a "new" adult "close" brother or sister.

DISCUSSION

The purpose of this exploratory study was, first, to describe and compare characteristics reported with "close", "least-close", and "other" (i.e., neither "close" nor "least-close") sibling relationships in childhood. A second goal was to examine systematically the extent to which these characteristics may predict or mediate whether a childhood "close" sibling continues into adulthood in contrast to childhood "close" siblings who are subsequently replaced with a different "close" sibling in adulthood. First, it was hypothesized that subjects would report childhood experience of 1) less rivalry and conflict, greater perceived warmth, and more joint activities with "close" in contrast to "least-close" siblings; and 2) that in childhood, siblings who are parental favorites tend to be identified as subjects' "other" (i.e., neither "close" nor "least-close") sibling(s). A second hypothesis was that a greater percentage of childhood "close" siblings are not replaced by different "close" siblings in adulthood.

Why Subjects Felt "Close" To And Distant From "Least-Close" Sibling In Childhood

First, we asked subjects which sibling they felt closest to in childhood, and why. Childhood "close" siblings were selected by subjects, overall, because they were close in age, readily available, experienced greater intimate (e.g., that they were easy to "talk to" and "get along with"), and more similar (e.g., similar in interests, values, and temperament to one another). These findings are consistent with Bigner (1985) and Cicirelli's (1980a) conclusions that these variables are crucial for sibling "closeness" to develop. The results of our study of what makes for "close" sibling relationships in childhood is also similar to research findings describing crucial factors that promote "close" friendships in childhood and adulthood (i.e., friends' availability to one another, their similarity in interests and values, and intimacy) (Hallinan, 1979; Pogrebin, 1987; Rubin, 1985; Santrock, 1983; Smart and Smart, 1982; Viorst, 1986). The results of our study suggest that developing "close" friendships and "close" childhood sibling relationships have more in common than has been previously recognized. It is possible that developing and maintaining a childhood "close" sibling relationship may actually provide a "how to" model for developing successful friendships across the lifespan.

We then asked subjects which sibling they felt "least-close" to, and why. Subjects identified a brother or sister as "least-close" for reasons opposite to those cited for why

siblings were identified as "close". In other words, subjects most frequently reported that these siblings were far apart in age from themselves, were dissimilar to subjects (e.g., did not have the same interests, values, or temperament), and subjects felt a lack of intimacy toward them (e.g., "least-close" siblings were not easy to talk to or get along with). Another interpretation of "least-close" siblings' dissimilarity is offered by Brickman and Bulman (1977) and Schachter (1982). They suggested that observed dissimilarity of subjects and "least-close" siblings may be the result rather than the cause of siblings disliking one another. In other words, disliking a sibling came first, then a conscious effort by one or both siblings to become as "unlike" one another as possible follows.

Subjects were asked to describe their siblings in terms of perceived degree of rivalry, amount of joint activities, degree of conflict, and feelings of warmth they experienced within each of their sibling relationships. It was hypothesized, first, that subjects would report experiencing less rivalry and conflict, perceive a greater degree of warmth, as well as indicate that they did more things together with a "close" vs. a "least-close" sibling as children. Results were anticipated in respect to significantly greater joint activities and perceived warmth. Subjects did not report experiencing significantly less rivalry or conflict with their "close" vs. "least-close" siblings. However, a trend

towards less conflict with "close" vs. "least-close" siblings was reported. First, concerning rivalry, the literature suggests that sibling rivalry develops for two reasons--first, in competition for parental rewards, and second, as a result of competition with siblings as a means to define individual identities vis-a-vis brothers and sister in the family-of-origin (Pfouts, 1976). According to this theory, even when children feel equally loved and accepted by parents, a drive for uniqueness promotes inter-sibling competitive struggles. Rivalry, then, suggests one-on-one confrontation and would more likely be observed as greatest when siblings frequently engage in activities together as was reported with "close" siblings in our study. The results of this study did not support this theory. For example, although subjects reported significantly greater amount of joint activities with their childhood "close" siblings these relationships were reported to be without significant rivalry. Our findings are consistent, however, with those of Ross and Milgram (1982) who found that "doing things together" without significant rivalry was crucial to developing "close" childhood sibling relationships.

