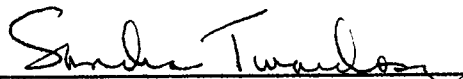
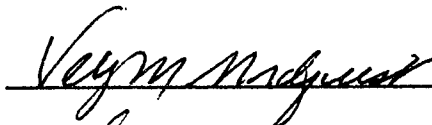


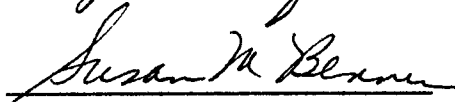
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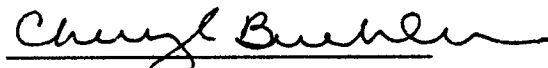
I am submitting herewith a dissertation written by Linda Hall Richey entitled "The Relationships Among Expression of Affection, Gender of Family Members, and Family Situations." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Human Ecology.


Sandra Twardosz, Major Professor

We have read this dissertation
and recommend its acceptance:







Accepted for the Council:


Associate Vice Chancellor and
Dean of The Graduate School

THE RELATIONSHIPS AMONG EXPRESSION OF AFFECTION,
GENDER OF FAMILY MEMBERS,
AND FAMILY SITUATIONS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Linda Hall Richey

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DEDICATION

Four very special people enabled me to undertake and complete my graduate work while being wife, mother, and teacher. Without their love, help, understanding, patience, and constant belief in me, I could not have reached my goal. They are my husband and three children.

My husband Dean, in addition to his own professional responsibilities, provided endless emotional support and many times performed my share of the family-related tasks necessary to keep a large, active family running smoothly. He truly was the "wind beneath my wings."

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ABSTRACT

The purpose of this study was to analyze previously collected data on the expression of affection among family members with respect to gender of family members, family activities, and family member responses. Research questions included examining (a) if there were differences in the way fathers and mothers expressed affection and social interaction to sons and to daughters and in children's responses to that affection and social interaction; (b) if there were differences in the way sons and daughters expressed affection and social interaction to fathers and to mothers and in parents' responses to that affection and social interaction; and (c) if there were differences in the way fathers and mothers expressed affection and social interaction to one another and in their responses to those behaviors.

The subjects consisted of 11 Caucasian, intact, middle-class families (22 parents and 24 children) with one child in day care. Six in-home observations of five family routines were conducted. The routines were pre-dinner activities, dinner, post-dinner activities, a verbal game, and a construction game. Measures included the operational definitions of smiles, affectionate words, active affectionate physical contact, passive affectionate physical contact, and social interaction. Two types of reactions were measured: positive and neutral. Multivariate analysis of variance was used to analyze the data.

The results indicated gender differences in the expression of social interaction from parents to sons. Compared to fathers, mothers expressed more social interaction to sons and sons expressed more social interaction to mothers. Also, mothers expressed more passive affectionate physical contact to sons than did fathers. No other differences were found. The results were discussed in terms of specific aspects of the methodology that could be strengthened in future studies.

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CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

Children enter this world equipped to be social beings. Their physical characteristics, e.g., softness, small size, smell, family resemblance, and signalling and approach behavior draw adults to their care (Bowlby, 1971). Through the use of these signalling and approach behaviors (e.g., looking, smiling, clinging, crying, and sucking), and the responses of their caregivers, an interactive, bidirectional relationship develops (Bell, 1968).

Within the context of this relationship, socialization, i.e., the teaching and acquisition of society's requirements for membership, begins (Birns, 1976). Socialization of children typically occurs in a group setting, and a family is usually that initial group setting with parents and siblings as the agents of socialization. Eventually, other groups will become part of the child's immediate social environment. However, even at the beginning, other systems, e.g., church, extended family, and cultural beliefs and attitudes, are shaping the child's social environment (Bronfenbrenner, 1979). For example, cultural beliefs and attitudes will determine the amount of holding and cuddling an infant will receive or the number of adults that will care for the child. Sex role stereotypes may be reinforced through the values supported by the family, the church, the community, and the culture. The characteristics of the child's neighborhood

may be determined by socioeconomic factors. However, the family is the main unit of socialization.

The parents are especially important in the socialization process. Hetherington and Parke (1986) note that, in the effective parent-child relationship, a warm and loving emotional bond is a key determinant of socialization (Burton, 1983; Maccoby & Martin, 1983; Noller, 1978). A nurturant model may provide the basis for positive child outcomes, e.g., secure attachment and development of prosocial behavior. Children will imitate a positive, nurturant model and will want to maintain the relationship (Bandura & Huston, 1961; Kagan, 1964; Sears, Maccoby, & Levin, 1957).

Furthermore, the expression of affection in the marital relationship is an indicator of marital satisfaction and has a positive relationship to marital quality (Lewis & Spanier, 1979). It appears that nurturant, warm, and loving relationships that occur in families should be studied if they are a determining factor in optimum child development and a facilitator of the socialization process.

Affection not only facilitates the socialization process, but is itself socialized. As a target of the socialization process, affection is used and shaped differentially by parents in their relationships with children. Children's expressions of affection and responses to affection are being socialized by parents. In many cultures parental socialization of the expression of affection may differ between daughters and sons. For example, in the United States parents have been found to use more restrictiveness on sons' expression of

feelings, in general (Block, 1978). Daughters' relationships with their fathers have been characterized as warmer, e.g., fathers will cuddle and attend to interpersonal aspects of the relationship, compared to their relationships with sons (Jacklin, DiPietro, & Maccoby, 1984). So mothers and fathers may express affection differently, may express it differently to sons and daughters, may respond to the affection of their daughters and sons differently, and may be modeling differential behavior.

Setting variables, e.g., number and importance of people present, location of interaction, and tasks to be performed in parent-child interactions, may have some influence on the affectional relationship and affectionate behavior. As a determinant in the process of socialization, the expression of affection could be influenced by the presence of family members, children's peers, or adults' peers. For example, while eating dinner a father may be more affectionate to his son in the privacy of their own home than at a father-son banquet in a public restaurant. An activity may result in increasing family affection, e.g., playing a game. Where the game is played and the kind of game played may further promote the quality and quantity of interactions.

If the affectional relationship, i.e., the expression of, receiving of, and response to affection, is important to healthy family functioning and optimal child development outcomes, we must know the variables associated with and involved in facilitating that relationship so that we may support parent-child and other family relationships. Determining and clarifying these variables is important in order to design interventions for or to teach and inform families.

Knowledge that specific family situations make it more likely that affection will be expressed may be used in family counseling recommendations. For example, if it is known that one type of family activity seems to encourage the expression of affection but another seems to encourage competition and criticism, then the former may be scheduled more frequently and the latter avoided.

It is also important to know how the exchange of affection in one dyad of a family may affect another family member. Cummings, Zahn-Waxler, and Radke-Yarrow (1981), for example, found that children observing naturally occurring and simulated expressions of affection between their parents experienced happiness or jealousy and suggested that children may learn from observing affectionate interactions. In order to study such effects, a knowledge of the expression of affection in families would be important.

The knowledge that gender differences are associated with the affectional relationship could also be used in education and intervention. New knowledge would either help dispel or support commonly held, stereotyped beliefs about males' and females' expression of affection, i.e., females are generally warm, loving, and responsive and males are generally aggressive and unresponsive. For example, Botkin and Twardosz (1988) found that preschool children's affectionate expressions were not traditionally gender-typed.

In order to understand the variables to be studied, i.e., expression of affection, gender differences, and situational factors, a more complete discussion follows, and the importance of the study of affection in families is considered. Gender differences in parenting, specifically socialization, are

reviewed. Finally, the contribution of situational factors, e.g., the physical environment and tasks, are discussed.

Expression of Affection in Families

The family is a logical group in which to study affection because of the proposition that frequency of interaction is positively related to the degree of expressed affection (Homans, 1950), and because families usually interact frequently. Supporting Homans' proposition, Tanner (1975) found a positive relation between familial affection and the participation in family activities by boys and girls, by members of different sized families, and by middle SES families, i.e., the more participation by these groups, the more feelings of affection the family members had for each other. Tracy and Ainsworth (1981) also support the idea that frequency of affectionate feelings (in this case maternal) positively correlates with frequency of acts. It is possible that with the greater exposure and contact that occurs in families, compared to other types of groups, the more likely it is that emotions will be expressed. Some of those emotions may be affectionate. Therefore, the family provides a viable setting for the study of affection.

Schutz (1982) stated that "affection occurs primarily in dyadic interactions rather than group interactions" (p. 94). Therefore, it seems important to study the dyadic interactions within the family as a means to describe the amount and type of affection that occurs. However, each dyadic relationship is embedded in a variety of familial relationships with a variety of members, e.g., father-child,

spouse, a triad of a parent and two siblings, sibling (Cromwell & Peterson, 1983). Cromwell and Peterson state that the family system includes the individual, dyadic, and family levels. These levels function independently, but also are interdependent. One level, e.g., a child, may be within the next level, e.g., the parent-child dyad. The dyad is in the next level, e.g., the family system - mother, father, child. These interrelationships must be recognized when studying the dyadic relationship because other family members will affect the dyadic interaction. Also, it must be noted that the expression of affection or other behavior in family interaction is only a part of that interaction. Finally, the response of the receiver of the behavior expressed must be examined. Specific responses, e.g., positive, negative, neutral, or no response to a behavior may have a direct impact on the recurrence and quality of the expressed behavior. Little research has been conducted on the responses to affectionate expression of family members.

Adult-child Relationships, Affection, and Child Outcomes

Specific to child outcomes in adult-child relationships, affection, i.e., warmth, nurturance, and responsiveness, has been related to the development of children's prosocial behavior (Hoffman, 1975), secure attachment to primary caregivers (Ainsworth, Bell, & Stayton, 1971; Clarke-Stewart, 1973), development of same-sex behavior and sex role development (Hetherington, 1965; Maccoby, 1980), social competence (Baumrind, 1973; Waters, Wippman, & Sroufe, 1979), self-esteem (Barber & Thomas, 1986; Coopersmith, 1967),

moral development (Hoffman, 1982; Londerville & Main, 1981), child compliance (Lytton, 1980), social adjustment (Daniels, Dunn, Furstenberg, & Plomin, 1985), and cognitive competence and achievement (Clarke-Stewart, 1973; Lytton, 1980; Rosen & D'Andrade, 1959).

Similarly, lack of parental warmth, nurturance, and affection has been associated with children's maladjustment, aggression, and delinquency (Lytton, Watts, & Dunn, 1986; Oleinick, Bahn, Eisenberg, & Lilenfeld, 1966; Siegelman, 1966). For example, a study comparing disturbed with normal adolescents revealed a difference in their perceptions of their families (Kagel, White, & Coyne, 1978). Normal adolescents described their families as warm and expressive. In another example, Schaefer (1965) developed an inventory to collect children's reports of parents' observable behaviors. This scale was able to discriminate between delinquent and non-delinquent adolescent boys. Delinquent boys rated their parents as expressing less affection and providing less emotional support than non-delinquent adolescent boys.

Antisocial behavior and delinquency have been viewed as an individual problem, but one linked with family variables. For example, delinquency has been linked with inadequate maternal supervision (Glueck & Glueck, 1957; McCord, McCord, & Thurber, 1963), attachment to parents (Linden & Hackler, 1973), and father absence (Bandura & Walters, 1959; Siegman, 1966; Stephens, 1961). Bahr (1979) concluded from a review of studies on family characteristics and adolescent deviance that, referring to family interactions, "the type of interaction appears to have a direct relationship with delinquent

behavior" (p. 618) and "attachment to the family and values of the family appear to condition the effect of peer group associations on delinquency" (p. 619).

Available and responsive parents, functioning in a warm and affectionate family environment, may provide the support necessary for children's optimal development. A supportive family environment, with affectionate interactions among family members, may be the basis for children identifying with parents and parents' values and for children developing a positive self-concept.