Another consideration is that "doing things together" may be the result of variables other than a lack of rivalry (Dunn & Kendrick, 1980, 1981, 1982a, 1982b; Koch, 1956). For example, engaging in shared activities implies siblings' availability to one another that may be promoted by

siblings' closeness in age. Joint activities also implies sibling similarities. Is this similarity the result of siblings being the same- vs. opposite-sex, or of sharing similar values, interests, similar or compatible temperaments and personality characteristics which may be manifested in a lack of subjective rivalry? Dunn and Kendrick (1982b) concluded from their study that it is likely that all of these variables contributes to subjects' preference for a particular "close" sibling.

Regarding conflict, the results of our study indicate that subjects tended towards experiencing less conflict within "close" in contrast with "least-close" sibling relationships. These findings are inconsistent with those of Dunn and Kendrick (1980, 1981, 1982a, 1982b), who stated that conflict is more apt to be observed between "least-close" siblings who overtly express a dislike for one another, and, when possible, actively avoid spending time together. Pogrebin (1987) and Rubin (1985) have concluded from their separate studies on adult friendships that significant conflict experienced within their relationships is often reported by adults as a primary reason for dissolving a "close" friendship. Intense conflict, then, is rarely experienced within a successful "close" adult friendship. It is possible that "least-close" siblings fall on a continuum from "tolerated"--neither liked nor dislike--to "intensely disliked". If this is the case, our study was

not designed to measure emotional quality of "least-close" sibling relationships. The lack of our measurement's sensitivity could have masked results of significantly greater conflict between subjects and their "least-close" sibling which had been hypothesized.

Finally, regarding warmth, subjects reported significantly greater experiences of perceived warmth within "close" as opposed to "least-close" or "other" sibling relationships. Previous research has not addressed this variable. It seems likely that perceived warmth could be the result of siblings "doing things together" (Ross & Milgram, 1982) without a great deal of conflict (even within the context of "friendly rivalrous competition"). Our findings suggest that joint activities and perceived warmth go hand-in-hand. The relationship among these two variables is also reported in successful friendships (Pogrebin, 1987; Rubin, 1985).

Parental favoritism of one sibling over another is an interesting variable to study in sibling relationships since it is generally categorically denied by parents but is almost universally perceived by siblings (Dunn & Kendrick, 1982b). We hypothesized that most siblings who were favored by one or both parents in childhood would be identified as an "other" sibling (i.e., a sibling who is neither "close" nor "least-close"). This hypothesis was supported in our study. Of siblings who were favored by parents, 55% were

identified as "not-close" (33% of these were identified as "other" siblings); 22% were reported as being subjects' "least-close" siblings; and 21% were identified as subjects' "close" brother or sister. It is possible that subjects are less willing--or unable--to develop a successful "close" sibling relationship with a brother or sister that is perceived to be a parental favorite because of possible interference and/or bias in the direction of the favored sibling. Siblings may also perceive overtly disliking a sibling (i.e., "least-close") as dangerous because differences between subject's and their "least-close" brother or sister is subject to parental interference--likely to the benefit of the "least-close" sibling. The literature suggests that "close" sibling relationships more easily develop when they are not subjected to parental intervention (Dunn & Kendrick, 1982b).

Continuity vs. Discontinuity of "Close" Sibling Relationships From Childhood Into Adulthood

The second issue addressed in this study was why some childhood "close" sibling relationships continued into adulthood while others did not. It was hypothesized that a greater percentage of childhood "close" siblings would remain "close" siblings into adulthood. The majority of our subjects (59%) reported a continuity of "close" childhood sibling relationships into adulthood, which is consistent

with findings reported in previous studies (e.g., Bank & Kahn, 1975, 1982b; Dunn, 1985; Eifermann, 1987; Gellman, 1987; Harley, 1986; Irish, 1964; Kennedy, 1986; Laverty, 1962; Ross & Milgram, 1982; Scott, 1983; Troll, 1982). A decline in similarity with childhood "close" siblings (with an increase of similarity with new adult "close" siblings) was the most frequently cited reason why, in the current study, a change in "close" siblings was made in adulthood. Why 41% of "close" childhood sibling relationships fell by the wayside, however, remains a crucial question. Because our subjects emphasized a decline in subject and sibling similarity as the reason why childhood "close" siblings were subsequently replaced, it is worth speculating on causes of dissimilarity. First, subject and sibling may be pursuing different lifestage tasks. For example, one may be career-oriented while the other is focusing on raising a family. Another possibility is that career goals may be markedly dissimilar. Finally, there may be subtle--or not so subtle--differences inherent among opposite-sex sibling pairs that make dissimilarity more probable as a function of siblings' sex and lifestage tasks.

Implications Of Results

Parenting. Our results support research findings suggesting that sibling rivalry may be ubiquitous (e.g., Bank & Kahn, 1982b; Dunn, 1985, 1985; Dunn & Kendrick,

1982a, 1982b; Mead, 1972; Rubin, 1985; Stearn & Freeman, 1988; Viorst, 1986). Stearn and Freeman (1988) state that rivalry is a "condition" that is observed in most all sibling relationships. It is likely that if rivalry is better understood and accepted by parents, day-to-day encounters with sibling competitiveness could become more tolerable and less a focus of parental concern and energy. Results also suggest that sibling conflict is a "condition" that comes with the territory of troubled sibling relationships. The task of future research may be to more clearly isolate and operationally define rivalry and conflict.

Because there was a significantly greater amount of joint activities experienced between "close" vs. "least-close" siblings, results of our study suggest that sibling "closeness" may be promoted by parents encouraging brother(s) and/or sister(s) to "do things together" and by fostering togetherness through family activities (e.g., camping, attending functions, playing, and working as a family). Finally, the experience of perceived warmth reported within "close" sibling relationships may be an overall residual emotion from siblings' joint activities. It is the shared memories of these activities that adult siblings report to be the foundation for building and maintaining "close" sibling relationships across the lifespan (Bank & Kahn, 1982a, 1982b; Cicirelli, 1982; Dunn & Kendrick, 1982b). These shared memories become especially

crucial in the elderly for facilitating a satisfactory closure to their life (Cicirelli, 1982, 1987; Erikson, 1968, 1978, 1980). These findings make sense in light of research on "close" friendships that also indicates that "close" friends spend a lot of time doing things together in an atmosphere of perceived emotional warmth (Rubin, 1985).

Siblings. For young children, improved sibling relationships may be encouraged through parental understanding of what fosters "close" sibling relationships (e.g., an opportunity to "do things together"). As adolescents, siblings may be counseled with the knowledge that not all siblings are "close" and this is likely the result of having less similarity with one sibling compared to another sibling. In general, then, "closeness" of siblings--and of friends--relates to people perceiving a similarity between themselves and others. A worthwhile goal of family, friends, and society as a whole maybe to make an effort to reduce sibling's guilt over "least-close" sibling relationships and encourage awareness that differences do not have to be perceived as either right or wrong but rather just as differences. Parents may also reduce sibling guilt by acknowledging that not all siblings may experience a "close" warm and conflict-free relationship. By removing an emotional label (i.e., "close" = "good" and "least-close" = "bad") adolescents and their families may become more tolerant and less conflicted with "least-close" sibling relation-

ships. As adult siblings, emotional and mental health may be encouraged with a concerted effort by clinicians to remove sibling guilt over having relational difficulties with brother(s) and/or sister(s) through sharing of information regarding the ubiquity of "not-close" sibling relationships. If knowledge that "not-close" sibling relationships may, in fact, be "normal"--a likely outcome of dissimilar siblings--adults may be able to reduce their guilt and emotional turmoil over not particularly caring for or spending time with one or more siblings.