In Kaslow's study (1987) of types of family therapy, it was noted that some types of family therapy view the affectional dimension of family functioning as important. For example, psychoanalytic theory supported the expression of affectionate feelings and encouraged affective communication. A problem-solving therapy, e.g., McMaster Model (Epstein, Bishop, & Levin, 1978), supported affective responsiveness and even divided family problems into two categories, affective and instrumental. It is possible that family intervention strategies directed toward family affection exchange may be helpful in the therapeutic process. Observations of expressions and responses to affection in families could be helpful. Assessment of affectionate patterns among family members may provide suggestions for therapy.

Parental nurturance and affection may be necessary for healthy family functioning and optimal child development. Unresponsive parents in a cold and rejecting family environment may increase the chances of children's identifying with people and values other than the parents and endanger the child's development of a positive self-concept. Family therapy may be able to identify

and help remediate deficiencies in those family variables that contribute to healthy functioning, e.g., a deficiency in the frequency of positive parent-child interaction.

Spouse Relationship and Affection

Affection in the marital relationship has been studied. Belsky (1981; 1985) has suggested that the marital relationship may effect the parent-child relationship, and that the affectionate aspect of the relationship is important. The expression of affection has been noted to have a positive relation to marital quality (Lewis & Spanier, 1979; Rettig & Bubolz, 1983; Spanier & Lewis, 1980).

Although marital quality has been considered a global evaluative concept of marriage, the more specific constructs of marital adjustment, marital satisfaction, and marital intimacy may provide better descriptions of the actual marriage relationship (Fincham & Bradbury, 1987; Lewis & Spanier, 1979). Other dimensions of marital quality may include marital happiness, integration, and stability.

Researchers have used both global and specific measures to assess the previously mentioned marital quality indicators. In most of these assessments an affectional component was included. Nye, White, and Friederes (1969) stated that spouses' positive affect toward one another was crucial to marital stability. In an early attempt at categorizing types of marriages, Burgess and Locke (1945) suggested that affection between married partners separated "institutional" from "companionship" marriages. Lewis and Spanier (1979)

reviewed marital quality research and positively linked marital quality with the expression of affection.

Other studies have linked affection and the indicators of marital quality. In a survey of 43 couples, Tolstedt and Stokes (1983) found that affective and verbal intimacy, i.e., the expression and exchange of close feelings and of verbal expressions of liking and loving, made a major contribution to marital satisfaction prediction. Using questionnaires Villard (1976) surveyed 120 married couples looking specifically at the exchange of affection in the marital relationship. Both spouses rated the frequency and relative importance of 24 affectionate exchange behaviors. It was found that women were more intimate in their exchange of affection and that the greatest amount of affection exchange occurred between 9 and 17 years of marriage. It is interesting to note that the frequency of affectionate exchanges and level of intimacy exchange could discriminate couples with a symptomatic child. Couples with these children had a lower usage of intimacy.

In a comparison of one-career and dual-career families, Burke and Weir (1976) surveyed 189 married couples and found that dual-career couples had lower affectional exchange needs. Not only did this study assess by self-report the affection expressed to the spouse, but it also assessed the affection wanted by the spouse from the partner.

Two studies have determined that husbands and wives make a very interesting evaluation of interactions in marriage. Rettig and Bubolz (1983) and Wills, Weiss, and Patterson (1974) both found that it was wives who paid

attention to the affectional component of the relationship while husbands were more concerned with the instrumental aspects, e.g., the more service-oriented activities of cooking and making repairs.

Marital quality may have an effect on parenting. Brody, Pellegrini, and Sigel (1986) investigated marital quality and parental teaching of school-aged children. Using parental self-reports of marriage problems and observations of interactions, it was found that those fathers reported as discontented used a less positive teaching style, e.g., fewer positive comments and more intrusion on children's efforts to learn. Goldberg and Easterbrooks (1984) linked marital quality and toddlers' optimal development. Using parental self-reports of marital adjustment, marital harmony, child-rearing attitudes, parents' sensitivity, and marital satisfaction, Goldberg and Easterbrooks found more positive child outcomes in families where parents were satisfied with their marriage. Simons, Whitbeck, Conger, and Melby (1990) found that mothers' marital satisfaction was positively related to mothers' constructive parenting as measured by four scales, i.e., warmth, authoritative parenting, child monitoring, and communication. Using parents' self-reports of marital satisfaction and observations of family interaction, they found mothers, in general, to be more responsive and sensitive to children than fathers.

Barber (1987) provided support for the contributing role of marital quality to the socialization of children in his study of adolescent self-esteem and the marital relationship. Parents' support of adolescents, especially fathers' support, was significantly predicted in this study of marital quality. Fathers'

support was significantly related to adolescents' ratings of their social worth, defined as a dimension of self-esteem. Affection in the marital relationship may have far reaching effects on family functioning and child outcomes.

Definition of Affection

Parent-child relationship. Affection has been a term used synonymously in the parent-child literature for the warm, nurturant, and responsive relationship between parents and children. For example, Epstein, Bishop, and Baldwin (1982) referred to a part of the affective functioning of families as nurturance. Sears, Maccoby, and Levin (1957) viewed affection as part of the warmth dimension when referring to mothers' childrearing patterns. In Sears, et al. affection was used to describe the mother-child bond and as a means to label mothers' overt behavior. Schutz (1982) even suggested that parental affection was a significant part of parental acceptance of the child in the parent-child relationship. Yarrow, Scott, and Waxler (1973) referred to the act of showing affection as nurturance and L'Abate (1990) also used nurturant to describe the caretaking quality of being available emotionally.

No consistent operational definition has been used for the expression of affection in the parent-child literature. Affection has been equated with comforting behavior, warmth, nurturance, and responsiveness (Barnett, King, Howard, & Dino, 1980; Roe & Siegelman, 1963; Sroufe & Ward, 1980). Researchers of parenting (Baumrind, 1971; Langlois & Downs, 1980; Tauber, 1979a; Tauber, 1979b), children's socialization (Pettit & Bates, 1989; Saarni,

1979; Snyder & Patterson, 1986), children's sex role development (Fagot, 1974; Margolin & Patterson, 1975), mother-child interaction (Adamson & Bakeman, 1985; Belsky, Gilstrap, & Rovine, 1984; Lamb, 1977; Olson, Bates, & Bayles, 1984; Weinraub & Wolf, 1983), and father-child interaction (Lamb, 1977) have all used an affectionate dimension in their studies. Barber and Thomas (1986) argue for separating physical affection from general warmth and support. A review of the numerous definitions of affection can be found in Twardosz and Nordquist (1983).

Some examples of researchers' attempts to define this elusive construct include the following. Bradley and Caldwell (1979) used a "maternal warmth" scale on their home environment observational instrument (HOME). An item on that scale includes "mother caresses, kisses, or cuddles child." The Nursing Child Assessment Teaching Scale (King & King, 1979) developed at the University of Washington School of Nursing has a "social-emotional growth fostering" component consisting of items that include a rating of parental physical affection (touches, pats, strokes), facial expressions (smiles), postural positions, proximal positions, and verbal behavior (positive and negative). Tracy and Ainsworth (1981) studied maternal affection in the mother-infant dyad. Frequency measures were determined from four affectionate behavior categories, i.e., kissing, hugging/cuddling, patting/stroking, and other. Benn (1986) measured maternal functioning using an interviewer's rating of audio tapes. Warmth and ease were observed and rated based on the content and sound of the subject's responses.

Defining affection has also been successfully achieved by using a set of discrete, socially-validated categories of behavior (Twardosz, Schwartz, Fox, & Cunningham, 1979). These categories were developed for the purpose of being able to consistently define affection in behavioral terms as it is expressed in natural settings. Concurrent validity, using a social validation strategy, was demonstrated through the use of community volunteers who subjectively rated videotaped, caregiver-child interactions. Objective ratings were made by trained observers of these same interactions using the behavioral definitions. Those general behavior categories included affectionate words, smiling, active affectionate physical contact, and passive affectionate physical contact. These categories are similar to many of the definitions used by other researchers as described above.

Marital relationship. The affectional dimension of marriage has been viewed in terms of resources (Cuber & Harroff, 1965; Jorgensen, 1979; Levinger, 1965; Rettig & Bubolz, 1983; Safilios-Rothschild, 1976), sexuality (Bell, Daly, & Gonzalez, 1987; Kimmel & Van Der Veen, 1974; Tolstedt & Stokes, 1983), communication (Lewis & Spanier, 1979; Snyder, 1979), a bond or an attachment (Burr, 1973; Tolstedt & Stokes, 1983), emotional closeness (Waring, McElrath, Lefcoe, & Weisz, 1981; Waring & Reddon, 1983; Waring, Tillman, Frelick, Russell, & Weisz, 1980), and emotional support (Ammons & Stinnett, 1980). Kersten (1990) referred to "marital disaffection" when the emotional attachment in marriage had disintegrated.

No consistent operational definition of affection in the marital relationship has been used. In studying marital adjustment and marital satisfaction, many researchers have had spouses report their affection in marriage through the use of questionnaires and interviews. Scales have been developed to assess, generally and specifically, the affectionate dimension in the marital relationship. To rate marital adjustment, Locke and Wallace (1959) used a general question, e.g., a six-point rating of "demonstration of affection," in their Marital Adjustment Test. In the Dyadic Adjustment Scale, Spanier (1976) used four specific items for respondents to describe their affection in marriage. An example of one of those items is a two-point rating of "not showing love." Snyder (1979) tapped affective communication as one dimension of ten in his assessment of marital satisfaction. In his Marital Satisfaction Inventory, individuals responded, either true or false, to items that assessed verbal and nonverbal affective communication, e.g., "I'm not sure my spouse has ever really loved me."

Marital intimacy is another area where the feelings of affection have been measured. The emotional and affectional dimension of marriage has been viewed as critical to an intimate relationship. Schaefer and Olson (1981) assessed this emotional dimension using a scale to rate closeness of feelings. In the Miller Social Intimacy Scale (Miller & Lefcourt, 1982), affectional feelings are specifically rated as a dimension of intimacy. Affection was also included as a dimension of marital intimacy in the Waring Intimacy Questionnaire (Waring & Reddon, 1983). As with others the affection item on this scale measured the degree of emotional closeness shared by a couple. Similar to the study of

parent-child interactions, it may be beneficial to not only look at shared feelings between marital partners and affection expressed from one spouse to another, but to also examine the spouse's specific responses to the other spouse's expressed affection. Little specific information is available in this area.

As in the parent-child literature many concepts and terms in the marital literature seem to be synonymous with affection. Much of the assessment of these concepts and terms in the marriage literature, however, differs from the parent-child literature. Research on the affectionate dimension of the marital relationship relies heavily on self-report, while in the parent-child relationship other methods are utilized, i.e., behavioral observation. Also, marital research seems to rely more on covert behaviors, e.g., feelings and opinions. Parent-child research studies use more overt behaviors, e.g., frequency of hugs, kisses, and smiles. These areas of research appear to be tapping two dimensions of affection in relationships. One is an internal aspect. The other is external. Both are important in the study of affection in family relationships.

Researchers have used a variety of definitions for the global construct of affection and different types of measures have been utilized, e.g., questionnaires, rating scales, and observations. Regardless of the method used, it may be advantageous to discretely categorize affectionate behavior and measure these categories separately in order to determine differences that the use of global definitions may mask. For example, Barber and Thomas (1986), using a self-report survey, found that physical affection of fathers to daughters

was a significant predictor of daughters' self-esteem. When physical affection was not separated from other sources of support, no difference was found.

Affection has been studied in the context of the family, but has not been consistently, operationally defined so that it is difficult to integrate findings across studies. However, it is possible to conclude that affection is important. It also seems to be advantageous to discretely define the expression of affection and use these definitions in research and applied settings.

Gender Differences

In our culture gender is used to organize our behavior (Belle, 1985). Therefore, it is necessary to pay attention to gender differences when studying parent-child interactions in families, as they pertain to the expression of affection and other emotions. Through observation/imitation and the teaching of cultural values by socialization agents, children learn sex roles from birth. The psychological and cultural environment of the child and the child's own biological maturation interact so that many experiences are common to the two sexes, but many are different. One of those areas where differences may be found is the parent-child relationship within the context of the family.