The results of our study also suggests that an informed and concerted effort should be made through the media and family systems counseling to increase individuals' awareness that lack of "closeness" with siblings may be simply a natural consequence of individual differences rather than a defect in their character. This awareness might reduce adult siblings' consternation over a "least-close" sibling relationship. Finally, an awareness that not every person we know becomes a "close" friend may help make sense of why all siblings may not be "close" just because they are siblings.

Limitations Of Exploratory Research

While the purpose of this study was exploratory in nature, several limitations in its interpretation should be noted. First, the retrospective nature of some of the

questionnaire items may limit the validity of these results. Also, as previously noted, an interview format may have yielded more in-depth responses and better clarification of types of rivalry and conflict to which subjects alluded. However, since this study was exploratory in nature, the goal was to get a large enough sample (which could be most easily assessed by use of a questionnaire).

Areas Of Future Research

Sibling relationships across the lifespan could best be studied as a longitudinal design. Because of the numerous problems (e.g., time and money) inherent in such a design, it is more likely that information regarding sibling relationships across the lifespan will be amassed from discrete research efforts such as this study and those that have been cited. However, future research designs could include a more in-depth probe of sibling relationship characteristics (e.g., degree of rivalry, joint activities, degree of conflict, perceived degree of warmth between siblings, and parental favoritism of one sibling over another) through use of interviews of not only subjects but also subjects' siblings and parents. For example, is conflict expressed differently depending on the sex of the siblings (e.g., same- vs. opposite-sex)? Another area of focus could investigate if and how the expression of conflict in a family-of-origin may be a function of a

family's ethnicity, socio-economic status, and parental education. Again, though our findings indicate that there tends to be more conflict with "least-close" vs. "close" siblings, this is an area that needs more research to determine nuances of conflict as it pertains to sibling relationships. Future studies might also focus on if and how siblings' sex (e.g., same- vs. opposite-sex), age spacing, and birth order impacts siblings' perception of warmth for one another.

Dissimilarity is another area for future research focus. For example, is perceived dissimilarity influenced by the sex (e.g., same- vs. opposite-sexed) of siblings? Large age spacing between siblings could also promote differences in salient life tasks being pursued by siblings and may make it increasingly difficult for siblings to have much in common. Such studies would increase an information base in this area of sibling relationships. Also, new facets of sibling relationships could be investigated. For example, how do parenting styles impact and influence sibling interactions while growing up as well as long-range impact on adult sibling relations? Do differences in siblings' temperament influence which siblings tend to be "close" vs. "least-close"? If so, what temperaments (i.e., "difficult", "slow to warm", and "easy") are compatible with one another (Chess and Thomas, 1986)?

It is important that future studies control for

subjects' sex, age spacing, and/or birth order relative to any other sibling characteristic under study to provide a clearer understanding of how these variables impact the development and maintenance of "close", "least-close", and "other" sibling relationships across the lifespan.

APPENDIX A

SIBLING RELATIONSHIP INVENTORY

Part I: FAMILY BACKGROUND INFORMATION

1. How many siblings (brothers/sisters) do you have? _____
2. Please list the first names (or first 2 letters of first name), current ages and gender for you and all of your siblings in the spaces below. Start with the eldest child (sibling #1) and end with the youngest. Use as many spaces as needed (spaces for six (6) siblings are identified). If there are more than six siblings in your family, additional space is provided for your use. Place a check in the far left column to indicate which sibling you are. Do not include step-brothers/sisters; but do include any half-brothers/sisters. BE SURE TO INCLUDE YOURSELF.

Place a check ("✓") to indicate which sibling you are	First name (or first 2 letters of first name)	Current age (years)	Their gender (indicate male or female)
_____ Sibling # 1	_____	_____	_____
_____ Sibling # 2	_____	_____	_____
_____ Sibling # 3	_____	_____	_____
_____ Sibling # 4	_____	_____	_____
_____ Sibling # 5	_____	_____	_____
_____ Sibling # 6	_____	_____	_____

Appendix A (cont'd)

3. What best describes your parent's socio-economic situation while you were growing up? (Please circle one)

- | | |
|-----------------------|-----------------------|
| a) upper class | d) lower middle class |
| b) upper middle class | e) lower class |
| c) middle class | |

4. While growing up, do you think your parents favored one child over the other? (Please circle an answer for both your mother and father)

Mother: Yes No Father: Yes No

a) IF YES: Which sibling do you think your mother favored?
(Please circle one)

Sibling #: 1 2 3 4 5 6

b) Which sibling do you think your father favored?
(Please circle one)

Sibling #: 1 2 3 4 5 6

5. While growing up, how would you characterize your relationship with each sibling?

	<u>Sibling #:</u>					
	Eldest				Youngest	
a) THERE WAS A GREAT DEAL OF RIVALRY BETWEEN US:						
1) all the time	1	2	3	4	5	6
2) sometimes	1	2	3	4	5	6
3) rarely	1	2	3	4	5	6
4) never	1	2	3	4	5	6
b) WE DID A LOT OF THINGS TOGETHER (i.e., played, school, parties):						
1) all the time	1	2	3	4	5	6
2) sometimes	1	2	3	4	5	6
3) rarely	1	2	3	4	5	6
4) never	1	2	3	4	5	6

Appendix A (cont'd)

		<u>Sibling #:</u>					
		Eldest					Youngest
c)	IT SEEMED LIKE THERE WAS CONFLICT BETWEEN US:						
	1) all the time	1	2	3	4	5	6
	2) sometimes	1	2	3	4	5	6
	3) rarely	1	2	3	4	5	6
	4) never	1	2	3	4	5	6
d)	THERE WAS A FEELING OF WARMTH IN OUR RELATIONSHIP:						
	1) all the time	1	2	3	4	5	6
	2) sometimes	1	2	3	4	5	6
	3) rarely	1	2	3	4	5	6
	4) never	1	2	3	4	5	6

6. While growing up, to which sibling did you feel the "closest" (i.e., preferred his/her company feelings of compatibility)? (Please circle one)

a) Sibling #: 1 2 3 4 5 6

b) Why do you think you felt "closest" to this sibling?

(Please explain): _____

7. Think about the time you spent with this sibling (as indicated in Question #13) when you were children. What were some of the things you enjoyed doing together?

Appendix A (cont'd)

8. Did you have the same "closest" sibling (as identified in Question #13) throughout your childhood/adolescence? (Please circle one)

Yes No

Please explain: _____

- a) If Question #15 is NO, and there was another brother or sister who became close to you, please indicate which sibling that was. (Please circle one)

Sibling #: 1 2 3 4 5 6

- b) What was your age when this change occurred?

Age: _____

9. While growing up, to which sibling were you "least-close"?

a) Sibling #: 1 2 3 4 5 6

- b) Why do you think you felt "least-close" to this sibling?
(Please explain) _____

10. Think about the time you spent with the sibling (as mentioned in Question #16) when you were children. What were some of the things that particularly bothered/irritated you about this sibling?

Appendix A (cont'd)

11. Did you have the same "least-close" sibling (as identified in Question #16) throughout your childhood/adolescence? (Please circle one)

Yes No

Please explain: _____

12. At present time, which sibling do you feel the closest to? (Please circle one)

Sibling #: 1 2 3 4 5 6

13. If this sibling is different from the one previously identified as your "closest" sibling (Question #13), what do you think prompted this change?