Parents' Differential Socialization of Sons and Daughters

Parents' differential socialization of sons and daughters has been supported in the socialization literature. In an early summary of research, Maccoby and Jacklin (1974) posited that few differences could be found in

differential parental behavior as a result of sex of child. Block (1978) questioned those findings and reasoned that Maccoby and Jacklin's conclusions were based on measurement problems, i.e., the concepts measured were too broad and there was a marked absence of father data. Since that time more studies have been conducted that support the gender difference position.

In a more recent review of research, Siegal (1987) summarized the results of 39 parent-child interaction studies that included fathers. In those studies where sex of child results were significant, fathers were found to differentiate between girls and boys more than mothers, especially in the areas of discipline and physical involvement. Father-specific effects were found in 51% of the studies. An exception to this finding was in the areas of affection and vocalizations with infants and toddlers.

It is interesting to note that in his review of the studies of parent-child interaction, Siegal (1987) found that many researchers discovered significant evidence supporting differential behavior of parents, e.g., fathers stimulated infants daughters more than infant sons and mothers stimulated infant sons more than infant daughters. With infants cross-sex effects were found. With older children, same-sex effects were found. For example, Parke and Sawin (1980) found with infants that fathers were more affectionate with daughters and mothers were more affectionate with sons. Siegal noted that many of these studies observed and surveyed global behaviors and characteristics of parents. Studies of more specific parental behaviors or characteristics were lacking.

Initially, parent-child research consisted of studies of mother-infant interaction, mother reports of father-infant interactions, or father absence related to children's sex-role development (Biller, 1968; Hetherington, 1966). During the past twenty years, fathers have gradually been included in the study of parent-child interactions at all stages of child development.

Researchers have employed various methodologies to study gender differences in parents' socialization of children. In Siegal's review (1987) of studies concentrating on parental socialization behaviors, home and laboratory observations and parent self-report (especially mother self-reports) were the predominant methodologies. In Maccoby and Jacklin's review (1974) of differential socialization of boys and girls (including social stimulation, verbal interaction and stimulation, and warmth, nurturance, and acceptance), observations, questionnaires (both parent and child), and interviews were the common methodologies. In many instances, the observations were conducted only once during the study (Hatfield, Ferguson, & Alpert, 1967; Lewis, 1972; Pedersen & Robson, 1969).

The socialization literature has expanded to include gender-related studies of both parents with infants, toddlers, preschoolers, older children, and young adults and it has been found that parents treat girls and boys differently from birth. These studies generally compared fathers' and mothers' differential behavior based on children's sex. In general the results support the finding that fathers differentiate between sons and daughters more than do mothers (Siegal, 1987).

Newborns and infants. Birns (1976) reviewed studies on parent-newborn and parent-infant interaction with respect to the socialization of sex roles. Differences in parental behavior were found in these studies, e.g., male newborns were touched more; firstborn males were attended to by fathers more; and parents spent more social time with infant daughters, e.g., getting daughters to smile. Parents have been observed to look more at same-sex infants and to stimulate them more during play interactions (Parke & Sawin, 1977; 1980). Parke and Sawin also found that parents focused their affection on the infant of the opposite sex. Malatesta and Haviland (1982) found that parents contingently responded to infant sons more than to infant daughters and responded more to sons' expression of emotions. Infant boys were touched more and, if firstborn, were walked more by both parents (Parke & O'Leary, 1976). It is interesting to note that Kotelchuk (1976) found no differences in parental attachment behaviors as a result of sex of child.

Frisch (1977) found that even adult strangers would encourage sex-typed behavior in 14-month-old infants relative to the adults' perceptions of the sex of the infant. Encouragement of nurturance play, e.g., adult plays with a doll or bottle, for female infants and encouragement of active play for male infants occurred.

Studies of father-infant and mother-infant interaction have found that fathers talk more to firstborn sons (Parke, 1979) and to generally talk more and play more with their infant sons (Rebelsky & Hanks, 1971; Rendina & Dickerscheid, 1976). Compared to mothers, fathers' interactions with infants

were more playful (Lamb, 1977; Power & Parke, 1982; Smith & Dalglish, 1977) and mothers held infants more for the purpose of caregiving (Lamb, 1977). Fathers attended to sons more than mothers attended to sons or daughters (Field, 1978). In general, fathers were found to participate less in child care than mothers (Belsky, Gilstrap, & Rovine, 1984; Power & Parke, 1982). Mothers were found to be more restrictive of infants and watched infants more than did fathers (Power & Parke, 1982). In general, infants' gender has been found to influence adults' behavior in adult-child interactions (Condry & Condry, 1976; Frisch, 1977; Smith & Lloyd, 1978).

Toddlers. Specific to toddlers, Fagot (1973) reports that some play behaviors are sex-typed by adults, e.g., roughhouse play for boys, doll and dress-up play for girls. Fagot (1978) also found that adults reacted differentially to toddlers' play behavior. Same-sex play behaviors was responded to positively and cross-sex play behaviors negatively. Fagot (1974; 1978) also found that parents played more with sons and that daughters were criticized and praised more. In general, Belsky (1979) found a low rate of father-toddler interaction. In a comparison of parents' communication with toddlers, research findings are mixed. Mothers were found to speak to toddlers more than did fathers (Golinkoff & Ames, 1979), although Stoneman and Brody (1981) found that fathers spoke more to sons than did mothers and that fathers and mothers spoke to daughters at the same rate. Although findings are mixed, a parental

pattern of gender-typed behavior with toddlers is established in frequency and type of interactions.

Preschool children. Preschool children, their parents, and other socializing agents have been observed. Baumrind (1971) and Marcus and Corsini (1978) found no significant differential behavior of parents to preschool sons and daughters. A number of other studies have resulted in significant findings. Rheingold and Cook (1975) found that parents supplied sons and daughters with gender-typed toys. Bell, Johnson, McGillicuddy-DeLisi, and Sigel (1981) found that, during a paper-folding task in one child families, fathers helped preschool sons more and preschool daughters less than mothers helped them. In families with three children, they found that fathers helped daughters more than mothers helped daughters. In general, Bell, et al. found fathers and mothers more severe with same-sex children and more indulgent with cross-sex children. This relationship was stronger for fathers. Compared to mothers, fathers, in a table game, used more controlling language, e.g., giving specific directions or commands (McLaughlin, Schutz, & White, 1980) with preschoolers. Stuckey, McGhee, and Bell (1982) found that both parents' attention to sons and daughters (ages 32 months to 72 months) differed based on maternal employment status. When mothers were employed outside of the home, both parents paid more attention to daughters. When mothers were unemployed, they paid more attention to sons.

Noller (1978) found that, in general, mothers were more affectionate with preschoolers than fathers based on father-child and mother-child observations. Baumrind and Black (1967) using a self-report questionnaire found that, compared to fathers, mothers of boys were warmer with sons and mothers of girls were stricter with daughters than were fathers. Using a self-report questionnaire, they also found that fathers of boys more than mothers of boys required obedience and wanted control over sons. Mothers of boys more than fathers of boys showed more empathy, approval, and signs of a caring relationship. Fathers of girls used fear more than mothers of girls in discipline. Mothers of girls required more neatness, encouraged more adult-child interaction, and used more corporal punishment and privilege deprivation than did fathers of girls. Also, mothers allowed more verbal disagreements with sons than daughters and required more obedience from daughters than sons.

In a laboratory experiment on parental punitiveness, where parents were instructed to reward or punish children based on parental perception of children's successful and unsuccessful performance on a puzzle task, Mulhern and Passman (1981) found that mothers tended to punish sons more than daughters. In this same study a trend of the father punishing the daughter more than the son was detected. In general, parents punished their cross-sexed child more severely. As stronger forms of punishment were perceived to be required, gender of the child became a more important issue and mothers used stronger punishment for both sons and daughters than fathers did. Langlois and Downs (1980) found that, although inconsistent with boys,

mothers rewarded daughters more consistently with affection and praise for same-sex play behavior.

Gender-related studies have been conducted with other socializing agents. The study of peers' influence on preschoolers has revealed peer group pressure for gender appropriate activities (Fagot, 1977) and the peer group as a resource for appropriate gender-related activities and ideas. Teachers have also been agents of differential socialization behavior with preschoolers. Serbin, O'Leary, Kent, and Tonick (1973) found that preschool boys received more teacher attention to their requests for help than did girls and that the attention was more informative and helpful. Fagot and Serbin, et al. found evidence for teachers encouraging same-sex stereotyped play activities and discouraging cross-sex activities with preschoolers. In a day care setting teachers were found to express more affection to female children than to male children, especially smiling and physical contact (Botkin & Twardosz, 1988). Apparently research findings are mixed with regard to parents' differential behavior with preschool children. Research findings are more consistent with respect to other socializing agents' encouraging same-sex behaviors in preschool children.

School-age children. In her cross-cultural study of parents' and children's interactions, Bronstein (1984) found support for fathers' differentiation in attitudes and behaviors in gender-related areas with sons and daughters. Affective style, individual behaviors, and specific behavior clusters were studied. For example, as part of the "warm egalitarianism" behavior cluster, fathers

showed more affection to sons and daughters than did mothers. Emmerich (1962) and Noller (1978), using self-report and observation of interactions, respectively, reported no sex of parent main effects in parent-school-age child interactions. However, Margolin and Patterson (1975) found no main effects for the sex of parent in positive or negative expressions of behavior to school-age children, but found a main effect for sex of child. Results of this observational study found that in parent-child interactions, boys, more than girls, received positive responses from parents. Fathers responded differentially to boys and girls, e.g., sons received twice the number of positive responses from their fathers than did daughters. Mothers did not respond differentially to sons and daughters. However, Block (1978) studied older children and found that parents of sons were more traditional in their interactions, e.g., punishment and conformity were issues. Tauber (1979a) found that parents participated in more active play with boys and more sociable play with girls. Daughters, on the other hand, received more comforting from parents. It seems that fathers discriminate more than mothers between boys and girls during family interactions, especially with gender-related issues. Thus, fathers may have more influence over children's sex role development.

Adults' differential behavior with male and female children has been observed in the laboratory, the home, and educational settings. Frisch (1977) suggested that "real parents in naturalistic environments" (p. 1674) must be studied further to determine if parents' sex-stereotypical behavior does exist in the family setting. It is possible that not only the sex of the parent, but also the

setting, may influence the socialization of the child, including the socialization of affection. It is very possible that parental affection is a part of parental differential behavior (Baumrind & Black, 1967; Maccoby & Jacklin, 1974; Sherman & Denmark, 1978).

Numerous studies, however, have found no significant gender differences in the exchange of affection among family members. In a laboratory setting Hilton (1967) and Hatfield, Ferguson, and Alpert (1967) found no differential expression of affection or expression of warmth and responsiveness, respectively, by mothers to four- and five-year-old children. Using home observations Moss (1967) found no significant gender differences in mothers' affectionate contact with infants. In two parent-child interaction studies, Allaman, Joyce, and Crandall (1972) found no significant gender differences in parental "affectionateness" to children (first study: ages 0-80 months and 6-10 years; second study: ages 0-40 months, 41-80 months, 80 months to 10 years, and 18-26 years). Blayney (1973) and Palovitz (1984) studied father-child interaction and found no significant gender differences. Blayney studied fathers' expression of affection to 4-year-old children. Palkovitz observed fathers interacting with 5-month-old infants and found no significant gender differences in physical contact or affective interactions. Smith and Daglish (1977) observed parents and their 24-month-old children. No gender differences were observed in parental affection. Weinraub and Frankel (1977) observed parents and their 15-21-month-old children. No significant gender differences in parental touching were observed. As previously mentioned, Maccoby and Jacklin (1974), in a

review of approximately 200 studies, found little or no evidence to support differential parental affection.

However, it appears that the findings are inconsistent (Block, 1978; Furman & Buhrmester, 1985). Block found discrepancies in Maccoby and Jacklin's (1974) review of the differential socialization literature and their conclusion that few differences exist. Block referred to methodological and theoretical problems in the many investigations of parents' differential socialization of children, including the childrearing dimension of warmth. Some of those problems included the use of global concepts, the use of too few childrearing dimensions, the lack of father information, and the predominant use of preschool age or younger children. Block did find support for differential socialization of children, including support for fathers having a warmer relationship with daughters than with sons.