14. What is your gender? (Please circle one)

Male Female

15. What is your age? _____

16. What is your ethnic background? (Please circle one)

Asian Black Caucasian

Hispanic Other: _____

REFERENCES

- Abramovitch, R., Corter, C., & Pepler, D. (1980). Observations of mixed-sex sibling dyads. Child Development, 51, 1268-1271.
- Abramovitch, R., Corter, C., & Lando, B. (1979). Sibling interaction in the home. Child Development, 50, 997-1003.
- Abramovitch, R., Pepler, D., & Corter, C. (1982). Patterns of interaction among preschool-aged children. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp.61-86). Hillsdale, NJ: Erlbaum.
- Adams, V., (1981). The sibling bond: A lifelong love/hate dialectic. Psychology Today, 15 (6), 32-47.
- Allan, G. (1977). Sibling solidarity. Journal of Marriage and the Family, 39, 177-184.
- Bank, S., & Kahn, M.D. (1975). Sisterhood-brotherhood is powerful: Sibling sub-systems and family therapy. Family Process, 14, 311-337.
- Bank, S., & Kahn, M.D. (1982a). Intense sibling loyalties. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp.251-266). Hillsdale, NJ: Erlbaum.
- Bank, S., & Kahn, M.D. (1982b). The sibling bond. New York: Basic Books.
- Baskitt, L.M. (1984). Ordinal position differences in children's family interactions. Developmental Psychology, 20 (6). 1026-1031.
- Baskitt, L.M. (1985). Sibling status effects: Adult expectations. Developmental Psychology. 21 (3), 441-445.
- Bigner, J.J. (1985). Parent-child relations: An introduction to parenting (2nd ed.). New York: Macmillan.

- Bossard, J.H.S., & Boll, E.S. (1956). The large family system. Philadelphia: University of Pennsylvania Press.
- Brickman, P., & Bulman, R.J. (1977). Pleasure and pain in social comparison. In J. Suls & R. Miller (Eds.), Social comparison processes. Washington: Hemisphere Publishing Corp.
- Brody, G.H., Stoneman, Z., MacKinnon, C.E., & MacKinnon, R. (1985). Rose relationships and behavior between preschool-aged and school-aged sibling pairs. Developmental Psychology, 2 (1), 124-129.
- Brubaker, T. H. (1985). Later life families. In R.J. Gelles & A.A. Alber (Eds.), Family studies text series (Vol. 1). Beverly Hills, CA: Sage.
- Bryant, B.K. (1982). Sibling relationships in middle childhood. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 87-122). Hillsdale, NJ: Erlbaum.
- Buhler, C. (1940). The child and his family. London: Routledge and Kegan Paul.
- Butler, R.N. (1963). The life review: An interpretation of reminiscence in the aged. Psychiatry, 26, 65-76.
- Caplow, T. (1968). Two against one: Coalitions in triads. Englewood Cliffs, NJ: Prentice Hall.
- Chess, S., Thomas, A. (1986). Temperament in clinical practice. New York: The Guilford Press.
- Cicirelli, V.G. (1973). Effects of sibling structure and interaction on children's categorization style. Developmental Psychology, 9, 132-139.
- Cicirelli, V.G. (1977). Relationships of siblings to the elderly person's feelings and concerns. Journal of Gerontology, 32 (3), 317-322.
- Cicirelli, V.G. (1980a). A comparison of college women's feelings toward their siblings and parents. Journal of Marriage and the Family, 42, 95-102.
- Cicirelli, V.G. (1980b). Relationship of family background variables to locus of control in the elderly. Journal of Gerontology, 35, 108-114.

- Cicirelli, V.G. (1980c). Sibling relationships in adulthood: A lifespan perspective. In L.W. Poon (Ed.), Aging in the 1980's: Psychological issues (pp.455-462) Washington DC: American Psychological Association.
- Cicirelli, V.G. (1982). Sibling influence throughout the lifespan. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 267-284). Hillsdale, NJ: Erlbaum.
- Cicirelli, V.G. (1987). Siblings. In G.L. Maddox, R.C. Atchley, L.W. Poon, G.S. Roth, I.C. Siegler, R.M. Steinberg (Eds.), The Encyclopedia of Aging, (pp. 608-609). New York: Springer Publishing, Inc.
- Clark, M. & Anderson, B. (1967). Culture and aging. Springfield, Il: Charles C. Thomas.
- Constantine, L.L. (1986). Family paradigms: The practice of theory in family therapy. New York: Guildford Press.
- Dunn, J. (1985). Sisters and brothers. In J. Bruner, M. Cole, & B. Lloyd (Eds.), The developing child series. Cambridge, MA: Harvard University Press.
- Dunn, J. (1986). Commentary: Issues for futures research. In R. Plomin & J. Dunn (Eds.), The study of temperament: Change, continuities, and challenges, (pp. 163-171). Hillsdale, NJ: Erlbaum.
- Dunn, J. & Kendrick, C. (1980). The arrival of a sibling: Changes in patterns of interaction between mother and first-born child. Journal of Child Psychology and Psychiatry, 21, 119-132.
- Dunn, J. & Kendrick, C. (1981). Interaction between young siblings: Associations with the interaction between mother and first-born child. Developmental Psychology, 17, 336-343.
- Dunn, J. & Kendrick, C. (1982a). Siblings and their mothers: Developing relationships within the family. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 39-60). Hillsdale, NJ: Erlbaum.
- Dunn, J. & Kendrick, C. (1982b). Siblings: Love, envy and understanding. Cambridge, MA: Harvard University Press.