Significant gender differences have been found in the exchange of affection among family members in other studies. Belsky (1979) found that parents expressed more positive affection to the same-sex toddler than to the cross-sex toddler. Margolin and Patterson (1975) found that parents gave more positive responses to 5-12-year-old boys than to girls. Also, it was found that fathers gave more positive responses to sons than to daughters. Noller (1978) found that fathers gave more affection to preschool girls than to preschool boys. Barber and Thomas (1986) found that male college students reported receiving less physical affection from parents than female college students.

It is possible that research methodology has played a large part in the contradictions in the literature. Earlier studies lacked information on fathers, i.e., they used mother reports of fathers' behavior instead of actual father reports or observations of fathers' behavior. Siegal (1987) has suggested that many studies did not single out specific parental characteristics for study. The use of global definitions of the target behavior, instead of more specific, operational definitions has contributed to mixed, and sometimes contradictory, findings. Block (1976) suggested that the lack of a conceptual framework has hindered the study of differential socialization of children.

Studies that investigated gender differences in the parent-child relationship and included a measure of affection are listed in Table 1. In each study included in the table, affection was defined or conceptualized in a manner similar to the definitions used in the present study. Studies published from 1957 to the present and using various methodologies, e.g., questionnaire, home observations, and laboratory observations, were included. The parent-child relationship was observed at home, in hospitals, in day care and nursery school settings, and the laboratory. The sample characteristics included all socioeconomic classes, one- and dual-income families, various ethnic groups, and single-parent families. Only families with natural-born children were used.

Situational Factors

Factors such as family status, gender of family members, ordinal position of children, and personalities of individuals may affect family relationships, e.g.,

Table 1

Studies of Gender Differences in the Parent-Child Relationship that Included an Affection Measure.

Study	Age and N	Procedure	Affection Definition	Results
Allaman, Joyce, & Crandall (1972)	EXP I: 0-80 mos., 6-10 yrs. N = 95 & parents	1 LS	Mother's affectionateness: bipolar scale of hostility-affection	No difference
	EXP II: 0-40 mos. 41-80 mos. 80 mos.-10 yrs. 18-26 yrs. N = 65 & mothers	1	Same as EXP I	No difference
Barber & Thomas (1986)	college males & females N = 527	6	Physical affection: kiss, hug	Fathers: girls > boys, physical affection
Barnett, King, Howard, & Dino (1980)	4-6 yrs. N = 54 & parents	5	Frequency of affectionate interaction	Mothers' report: Mothers > fathers engaged in affection.
Baumrind & Black (1967)	3-4 yrs. N = 95 & parents	1,5	Warmth: presence of a loving relationship, approval, empathy	Mothers > fathers
Belsky (1979)	15 mos. N = 40 & parents	1	<u>Parent behavior:</u> Positive affection: kiss/hug Vigorous motion: bouncing on knee <u>Infant behavior:</u> Expresses pleasure: smiles, laughs	Parents kiss & hug same-sex child > cross-sex child.

Study	Age and N	Procedure	Affection Definition	Results
Belsky, Gilstrap, & Rovine (1984)	1,3,9 mos. N = 72 & parents	1,5 LS	<u>Parent behavior:</u> Positive affection: expressing positive emotional feeling toward baby by hugging, kissing, smiling at, verbalizing endearments <u>Infant behavior:</u> Smile/excitement: smile, laugh	Mothers > fathers showed more positive affection at all 3 ages. No sex of child difference.
Block (1973)	<u>Parents of:</u> I: 3-4 yrs. N = 67 II: 3-11 yrs. N = 119 III: 15-17 yrs. N = 239 IV: 17-20 yrs. N = 339	5	Express affection: holding, kissing, hugging	II, III, & IV: Fathers express affection to girls > boys. III: Mothers express affection to girls > boys.
Brody, Stoneman, & McCoy (1992)	<u>Families:</u> 4-11 yrs. & parents N = 109 56 prs. brothers 53 prs. sisters	1	<u>Parent behavior:</u> Positive behavior: hugs, affectionate touches, praises, laughs, smiles, giggles <u>Sibling behavior:</u> Same as parents	Mothers > fathers direct positive behavior to children.
Bronstein (1984)	7-12 yrs. N = 54 & parents	1	<u>Individual behavior:</u> Physical nurturance: offering food, grooming <u>Behavior cluster:</u> Warm egalitarianism: showing affection	Mothers > fathers gave physical nurturance. Fathers > mothers scored in warm egalitarianism cluster. No sex of child difference.

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Cox (1970)	11-13 yrs. <u>N</u> = 100 & 98 mothers & 77 fathers	5,6	Loving	Girls > boys perceived fathers as more loving. Girls' mothers > boys' fathers more loving.
DeLuccie & Davis (1991)	3-17 yrs. <u>N</u> = 177 & fathers	5,6,7	<u>Parent behavior:</u> Expression of affection: child centeredness, acceptance	No sex of child differences
Droppleman & Schaefer (1963)	12-14 yrs. <u>N</u> = 165 & parents	5,6	<u>Parent behavior:</u> Love, nurturance, & affection: expression of affection, positive evaluation	Boys & girls reported mothers > fathers as more affectionate & nurturant. Girls > boys reported receiving more love, nurturance, & affection from both parents.
Emmerich (1962)	6-10 yrs. <u>N</u> = 306 & parents	5	<u>Parent behavior:</u> Nurturance: positive, facilitating, reaction to dependent reciprocal child role behavior	Mothers > fathers were nurturant.
Fagot (1974)	18-23 mos. <u>N</u> = 12 & parents	1,5	<u>Parent behavior:</u> Praise <u>Infant behavior:</u> Hugs, kisses	Parents praised girls > boys. Mothers praised > fathers.
Fagot (1978)	23 mos. <u>N</u> = 24 & parents	1,5	<u>Parent behavior:</u> Positive reaction to child behavior: praises child, gives physical comfort <u>Child behavior:</u> Hugs, kisses	Parents praised girls > boys.

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Field (1978)	4 mos. <u>N</u> = 36 & parents	4	<u>Parent behavior:</u> Talking, smiling, laughing, poking, holding of limbs	Mothers > fathers poked & held limbs.
Field, Gewirtz, Cohen, Garcia, Greensburg, & Collins (1984)	3-69 mos. <u>N</u> = 53 & parents	3	<u>Parent behavior:</u> Kiss, hug <u>Child behavior:</u> Kiss, hug	No difference
Goldberg & Lewis (1969)	6 & 13 mos. <u>N</u> = 64 & mothers	4 LS	<u>Mother behavior:</u> Physical contact: touching	Mothers physically contacted girls > boys.
Hatfield, Ferguson, & Alpert (1967)	4-5 yrs. <u>N</u> = 40 & mothers	4	<u>Parent behavior:</u> Warmth <u>Child behavior:</u> Warmth	No difference
Hilton (1967)	4 yrs. <u>N</u> = 60 & mothers	4	<u>Mother behavior:</u> # of overt expressions of love &/or support: hugs, kisses, etc.	No difference
M. Hoffman & Saltzstein (1967)	12 yrs. <u>N</u> = 444 & parents	5,6	Affection	Girls > boys rated parents as more affectionate.
Hwang (1986)	8-12 mos. <u>N</u> = 27 & parents	1	<u>Parent behavior:</u> Affection: kissing, hugging, affectionately touching child. Distal bidding: smiling, laughing Playing behavior with child: physical play Caretaking behavior: changing, bathing	Mothers > fathers displayed more affectionate behavior & distal bids. When alone > when mother present, fathers displayed more affectionate behavior, distal bids, & play behavior.

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Kagan (1971)	4,8,13,27, & 48 mos. <u>N</u> = 180 & mothers	1:4,8 mos. 4 LS	Physical affection	No difference
Kagan & Lemkin (1960)	3-8 yrs. <u>N</u> = 67	6	<u>Parent behavior:</u> Nurturance: affection cluster- kisses	Boys replied mothers > fathers kissed the most.
Lamb (1977a)	7,8,12,13 mos. <u>N</u> = 20 & parents	1	<u>Parent behavior:</u> Physical contact: holding infant, picking up to kiss, cuddle, or hug <u>Play:</u> engage in interaction. <u>Child behavior:</u> Affiliative: laughing Attachment: touching	Fathers > mothers held infant for play. Mothers > fathers held infant for caretaking. Infants directed affiliative behavior to fathers > mothers.
Lamb (1977b)	7-24 mos. <u>N</u> = 26 & parents	1 LS	<u>Child behavior:</u> Touching	No difference
Leiderman, Leifer, Seashore, Barnett, & Grobstein (1973)	1 wk, 1 mo. & 3 mos. <u>N</u> = 66 & mothers	1 LS	<u>Mother behavior:</u> Holding, laughing, affectionate touch, smiling	1 month: Mothers affectionately touched boys > girls.
Lewis (1972)	3 mos. <u>N</u> = 32 & mothers	1	<u>Infant behavior:</u> Smiling <u>Mother behavior:</u> Touching, smiling, rocking	Mothers held boys > girls.

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Margolin & Patterson (1975)	5-12 yrs. <u>N</u> = 28 & parents	1	<u>Parent reaction behavior:</u> Positive parent consequences: approval, laugh, play, physical positive, touch <u>Child behavior:</u> Prosocial: laugh, physical positive, touch	Parents gave positive responses to boys > girls. Fathers gave almost twice the amount of positive responses to boys > girls.
Moss (1967)	3 wks. <u>N</u> = 29 & mothers	1	<u>Mother behavior:</u> Affectionate contact, smiles, total # of holds, rocking, holds close, holds distant <u>Child behavior:</u> Smiles	Mothers held distant boys > girls.
Noller (1978)	3-5 yrs. <u>N</u> = 67 & parents	3	<u>Interaction:</u> # of verbal & nonverbal interactive behaviors between members of dyad: holding hands, touching, kissing, patting on head or bottom, cuddling, hugging <u>Affection:</u> Interaction behaviors normally regarded as affectionate: kissing, cuddling, hugging	Parent-son dyads had fewer interactions than parent-daughter dyads. Mother dyads more affectionate than father dyads. Father-daughter dyads more affectionate than father-son dyads.

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Noller (1980)	5-8 yrs. <u>N</u> = 40 & parents	4	<u>Parent behavior:</u> Touching: stroking, patting, holding, nursing Talking: praising <u>Child behavior:</u> Touching: stroking, patting, holding, nursing	No difference
Noppe, Noppe, & Hughes (1991)	3-5 mos. <u>N</u> = 23 & parents, including 2 single mothers	1	<u>Parent behavior:</u> Positive affection: smiles, kisses Stimulates: tickles <u>Child behavior:</u> Positive affection: smiles, reaches for, mouthes parent <u>Reciprocal behavior:</u> Proximal & tactual contact between parent & child: hugs, kisses, caresses	Fathers > mothers engaged in reciprocal interaction with child.
Palkovitz (1984)	5 mos. <u>N</u> = 40 & parents	1,5	<u>Parent behavior:</u> Physical contact: caretaking, positive affection, soothing Affective: express pleasure toward child Play: vigorous <u>Infant behavior:</u> Affiliative: express pleasure toward parent	No difference

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Parke & O'Leary (1976)	birth-2 days <u>N</u> = 82 & parents	2	<u>Parent behavior:</u> Hold, smile, rock, touch, kiss	Mothers rocked boys > girls. When father present, mothers touched 1st born girls > 1st born boys. Fathers touched 1st born boys > 1st born girls.
Parke, O'Leary, & West (1972)	birth-2 days <u>N</u> = 19 & parents	2	<u>Parent behavior:</u> Affection: looks, smiles, holds, kisses, touches, rocks	Parents touched boys > girls.
Pedersen, Cain, Jr., Zaslow, & Anderson (1982)	5 mos. <u>N</u> = 41 & parents	1	<u>Parent behavior:</u> Distance receptor interaction: smiles Near receptor interactions- rocking or cuddling, holding, active touching (pats, caresses) <u>Child behavior:</u> Smiles	Mothers > fathers smiled at child.
Roopnarine, Talukder, Jain, Joshi, & Srivastav (1990)	1 year <u>N</u> = 54 & parents	1	<u>Parent behavior:</u> Holding: infant picked up & held in arms or lap Affection: hugging, kissing Touching: nonholding periods Smiling Playing: tickling, bouncing <u>Child behavior:</u> Smiling	Mothers > fathers picked up, held, comforted, and displayed affection. Fathers > mothers engaged in rough play. Infants smiled at mothers > fathers. When parents held child, displayed affection > played or comforted.

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Sears, Rau, & Alpert (1965)	4-5 yrs. <u>N</u> = 40 & parents	3,5	<u>Parent behavior:</u> Use of praise, warmth, affectional demonstrativeness <u>Child behavior:</u> Expression of affection	No difference
Sears, Maccoby, & Levin (1957)	birth-5 yrs. <u>N</u> = 379 & mothers	5,6	<u>Parent behavior:</u> Warmth of mother scale: affectionate interaction, praise, warmth, affectional bond, affectional demonstrativeness	Mothers recalled being warmer and praising girls > boys.
Siegelman (1965)	9-11 yrs. <u>N</u> = 212 & mothers	6	<u>Child's ratings:</u> Mothers' & fathers' display of nurturance	No difference
Simons, Whitbeck, Conger, & Melby (1990)	7th grade child <u>N</u> = 63 & families, including parents & other children	1,5	<u>Parent behavior:</u> Constructive parenting: warmth scale, including nonverbal communication & emotional expression	Fathers more constructive parenting when they thought it related to child's development.
Smith & Dalglish (1977)	12-24 mos. <u>N</u> = 32 & parents	1,5	<u>Parent behavior:</u> Shows affection: physical comfort, praise <u>Child behavior:</u> hugs, kisses	No difference
Stuckey, McGhee, & Bell (1982)	32-72 mos. <u>N</u> = 40 & parents	1,5	<u>Parent behavior:</u> Caretaking, positive affection, praise	Mothers > fathers gave praise and exhibited more positive affection and caretaking.

Study	Age and <u>N</u>	Procedure	Affection Definition	Results
Tauber (1979b)	8-9 yrs. <u>N</u> = 145 & parents, mothers > fathers	4	<u>Parent behavior:</u> Active play Buoyant support: laugh Sociable play: compliments child <u>Child behavior:</u> Physical contact seeking: touches parent Buoyant mood: laughs Sociable play: compliments parent	Mothers accepted & fathers rejected physical contact seeking in girls. Parents of girls > boys engaged in sociable play.
Weinraub & Frankel (1977)	15-21 mos. <u>N</u> = 40 & parents, mothers or fathers	4,5	<u>Parent behavior:</u> Touching <u>Child behavior:</u> Touching	No difference
Zussman (1980)	13-66 mos. <u>N</u> = 80 20 mothers & 20 fathers each w/a toddler & a preschool child	4	<u>Parent behavior:</u> Warmth/positive affection: physical affection, warmth to child, expresses joy Praise: praises or encourages	No difference

Note: 1 = home observation, 2 = hospital observation, 3 = nursery school observation, 4 = laboratory observation, 5 = parent questionnaire/interview, 6 = child questionnaire/interview, LS = longitudinal study.

the parent-child relationship. Social and situational factors may also influence family relationships. These factors, e.g., socioeconomic level, religious orientation, type of housing, community of residence, and educational opportunities, may be a part of the environment that affects the exchange of behavior in families (Parke, 1978). Within the home itself, for example, the family environment contains the factors mentioned previously, including the actual physical setting, e.g., playing a game sitting around a table. Bailey, Harms, and Clifford (1983) in reference to children's behavior and social interaction, state that "almost all behaviors are affected by the environment."

It is important to recognize the relation of the social context to family interactions. Specific to children's development, environmental variables, i.e., the physical environment, have been found to mediate social interactions (Clarke-Stewart, 1973; Levy-Shiff & Israelashvili, 1988; Schaffer & Crook, 1978). For example, families may interact differently at dinnertime if dinner is eaten around a table as opposed to eating in front of a television.

As a part of the family and home environment, situational factors may include the physical setting of the family or a family task. There is evidence that these situational factors will influence individual and group behavior. L'Abate (1990) suggests that different settings will have different task requirements, i.e., the home setting and the work setting will require different skills of the participants. It is possible that even within one setting, e.g., the home, different competencies are necessary depending upon the task at hand and the setting events.

Setting events have been classified into two categories (Twardosz, 1984).

The first category includes those circumstances in a person's immediate environment. This includes those surrounding factors that may affect behavior of individuals or groups, e.g., presence and number of other people, type of activity or task, furnishings or equipment. A second category includes those factors that do not coincide with an event, but occur separately from it such as a preceding activity. The remainder of the discussion pertains to the first type of setting event.

Woodson and de Costa-Woodson (1984) have suggested that the physical environment in the home should be considered when studying childrearing practices, especially parent-child interactions. In their study of two cultures (Malay and Chinese), the differences in the physical environments of the homes strongly correlated with children's proximity regulation to mothers through locomotion and crying. For example, children in the Malay family were cared for by nuclear family members in a small area with few furnishings. Children in the Chinese family were cared for by extended family members in a large room with food preparation and production supplies. Because of the food preparation equipment, Chinese children were constrained more. Malay children had easier access to an adult, especially their mothers. Chinese children's access to mothers was limited by the physical surrounding and by the social organization of primary care being provided by extended family members.

Wachs and Chan's (1986) findings also support the importance of environmental factors, e.g., the number of people in the home influences parent-child social interaction. Observing 48, 12 month-old infants, they found that the physical environment can structure parents' and children's behavior and children's development, e.g., children's vocabulary was enhanced through the introduction of novel stimuli.

In a study of the production of gender-related differences in behavior, Deaux (1984) noted that the task characteristics (male- vs. female-linked activities) were important. Situational factors, including tasks, have been mentioned by others as mediators of individuals' behavior (Berman, 1980; Spence, 1985).

In caregiving environments, other than the family, changes in setting events have produced behavior change. Twardosz and Risley (1982) suggested organizing the environment to facilitate specific activities and to encourage interaction. For example, Quilitch and Risley (1973) influenced children's social behavior by making available toys that would elicit either social play or isolate play as determined by children's prior use of those toys. The availability and use of the social toys, e.g., games for more than one child, increased social play. VanBiervliet, Spangler, and Marshall (1981) changed mealtime routines in a residential facility for the retarded to influence social interaction. Changing from cafeteria-style service to family-style service increased verbalizations and time spent at the table. A change in the physical environment of a mental hospital where 21 psychogeriatric patients received

care resulted in an increase of verbal communication during mealtime (Melin & Götestam, 1981). Changing the physical setting from a traditional, institutional arrangement of furniture lining the walls of the ward to one that was conducive to resident interaction, e.g., circular groupings of tables and chairs, allowing self-service of food, and brightening the lighting were a few of the environmental changes that resulted in a significant difference in patients' social interaction. A review of this literature can be found in Twardosz (1984).

The manipulation of setting events in group care environments has been successful in changing the social behaviors of individuals in those settings. Thus, it seems plausible that in family situations, various aspects of the immediate surrounding circumstances could influence the interactions of parents and children, husbands and wives, specifically their expression of affection. And, such effects could be specific to one or the other gender.

Summary

The warmth, nurturance, responsiveness, and affectionate aspect of parent-child emotional functioning has been pinpointed as a crucial factor in optimal parent-child relationships. These parenting characteristics have also been viewed as a critical factor in positive and negative child outcomes. A lack of parental nurturance and warmth has been correlated with adolescent delinquency and antisocial behavior. Also, affection in the marital relationship has been viewed as a contributing factor to marriage satisfaction. Given the support for gender differences in parents' differential socialization of sons and

daughters and the support for environmental factors contributing to adults and children's behavior variance, it appears that both these factors could influence the expression of affection and responses to that affection in the family.

Research Questions

The objective of this exploratory study is to analyze previously collected data with respect to the expression of affection among family members. How this expression differs across family activities, with respect to the gender of the parents and children, and the spouse relationship will be studied.

Five dependent variables were used in this study. They were (a) smiling, (b) affectionate words, (c) active affectionate physical contact, (d) passive affectionate physical contact, and (e) social interaction. Two sets of independent variables were used. In the first five research questions, type of routine was the independent variable with five levels. The five levels of type of routine were (a) pre-dinner activities, (b) dinner, (c) post-dinner activities, (d) a construction game, and (e) a verbal game. In the last five research questions, type of response was the independent variable with two levels. The two levels of type of response were (a) positive and (b) neutral. The ten research questions were:

1. Is there a difference in the way fathers and mothers express affection and social interaction to sons and does it differ across five family routines?
2. Is there a difference in the way fathers and mothers express affection and social interaction to daughters and does it differ across five family routines?

3. Is there a difference in the way sons express affection and social interaction to fathers and mothers and does it differ across five family routines?

4. Is there a difference in the way daughters express affection and social interaction to fathers and mothers and does it differ across five family routines?

5. Is there a difference in the way husbands and wives express affection and social interaction to one another and does it differ across five family routines?

6. Is there a difference in sons' responses to fathers' and mothers' expression of affection and social interaction?

7. Is there a difference in daughters' responses to fathers' and mothers' expression of affection and social interaction?

8. Is there a difference in fathers' and mothers' responses to sons' expression of affection and social interaction?

9. Is there a difference in fathers' and mothers' responses to daughters' expression of affection and social interaction?

10. Is there a difference in husbands' and wives' responses to one another's expression of affection and social interaction?

CHAPTER II

METHODS

This study is based on data collected from a previous research project on the exchange of affection between parents and children. The original project was funded by a small grant to Dr. Sandra Twardosz from the College of Human Ecology at the University of Tennessee.¹

There were two general objectives of the present study. The first was to analyze the previously collected data with respect to the expression of affection and social interaction among family members. The second was to analyze the same data with respect to family members' responses to those expressions of affection and social interaction.

Subjects

The subjects of this study were families recruited from a university day care program. A letter explaining the research project and giving information about a follow-up telephone call was sent to each family. To explain the purpose of the project, the researcher called each family that met the study's criteria, i.e., a two-parent home, a minimum of two children no more than 12 years old, and the family living within a 20-mile radius of the university. If the

¹The data were collected in 1984. Participants in the project were Sandra Twardosz, Melinda Raab, Deena Richman, and Dava Shoffner.

family accepted the invitation to discuss the project further, the researcher visited in the home to explain the details of the research study and to gain their consent.

Eleven, Caucasian, intact, middle-income families with a total of 24 children participated in this study. Four families consisted of parents and only male children, while three families had only female children. Eighty-two percent ($n = 9$) of the families had two children each. The remaining two families had three children each. Ten families lived in a detached house, while one family resided in an apartment.

The parents in the families had been married an average of 10.1 years (range: 6.5 to 15 years). It was the first marriage for all participants. All parents had some college education, with 91% ($n = 20$) of the parents earning an undergraduate degree. Fifty-five percent ($n = 12$) of the parents had earned a graduate degree.

All fathers ($N = 11$) were college graduates with 64% ($n = 7$) having attained a graduate degree. Only one father was attending university classes at the time of this study. All fathers were employed outside of the home. One father reported having a disabling condition, legal blindness. The average age of the fathers was 35 years (range: 28 to 41 years).

Of the 11 mothers, nine were college graduates. Five had earned a graduate degree and four had some graduate training. At the time of the study, three mothers were attending college classes. Seventy-three percent ($n = 8$) of the mothers worked outside of the home and one mother wrote professionally

in the home. The average age of the mothers was 33.5 years (range: 28 to 38 years).