- Eifermann, R.R. (1987). Children's games, observed and experienced. In A.J. Solnit & P.B. Newbawer (Eds.), The psychoanalytic study of the child: (Vol. 42) (pp. 127-144). New Haven: Yale University Press.
- Erikson, E.H. (1968). Generativity and ego integrity. In B.L. Neugartn (Ed.), Middle age and aging: A reader in social psychology (pp. 85-87). Chicago: The University of Chicago Press.
- Erikson, E.H. (1978). Adulthood. New York: Norton.
- Erikson, E.H. (1980). Identity and the life cycle. New York: Norton.
- Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117-140.
- Form, W.H., & Geschwender, J.A. (1962). Social reference basis of job satisfaction: The case of manual workers. American Sociological Review, 27, 232-233.
- Gillman, R.D. (1987). A child analyzes a dream. In A.J. Solnit & P.B. Newbawer (Eds.), The psychoanalytic study of the child: (Vol. 42) (pp. 263-273). New Haven: Yale University Press.
- Ginott, H.G., (1969). Between parent and child. New York: Avon Books.
- Hagestad, G.O. (1987). Able elderly in the family context: Changes, chances, and challenges. The Gerontologist, 27 (4), 417-422.
- Hallinan, M.T. (1979). Structural effects on children's friendships and cliques. Social Psychology Quarterly, 42, 43-54.
- Harley, M. (1986). Child analysis, 1947-1984. In A.J. Solnit & P.B. Newbawer (Eds.), The psychoanalytic study of the child: (Vol. 41) (pp. 129-153). New Haven: Yale University Press.
- Hartup, W.W. (1983). Two social worlds: Family relations and peer relations. In M. Rutter (Ed.). Scientific foundations of developmental psychiatry. London: Heinemann.
- Irish, D.P. (1964). Sibling interaction: A neglected aspect in family life research. Social Forces, 42, 279-288.

- Jones, H.F. (Ed.) (1968). The note-books of Samuel Butler: Vol. 20 (p.24). London: A.C. Fifield.
- Kalliopuska, M. (1984). Empathy and birth order. Psychological Reports, 55, 115-118.
- Kennedy, H. (1986). Trauma in childhood. In A.J. Solnit & P.B. Newbauer (Eds.), The psychoanalytic study of the child: (Vol. 41) (pp. 209-219). New Haven: Yale University Press.
- Kiell, N. (1983). Introduction. In N. Kiell (Ed.), Blood brothers: Siblings as writers (pp. 3-48). New York: International Universities Press, Inc.
- Koch, H.L. (1956). Some emotional attitudes of the young child in relation to characteristics of his sibling. Child Development, 27, 393-426.
- Koch, H.L. (1960). The relation of certain formal attributes of siblings to attitudes held toward each other and toward their parents. Monographs of the Society for research in Child Development, 25, 1-124.
- Lamb, M.E. (1978a). Interactions between 18 month olds and their pre-school-aged siblings. Child Development, 49, 51-59.
- Lamb, M.E. (1978b). The development of sibling relationships in infancy: A short term longitudinal study. Child Development, 49, 1189-1196.
- Lamb, M.E. (1982). Sibling relationships across the lifespan: An overview and introduction. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 1-12). Hillsdale, NJ: Erlbaum.
- Laverty, R. (1962). Reactivation of sibling rivalry in older people. Social Work, 7 (1), 23-30.
- Lindbergh, A.M. (1978). Gift from the sea. New York: Random House.
- Markus, H. (1981). Sibling personalities: The luck of the draw. Psychology Today, 15 (6), 35-37.
- Mead, M. (1972). Blackberry Winter: My earlier years. New York: William Morrow.