Of the 24 children, there were 14 sons and 10 daughters ranging in age from 5 months to 11 years, 3 months ($M = 4.4$ years). The average age of the sons was 4.5 years (range: 5 months to 11 years, 3 months). The average age of the daughters was 4.1 years (range: 10 months to 9 years). At least one child from each family was enrolled at the University of Tennessee Child Development Laboratories. One child had mild cerebral palsy. All children lived with their parents.

Settings

Six observation sessions were conducted during evening hours in the homes of the 11 families. Four of the sessions were meal observations and included the activities preceding the evening meal, the evening meal, and the activities after the evening meal. The observer arrived 1/2 hour before the family's scheduled meal time and stayed for an additional 1/2 hour after the meal ended. Typically, these observations were about 1 1/2 hours in length. The remaining two observations were of the family playing a construction game and a verbal game. For each game observation the two types of games were played for 15 minutes each. The observations occurred after the meal and clean-up but on different evenings than the meal observations. Family members' movements or the location of activities were not restricted.

During the observation of the meal all family members were present. Occasionally, one family member had not arrived from work for the pre-meal observation. Much of the pre-meal activities included adults' meal preparation and children's playing. Post-meal activities included clean-up, homework, and play. During the meal family members sat around a table.

Family members were allowed to choose the location of the game sessions. Two locations were chosen, i.e., around a table and on the floor. Every family member participated except infants. Families chose their own verbal and construction games, e.g., verbal games included reading and board games, and construction games included blocks and legos.

Observations

Except for reliability observation visits, the same observer was present in the home each week. An observer was assigned to a family for the duration of data collection. It was originally intended that data collection would occur once per week in each family. However, data collection ranged from 5 weeks to 16 weeks with the majority of the visits for nine families extending from 5 to 10 weeks. The remaining two families required from 11 to 16 weeks to complete data collection. Because of family events or illness and observer absences, the duration of participation was longer than originally planned.

Using a modified fractional factorial design, the order in which meal and game observations would occur for each family was varied to prevent order effects from confounding the results. For example, one family might be

observed at their first session playing games and then at the next two sessions at meals, followed by another game and two meals. Each family had a different observation sequence.

Each subject was observed for three, 10-second intervals and then the observer moved to another subject. Data were recorded after each 10-second interval. After each interval the observer would take approximately 10 seconds to record the behavior expressed, the recipient, and the recipient's reaction to the behavior. After all family members had been observed for three consecutive 10-second intervals, the observer would return to the first family member and resume the observation sequence. Observation and data collection continued throughout the appointed time.

The sequence in which family members were observed was determined upon the initiation of each observation session. The sequence of observation was chosen based on the arrangement of family members in the room when observation began. The observer would record the family members' presence in the room from left to right. That sequence was then followed for the duration of the observation session.

Measures

Expressive Behaviors

The expressive behaviors measured included four affectionate behaviors and social interaction. The affectionate behaviors were smiling, affectionate

words, active affectionate physical contact, and passive affectionate physical contact.

Smiling (SM) was scored if a family member smiled and laughed in any form and to any degree at someone or with someone during the 10-second interval. Smiling that was not directed to someone or used as a form of ridicule was not scored.

Affectionate words (AW) was scored if a family member used terms of endearment, verbally teased affectionately, or expressed love or liking to another family member. Direct compliments of one family member to another and indirect compliments of one member to another referring to a third member with the third member present were also scored as affectionate words. However, compliments given in a sarcastic tone of voice were not scored as affectionate words.

Active affectionate physical contact (AC) was scored if one family member interacted with another family member in a physical and affectionate manner. Examples of these behaviors included hugging, patting, kissing, tickling, and caressing. Playful wrestling, kicking, pinching, and biting were also included. Touching which occurred during dancing, playing with objects (e.g., pillow fighting), or during non-routine grooming (e.g., twirling child's hair) were also scored as active affectionate physical contact. Physical contact that was brief and occurred during routine movement was not scored.

Passive affectionate physical contact (PC) was scored if the affectionate behavior occurred for at least five consecutive seconds in the ten-second

interval. In general, this category was scored if the interaction was physical, purposeful, and affectionate, but not physically active as defined above.

Examples of these behaviors included a family member laying or leaning on another family member, holding hands, someone holding another on his or her lap, or having an arm around someone. Physical contact that was brief and occurred during routine movement was not scored.

Social interaction (SI) was scored when one family member directed social behavior to another family member. Social interaction behaviors included speaking to, arguing with, and playing cooperatively with someone. Physical contact observed in routine care, e.g., diapering, was scored as social interaction. Demonstrating or showing someone how to use or do something as well as reading, singing, vocalizing, and nodding to or with someone were scored as social interaction. Behavior that could be scored as affectionate was excluded. Physical aggression, physical punishment, accidental physical contact, passive activities (e.g., watching television and listening to music), or observing and listening to others without responding were not recorded.

Social and concurrent validation of the behavioral definitions have been established (Twardosz, Schwartz, Fox, & Cunningham, 1979). Trained observers scored videotapes of caregiver-child interactions using the behavioral definitions of affection, while community volunteers rated the same videotapes as higher or lower in affection using a Likert scale. The volunteers were not aware of the behavioral definitions. Significant correlations were found between these behavioral observations and subjective ratings, especially the

observations and ratings of smiling, active affectionate physical contact, and passive affectionate physical contact, $r(16) = .68 - .69, p < .01$).

Reaction Behaviors

The reaction behaviors measured included positive, neutral, negative, and no reactions. These behaviors were exhibited by the recipient of affectionate behavior or social interaction.

Positive reactions (POS) were recorded if a family member responded to the four affectionate behaviors or social interaction by smiling, laughing, saying affectionate words, or being physically affectionate as defined previously.

Negative reactions were included in the behavioral observations, but were not analyzed in this study because they occurred so rarely. Included in the negative category were crying, screaming, whining, frowning, pouting, physical aggression (e.g., kicking, hitting, pushing), threats (e.g., tattling), and disapproving behaviors.

Neutral reactions (NEU) were recorded if the reaction was interactive in nature but not positive or negative as defined above. For example, a father continuing to read to a child, but not responding to a child's smile while reading would be coded as neutral.

No reaction was recorded if the recipient of affectionate behavior or social interaction made no response to the expressed behavior. This reaction was not included in the data analysis.

Observer Training

Six undergraduate students in the Department of Child and Family Studies at the University of Tennessee were trained specifically for this study in the use of the behavioral measurement system. Training methods included studying and passing quizzes on a training manual, watching training tapes and practicing in child care and family settings. Periodic meetings of observers were held to give feedback on performance and for clarification of observation methods.

Interobserver Reliability

Data were collected for establishing interobserver reliability during two of the six observation sessions, i.e., during one meal and during one game for each family. During these two sessions a second observer collected data simultaneously and independently of the other observer. Observer reliability of the expression data was computed using Cohen's Kappa (Hartman, 1977). The computation of Kappa coefficients for interobserver reliability corrects for chance agreements. For those observations where there was 100% agreement that no behavior occurred, Kappa could not be calculated.

Fleiss (1981) states that Kappa coefficients of .60 to .75 are good and above .75 are excellent. Of the 87 Kappa coefficients computed for this study, 88.5% were above .64 and 73.6% were above .75. In general, moderate to high Kappa coefficients were computed (see Table 2). However, there were some

Table 2

Kappa Coefficients for Family Members' Expressive Behaviors by Meal and Game Routines

Expressor-recipient dyad	Behavior				
	SM	AW	AC	PC	SI
Meal routines					
Father to Mother	.68	.39	-	1.00 ^a	.90
Father to Son	.70	.89	.49	.83	.90
Father to Daughter	.77	.83	.80	.88	.88
Mother to Father	.87	1.00 ^a	-	0 ^b	.85
Mother to Son	.75	1.00 ^a	.91	.93	.89
Mother to Daughter	.89	.85	.77	.87	.90
Son to Father	.88	-	.50	.91	.91
Son to Mother	.89	-	.75	.96	.88
Daughter to Father	.54	-	.49	.93	.79
Daughter to Mother	.87	.67	.79	.85	.90
Game routines					
Father to Mother	.69	-	-	-	.84
Father to Son	.78	.74	.94	.90	.85
Father to Daughter	.90	.90	.69	.90	.76
Mother to Father	.87	.67	-	.85	.78
Mother to Son	.93	0 ^b	.64	.97	.67
Mother to Daughter	.74	.85	.79	.95	.79
Son to Father	.85	-	.66	.93	.91
Son to Mother	.59	-	1.00	.86	.92
Daughter to Father	.81	-	.49	.87	.74
Daughter to Mother	.90	-	.49	.96	.90

Note: Dashes indicate computation not possible.

^aComputation based on 1 agreed occurrence.

^bComputation based on 1 disagreement.

low scores. For example, during the game routine, daughters' expression of active affectionate physical contact to parents received a low score (.49). During the meal routine, low scores were specifically related to the father either as the expressor or as the recipient of behavior (.39 - .54). Thirteen Kappa coefficients were impossible to compute. Botkin, Townley, & Twardosz (1991) in a study of children's affectionate behaviors in day care settings, state that "Cohen's Kappa is designed to compute reliability on low-frequency behaviors. But affectionate words occurred so infrequently, the computation was arithmetically meaningless" (p. 275). As with Botkin et al.'s study, eight of the 13 uncomputed Kappas in this study were a result of the extremely low frequency of affectionate words. Seven of the eight were a low frequency of children's expression of affectionate words. The remaining five of the thirteen were the results of a low frequency of active affectionate physical contact of parents to each other during both game and meal routines and passive affectionate physical contact of fathers to mothers during game routines.

Each case of a low reliability score, e.g., a score below .60, was based on infrequent behaviors. For example, the score of fathers' expression of affectionate words to mothers during meal routines (.39) was based on only four possible occurrences out of 276 intervals observed, i.e., of the 276 intervals the observers agreed once and disagreed three times that the behavior occurred. The remaining 272 intervals resulted in agreements on the non-occurrence of behavior.

Observer reliability of the reaction data was computed using agreement scores based on the proportion of agreements and disagreements on occurrences of behavior. Using only the intervals in which both observers had agreed that an affectionate behavior had occurred, observer reliability on the reaction data was determined by computing the proportion of agreements between the two observers for the occurrences of each reaction (see Table 3). The agreement score was the quotient calculated as the number of agreements divided by the number of agreements plus disagreements. For all affectionate behaviors and social interaction during games and meals, the range of agreement scores for positive reactions and neutral reactions was .40 to 1.00 and .50 to 1.00, respectively. In general, the agreement scores were moderate to high.

Data Reduction and Transformation

For each type of affectionate behavior and social interaction, proportions were computed by dividing the number of intervals the subject behaved to a target family member, by the total number of intervals a subject was observed. Specific to the two types of reactions, proportions were computed by dividing the number of positive or neutral reactions to an affectionate behavior or social interaction from the target family member by the total number of intervals the subject expressed that behavior to the target family member.

When the recipient, or recipient's reaction could not be discerned, it was considered missing data and the interval was dropped from the total number of

Table 3

Interobserver Reliabilities of Family Members' Reactions to Affectionate Behaviors

Family member	Behavior				
	SM	AW	AC	PC	SI
Positive reaction					
Father	.79	1.00	.80	.60	.67
Mother	.77	-	.44	.42	.68
Son	.80	.50	.75	.75	.40
Daughter	.90	.75	.88	.67	.74
Neutral reaction					
Father	.74	1.00	1.00	.84	.86
Mother	.67	1.00	.50	.84	.84
Son	.95	1.00	.93	.94	.87
Daughter	.79	.73	.93	.89	.86

intervals. Arc sine transformations, appropriate for proportional measures based on unequal numbers of observations, were performed on the dependent variables to stabilize variances (Neter, Wasserman, & Kutner, 1985).

Data Analysis

Separate repeated-measures multivariate analyses of variance (MANOVA) were performed on the independent variables of type of routine and of type of reaction with the dependent behavioral measures of smiles, affectionate words, active affectionate physical contact, passive affectionate physical contact, and social interaction. The repeated measures design was used because the same experimental unit, the family, was measured on six different occasions (Kachigan, 1986; Neter, Wasserman, & Kutner, 1985). This controls for an increase in chance findings due to an increase in number of tests run. Sample sizes varied with families. Eight families had sons ($n = 8$) and seven families had daughters ($n = 7$). If either of the overall tests (MANOVA) was significant, separate univariate tests (ANOVA) of the dependent measures were examined for significance.