- Nadleman, L., & Begun, A. (1982). The effect of the newborn on the older sibling: Mothers' Questionnaire. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 13-18). Hillsdale, NJ: Erlbaum.
- Newson, J., & Newson, E. (1976). Seven year olds in the home environment. Harmondsworth: Penguin.
- Pepler, D.J., Abramovitch, R., & Corter, D. (1981). Sibling interaction in the home: A longitudinal study. Child Development, 52, 1344-1347.
- Pfouts, J.H. (1976). The sibling relationship: A forgotten dimension. Social Work, 21, 200-204.
- Pogrebin, L.C. (1987). Among friends: Who we like, why we like them, and what we do with them. NY: McGraw-Hill.
- Riley, M.W. (1983). The family in an aging society: A matrix of latent relationships. Journal of Family Issues, 4, 439-454.
- Rosenberg, G.S., & Anspach, D.F. (1973). Sibling solidarity in the working class. Journal of Marriage and the Family, 35, 108-113.
- Ross, H.G., & Milgram, J.K. (1982). Important variables in adult sibling relationships. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 225-250). Hillsdale, NJ: Erlbaum.
- Rubin, L.B. (1985). Just friends: The role of friendship in our lives. New York: Harper & Row, Publishers, Inc.
- Santrock, J.W. (1983). Life-Span development, (2nd ed.) Dubuque, IO: Wm. C. Brown Publishers.
- Scarr, S., & Grajek, S. (1982). Similarities and differences among siblings. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 357-382). Hillsdale, NJ: Erlbaum.
- Schacter, F.F. (1982). Sibling deidentification and split-parent identification: A family tetrad. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 123-152). Hillsdale, NJ: Erlbaum.

- Schacter, F.F., Shore, E., Feldman-Rotman, S. Marquis, R.E., & Campbell, S. (1976). Sibling Deidentification. *Developmental Psychology*, 12, 418-427.
- Schneider, D. (1968). American kinship: A cultural account. Englewood Cliffs: Prentice Hall.
- Scott, J.P. (1983). Siblings and other kin. In T.H. Brubaker (Ed.), Family relationships in later life (pp. 47-62). Beverly Hills, CA: Sage.
- Shanas, E. (1980). Older people and their families: The new pioneers. Journal of Marriage and the Family, 42 (1), 9-18.
- Shanas, E., Townsend, P., Wedderburn, D., Friis, H., Milhoj, P., & Stehouwer, J. (1968). Older people in three industrial societies. New York: Atherton.
- Sherman, E. (1987). Reminiscence groups for community elderly. The Gerontologist, 27, 569-572.
- Smart, M.S., Smart, R.C. (1982). Children: Development and relationships (4th ed.). New York: Macmillan Publishing Co., Inc.
- Stewart, R.B., & Marvin, R.S. (1984). Sibling relations: The role of conceptual perspective-taking in ontogeny of sibling caregiving. Child Development, 55, 1322-1332.
- Strean, H.S., & Freeman, L. (1988). Raising Cain: How to help your children achieve a happy sibling relationship. New York: Facts on File Publications.
- Sutton-Smith, B. (1982). Birth order and sibling status effects. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 153-166). Hillsdale, NJ: Erlbaum.
- Sutton-Smith, B. & Rosenberg, B.G. (1970). The sibling. New York: Holt Rinehart and Winston.
- Troll, L.E. (1971). The family of later life: A decade review. Journal of Marriage and the Family, 33 (2), 263-290.
- Troll, L. (1982). Continuations: Adult development and aging. Monterey, CA: Brooks/Cole Publishing Co.
- Viorst, J. (1986). Necessary losses. New York: Balantine Books-Faucett Gold Medal.

White, B., (1975). Critical influences in the origins of competence. Merrill-Palmer Quarterly, 21, 243-266.