When univariate tests were significant for the expression of affectionate behavior and social interaction by routine, Tukey's honestly significant difference method (HSD) was chosen as a post hoc test for multiple pairwise comparisons of factor level effects because all comparisons were of interest. For those tests of equal sample sizes, the Tukey method is exact. It is a conservative estimate for those tests of unequal sample sizes and is preferable to other methods,

e.g., Scheffe or Bonferroni, because narrower confidence limits are provided (Neter, Wasserman, & Kutner, 1985).

Because of the exploratory nature of this study, a .10 level of significance was used to test all hypotheses. Tukey comparison tests employed a .05 level of significance.

CHAPTER III

RESULTS

The results of the analyses of family members' expression of affection and social interaction during five family routines and the analyses of family members' reactions to affection and social interaction will be presented in two sections. First, the analyses of the expression of affection by parents to children, children to parents, and spouses to one another will be examined. Second, the analyses of the reactions to these behaviors will be presented.

Expression of Affection

Parents' Expressions of Affection and Social Interaction to Sons

The results of the analyses, testing if there is a difference in the way parents express affection and social interaction to sons and if it differs across routines follows. The mean percentages and standard deviations of parents' expressive behaviors to sons are in Table 4. Using Wilk's lambda as the criterion, no significant group effect was obtained in the overall MANOVA for type of routine in parents' expressions of affectionate behavior and social interaction to sons, $F(20, 104) = 1.10, p < .36$. However, a significant effect was obtained for the five behavioral dimensions for sex of parent, $F(5, 31) = 2.51, p < .05$. In subsequent univariate analyses both passive affectionate contact, $F(5, 35) = 2.98, p < .09$, and social interaction, $F(5, 35) = 3.71, p <$

Table 4

Mean Percentages of Parents' Expressive Behaviors to Sons ($N = 14$) by Routines

Behavior	Routine	Fathers ^a		Mothers ^b	
		M	SD	M	SD
SM	All routines	6.27	6.40	6.91	5.89
	Pre-dinner	5.03	2.91	6.57	5.52
	Dinner	4.05	3.06	7.68	5.52
	Post-dinner	14.19	10.28	11.37	8.26
	Verbal game	4.00	1.65	4.68	3.75
	Construction game	3.54	2.78	3.08	1.29
AW	All routines	3.60	2.03	3.02	1.13
	Pre-dinner	2.45	.55	3.04	1.01
	Dinner	3.64	1.52	2.54	.78
	Post-dinner	4.08	2.88	3.93	1.34
	Verbal game	0	0	0	0
	Construction game	3.97	2.66	1.69	0
AC	All routines	6.74	5.76	7.27	7.83
	Pre-dinner	6.05	4.22	8.80	8.74
	Dinner	3.28	1.03	5.59	2.79
	Post-dinner	14.94	7.83	12.41	12.05
	Verbal game	3.88	1.34	3.41	1.51
	Construction game	6.12	2.23	3.51	3.01
PC	All routines	9.73	9.79	15.83	14.10
	Pre-dinner	7.33	4.02	24.08	13.90
	Dinner	2.18	.13	12.72	14.63
	Post-dinner	18.90	16.03	23.15	21.87
	Verbal game	7.15	3.70	13.95	10.25
	Construction game	7.73	5.57	6.96	5.95
SI	All routines	21.24	14.63	25.13	16.11
	Pre-dinner	25.42	9.23	25.61	11.90
	Dinner	22.29	14.04	33.84	8.53
	Post-dinner	31.89	20.20	30.56	27.39
	Verbal game	14.77	11.07	15.28	11.58
	Construction game	12.07	7.30	19.69	7.48

^a $N = 7$.

^b $N = 7$.

.06, were significant. Mothers expressed more passive affectionate contact and social interaction to sons than did fathers.

Parents' Expressions of Affection and Social Interaction to Daughters

The results of the analyses, testing if there is a difference in the way parents express affection and social interaction to daughters and if it differs across routines follows. The mean percentages and standard deviations of parents' expressive behaviors to daughters are in Table 5. For parents' expressions of affectionate and social interaction behavior to daughters, no significant group effects for type of routine, $F(20, 87) = .48, p < 1.00$, or the five behavioral dimensions by sex of parent, $F(5, 26) = .43, p < .82$, were obtained in the overall MANOVA using Wilk's lambda as the criterion. Therefore, no subsequent analyses were performed.

Sons' Expressions of Affection and Social Interaction to Parents

The results of the analyses, testing if there is a difference in the way sons express affection and social interaction to parents and if it differs across routines follows. The mean percentages and standard deviations of sons' expressive behaviors to parents are in Table 6. Using Wilk's lambda as the criterion, no significant group effect for type of routine was obtained in the overall MANOVA, $F(20, 104) = .21, p < 1.00$. A significant effect was obtained in the overall MANOVA for the five behavioral dimensions by sex of parent, $F(5, 31) = 2.36, p < .06$. In subsequent univariate analyses only social interaction was found to be significant, $F(5, 35) = 9.53, p < .004$. Sons expressed

Table 5

Mean Percentages of Parents' Expressive Behaviors to Daughters ($N = 10$) by Routines

Behavior	Routine	Fathers ^a		Mothers ^b	
		M	SD	M	SD
SM	All routines	5.45	3.83	5.57	7.14
	Pre-dinner	5.81	3.64	3.73	3.04
	Dinner	9.25	5.79	12.87	16.73
	Post-dinner	3.67	2.61	6.86	2.21
	Verbal game	4.98	3.36	3.23	2.58
	Construction game	4.48	2.99	3.45	2.90
AW	All routines	3.56	1.84	2.96	1.38
	Pre-dinner	3.02	1.27	2.42	.65
	Dinner	4.01	2.65	3.87	2.05
	Post-dinner	3.93	2.13	2.50	.99
	Verbal game	4.92	4.13	2.00	.06
	Construction game	2.95	1.01	3.72	1.53
AC	All routines	4.74	5.45	4.52	3.06
	Pre-dinner	6.78	7.24	4.75	1.85
	Dinner	2.03	.24	5.43	3.97
	Post-dinner	6.72	8.34	6.39	4.01
	Verbal game	2.68	1.07	3.18	2.33
	Construction game	4.60	2.55	2.00	.06
PC	All routines	8.68	8.85	8.43	6.27
	Pre-dinner	10.24	9.09	10.54	7.42
	Dinner	6.04	6.65	8.96	6.13
	Post-dinner	11.44	16.07	7.90	6.26
	Verbal game	7.58	5.26	9.76	7.75
	Construction game	6.87	3.66	1.96	0
SI	All routines	23.15	14.32	22.60	14.53
	Pre-dinner	29.57	18.75	28.27	11.77
	Dinner	30.35	18.63	33.34	21.73
	Post-dinner	23.70	9.92	27.33	8.82
	Verbal game	12.43	7.85	11.78	6.79
	Construction game	18.16	5.20	14.65	6.52

^a $N = 7$.

^b $N = 7$.

Table 6

Mean Percentages of Sons' ($N = 14$) Expressive Behaviors to Parents by Routines

Behavior	Routine	Fathers ^a		Mothers ^b	
		M	SD	M	SD
SM	All routines	4.16	3.06	3.53	2.35
	Pre-dinner	6.32	4.78	3.22	2.47
	Dinner	3.41	1.47	3.42	2.38
	Post-dinner	6.17	4.13	4.60	3.02
	Verbal game	3.24	1.69	3.44	2.23
	Construction game	2.03	1.13	2.27	1.14
AW	All routines	.82	0	1.18	0
	Pre-dinner	0	0	0	0
	Dinner	0	0	0	0
	Post-dinner	.82	0	1.18	0
	Verbal game	0	0	0	0
	Construction game	0	0	0	0
AC	All routines	2.55	1.98	2.65	2.18
	Pre-dinner	1.76	1.55	1.39	.86
	Dinner	1.00	.25	2.12	1.63
	Post-dinner	5.22	.58	5.18	2.90
	Verbal game	1.64	0	3.02	2.60
	Construction game	2.25	2.18	1.50	.60
PC	All routines	6.11	5.17	8.73	4.95
	Pre-dinner	5.22	2.75	12.21	5.24
	Dinner	1.83	.70	8.34	4.26
	Post-dinner	11.22	7.21	12.16	5.96
	Verbal game	5.24	3.95	6.62	3.10
	Construction game	6.24	4.87	4.77	2.68
SI	All routines	11.49	8.41	16.24	9.64
	Pre-dinner	13.74	10.78	18.29	11.13
	Dinner	14.52	8.88	23.30	11.61
	Post-dinner	14.21	8.32	17.96	8.58
	Verbal game	8.04	5.70	9.30	3.72
	Construction game	6.29	5.04	11.78	4.72

^a $N = 8$.

^b $N = 8$.

significantly more social interaction to mothers than to fathers.

Daughters' Expressions of Affection and Social Interaction to Parents

The results of the analyses, testing if there is a difference in the way daughters express affection and social interaction to parents and if it differs across routines follows. The mean percentages and standard deviations of daughters' expressive behaviors to parents are in Table 7. Similar to parents' expressions of affection and social interaction to daughters, no significance was found for type of routine, $F(16, 68) = .44, p < .96$, or the five behavioral dimensions by sex of parent, $F(4, 22) = .94, p < .46$, using the Wilk's lambda as the criterion for the overall MANOVA for daughters' expressions of affectionate behavior and social interaction to parents. Therefore, no subsequent analyses were performed.

Parents' Expressions of Affection and Social Interaction to One Another

The results of the analyses, testing if there is a difference in the way parents express affection and social interaction to each other and if it differs across routines follows. The mean percentages and standard deviations of parents' expressive behaviors to each other are in Table 8. For mothers' and fathers' expression of affectionate and social interaction behaviors to each other, no significant group effects for type of routine, $F(20, 154) = .88, p < .62$, or the five behavioral dimensions, $F(5, 46) = .75, p < .59$, were obtained in the overall MANOVA using Wilk's lambda as the criterion. Therefore, no subsequent analyses were performed.

Table 7

Mean Percentages of Daughters' (N = 10) Expressive Behaviors to Parents by Routines

Behavior	Routine	Fathers ^a		Mothers ^b	
		M	SD	M	SD
SM	All routines	3.34	2.28	3.78	2.94
	Pre-dinner	2.76	2.00	2.13	.25
	Dinner	4.92	3.21	5.38	4.39
	Post-dinner	2.82	1.30	6.23	3.57
	Verbal game	2.92	1.39	2.28	1.21
	Construction game	2.85	2.90	3.24	1.40
AW	All routines	1.15	0	1.15	0
	Pre-dinner	1.15	0	1.15	0
	Dinner	0	0	0	0
	Post-dinner	0	0	0	0
	Verbal game	0	0	0	0
	Construction game	0	0	0	0
AC	All routines	2.36	1.42	2.08	1.19
	Pre-dinner	2.58	.76	2.03	1.51
	Dinner	6.38	0	2.57	2.02
	Post-dinner	2.39	1.11	2.13	0
	Verbal game	1.67	.66	1.65	.92
	Construction game	1.42	.62	0	0
PC	All routines	6.03	4.73	6.24	4.48
	Pre-dinner	7.80	5.46	7.26	6.00
	Dinner	3.56	2.03	5.18	3.45
	Post-dinner	8.22	6.71	6.14	4.75
	Verbal game	5.44	2.55	8.43	4.10
	Construction game	2.67	1.46	1.56	.80
SI	All routines	13.47	8.97	16.45	9.83
	Pre-dinner	17.18	6.28	17.74	7.22
	Dinner	15.54	16.38	25.05	10.01
	Post-dinner	16.78	5.35	19.97	10.46
	Verbal game	8.21	5.31	9.49	6.32
	Construction game	9.64	2.89	10.21	6.27

^aN = 7.

^bN = 7.

Table 8

Mean Percentages of Parents' Expressive Behaviors to One Another ($N = 22$)
by Routines

Behavior	Routine	Fathers ^a		Mothers ^b	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
SM	All routines	5.40	3.20	6.33	4.57
	Pre-dinner	5.49	3.55	6.97	4.84
	Dinner	7.52	2.82	7.16	5.66
	Post-dinner	6.26	3.54	6.63	4.14
	Verbal game	3.69	1.85	4.82	4.15
	Construction game	2.75	.72	3.79	2.91
AW	All routines	1.84	.11	2.53	1.00
	Pre-dinner	1.85	0	0	0
	Dinner	1.91	.08	2.13	.13
	Post-dinner	1.76	.13	2.21	.24
	Verbal game	0	0	0	0
	Construction game	0	0	3.02	1.52
AC	All routines	2.38	.90	2.10	.21
	Pre-dinner	1.88	.29	2.04	.26
	Dinner	2.08	0	2.16	.23
	Post-dinner	0	0	0	0
	Verbal game	3.70	0	0	0
	Construction game	0	0	0	0
PC	All routines	2.72	.86	4.06	1.62
	Pre-dinner	2.13	0	0	0
	Dinner	2.33	0	4.44	0
	Post-dinner	0	0	4.52	3.03
	Verbal game	3.70	0	4.76	0
	Construction game	0	0	3.04	.94
SI	All routines	16.73	13.62	16.09	12.09
	Pre-dinner	22.15	12.35	21.76	14.01
	Dinner	31.58	10.79	26.78	8.71
	Post-dinner	18.56	10.22	19.38	6.00
	Verbal game	4.16	2.15	5.54	5.83
	Construction game	5.08	2.89	5.01	4.09

^a $N = 11$.^b $N = 11$.

Reaction to Expression of Affection

Parents' Reactions to Sons' Expressions of Affection and Social Interaction

The results of the analyses, testing if there is a difference in the way parents react to sons' expressions of affection and social interaction follows. The mean percentages and standard deviations of parents' reactions to sons are in Table 9. Using Wilk's lambda as the criterion, no significant effect was obtained for the five behavioral dimensions by sex of parent, i.e., $F(5, 10) = .68$, $p < .65$. No significant group effect in the overall MANOVA for type of reaction, i.e., $F(5, 10) = 1.93$, $p < .18$, for parents' reactions to sons' expressions of affection and social interaction was found. Therefore, no subsequent analyses were performed.

Parents' Reactions to Daughters' Expressions of Affection and Social Interaction

The results of the analyses, testing if there is a difference in the way parents react to daughters' expressions of affection and social interaction follows. The mean percentages and standard deviations of parents' reactions to daughters are in Table 10. Using Wilk's lambda as the criterion, no significant effect was obtained for the five behavioral dimensions by sex of parent, i.e., $F(5, 8) = .03$, $p < 1.00$. No significant group effect in the overall MANOVA for type of reaction, i.e., $F(5, 8) = .77$, $p < .60$, for parents' reactions to daughters' expressions of affection and social interaction was found. Therefore, no subsequent analyses were performed.

Table 9

Mean Percentages of Parents' Reaction Behaviors to Sons ($N = 14$)

Behavior	Reaction	Fathers ^a		Mothers ^b	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
SM	Positive	48.32	29.44	43.93	35.60
	Neutral	35.36	23.16	40.48	33.06
AW	Positive	12.50	35.36	0	0
	Neutral	0	0	12.50	35.36
AC	Positive	19.32	26.70	34.31	43.73
	Neutral	43.18	41.66	39.64	45.18
PC	Positive	17.39	20.35	24.46	33.71
	Neutral	82.61	20.35	50.30	43.30
SI	Positive	15.64	12.00	16.82	16.25
	Neutral	76.15	9.84	74.58	14.90

^a $N = 8$.^b $N = 8$.

Table 10

Mean Percentages of Parents' Reaction Behaviors to Daughters ($N = 10$)

Behavior	Reaction	Fathers ^a		Mothers ^b	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
SM	Positive	68.67	31.41	73.66	27.19
	Neutral	28.47	33.45	23.96	23.56
AW	Positive	0	0	14.29	37.80
	Neutral	14.29	37.80	0	0
AC	Positive	39.76	33.92	48.81	44.21
	Neutral	28.81	24.81	22.62	32.88
PC	Positive	22.88	18.53	19.65	14.37
	Neutral	76.40	18.72	80.35	14.37
SI	Positive	27.30	13.03	27.03	10.01
	Neutral	63.62	13.73	65.57	8.66

^a $N = 7$.^b $N = 7$.

Sons' Reactions to Parents' Expression of Affection and Social Interaction

The results of the analyses, testing if there is a difference in the way sons react to parents' expressions of affection and social interaction follows. The mean percentages and standard deviations of sons' reactions to parents are in Table 11. Similar to parents' reactions to sons' expression of affection and social interaction and using Wilk's lambda as the criterion, no significant group effect was obtained in the overall MANOVA for the five behavioral dimensions by sex of parent, i.e., $F(5, 10) = .49$, $p < .78$, or for type of reaction, i.e., $F(5, 10) = 1.09$, $p < .42$, for sons' reactions to parents' expressions of affection and social interaction. Therefore, no subsequent analyses were performed.

Daughters' Reactions to Parents' Expressions of Affection and Social Interaction

The results of the analyses, testing if there is a difference in the way daughters react to parents' expressions of affection and social interaction follows. The mean percentages and standard deviations of daughters' reactions to parents are in Table 12. Using Wilk's lambda as the criterion, no significant group effect was obtained in the overall MANOVA for the five behavioral dimensions by sex of parent, i.e., $F(5, 8) = .63$, $p < .69$, or for type of reaction, i.e., $F(5, 8) = 2.1$, $p < .17$, for daughters' reactions to parents' expressions of affection and social interaction. Therefore, no subsequent analyses were performed.

Table 11

Mean Percentages of Sons' ($N = 14$) Reaction Behaviors to Parents

Behavior	Reaction	Fathers ^a		Mothers ^b	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
SM	Positive	41.44	35.14	46.74	33.73
	Neutral	36.11	34.01	34.20	27.61
AW	Positive	18.60	23.60	20.83	29.21
	Neutral	46.58	38.58	54.17	42.49
AC	Positive	38.24	35.20	18.94	21.82
	Neutral	45.09	41.07	42.97	38.69
PC	Positive	37.85	34.91	5.09	7.46
	Neutral	62.15	34.91	79.71	35.03
SI	Positive	17.45	8.78	11.40	7.28
	Neutral	70.20	16.05	79.10	3.89

^a $N = 8$.^b $N = 8$.

Table 12

Mean Percentages of Daughters' ($N = 10$) Reaction Behaviors to Parents

Behavior	Reaction	Fathers ^a		Mothers ^b	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
SM	Positive	41.60	20.43	22.21	24.32
	Neutral	46.84	25.95	56.09	32.35
AW	Positive	18.86	36.57	30.95	36.55
	Neutral	44.32	42.92	63.10	34.65
AC	Positive	44.17	39.64	18.65	18.34
	Neutral	52.26	37.38	64.29	32.69
PC	Positive	15.71	18.70	7.35	8.44
	Neutral	82.12	18.63	92.65	8.44
SI	Positive	13.96	5.42	13.38	4.98
	Neutral	73.10	3.95	73.02	10.55

^a $N = 7$.^b $N = 7$.

Parents' Reactions to One Another's Expressions of Affection and Social Interaction

The results of the analyses, testing if there is a difference in the way fathers and mothers react to one another's expressions of affection and social interaction follows. The mean percentages and standard deviations of parents' reactions to one another are in Table 13. Using Wilk's lambda as the criterion, no significant group effect was obtained in the overall MANOVA for the five behavioral dimensions, i.e., $F(5, 16) = .44$, $p < .82$, or for type of reaction, i.e., $F(5, 16) = .83$, $p < .55$, for parents' reactions to one another's expressions of affection and social interaction. Therefore, no subsequent analyses were performed.

Table 13

Mean Percentages of Parents' Reaction Behaviors to One Another ($N = 22$)

Behavior	Reaction	Fathers ^a		Mothers ^b	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
SM	Positive	48.55	33.11	43.45	30.49
	Neutral	38.50	31.41	38.62	23.87
AW	Positive	3.03	10.05	22.73	41.00
	Neutral	24.24	42.40	22.73	41.00
AC	Positive	13.64	32.33	0	0
	Neutral	13.64	32.33	36.36	50.45
PC	Positive	9.09	30.15	7.27	24.12
	Neutral	18.18	40.45	29.09	45.92
SI	Positive	16.86	13.69	13.51	6.83
	Neutral	78.64	14.66	79.56	5.96

^a $N = 11$.^b $N = 11$.

CHAPTER IV

DISCUSSION

The expression of affection and social interaction during five family routines and the reactions to that affection and social interaction among family members were analyzed. Although there were very few significant gender differences in this study, the results indicated gender differences in the expression of social interaction from parents to sons. Compared to fathers, mothers expressed more social interaction to sons and sons expressed more social interaction to mothers. Also, mothers expressed more passive affectionate physical contact to sons than did fathers. No other differences were found. With regard to the five routines, no gender differences were found for all categories of expression of affection of family members to one another. The reaction analyses revealed no gender differences in family members' reactions to one another's expressions of affection and social interaction.

Methodological Aspects of Study

The results must be interpreted with caution because a number of characteristics of the sample and methodology may not have been entirely appropriate for the specific research questions addressed in this study. Five methodological aspects of the study must be examined with respect to the results. They include sample size, sample characteristics, infrequent behavior

occurrence, observer reliability of infrequently occurring behavior, and the extreme variance across individuals' specific behavior.

First, significant results may not have been found because of the small sample size, i.e., 11 families with 22 parents and 24 children. The original study had been designed to examine the differences between parents and children and among family routines. The present study divided the sample further by looking at gender differences between parents and children. Although small samples have successfully been used in the study of family interaction (Pettit & Bates, 1989; Weinraub & Wolf, 1983), it is possible a larger sample may have increased the chances of finding significant differences in this study.

Also, it is possible that gender differences in expression and reaction behaviors were masked by age differences in the children and the number of years the parents were married. The expressions of and responses to affection may vary not only by gender, but also by age. Parents may differentially express affection to infants, toddlers, preschoolers, and school-aged children. For example, a mother may express more passive affectionate physical contact to a school-aged child and more active affectionate physical contact to a toddler. They may also respond differentially to different types of children's expressions of affection. For example, a father may respond positively to a toddler son's hug, but may have a more neutral, or even negative, response to a school-aged son's hug. Also, the number of years parents were married may be associated with the exchange of affection in the marital dyad. Villard (1976) found that couples married 9 to 17 years expressed affection, e.g., physical

intimacy, more than those couples married less than 9 years or more than 17 years.

Children may express affection differently depending upon their age. Hartup (1979) suggested that older children do express affection differently to parents and peers. If this does occur, a more rigorous design requiring specific age groups of children may be necessary in order to find significant results in family members' affectional exchanges.

Third, poor interobserver agreement was obtained for daughters' expression of active affectionate physical contact to parents and fathers' affectionate behaviors and social interaction. In each case poor agreement was associated with infrequently occurring behaviors. Increasing the sample size could increase the chance that these infrequent behaviors would occur. Perhaps this would improve the chances of detecting gender differences if they exist.

Fourth, analysis of the frequency of expression and reaction behaviors reveals two points. First, affectionate words did not occur as often as other behaviors. Among adults and children this specific interaction may be rare. Little research has been conducted on this affectionate interaction between or among family members. Second, the frequency of negative reactions during affectionate interactions was low. Two reasons may account for this. During affectionate interactions, as opposed to negative or neutral interactions, e.g., parental disciplining of children, family members arguing, or parents helping children with homework, negative reactions just may not occur as frequently as

other reactions. The presence of an observer may also have decreased the occurrence of negative reactions that would normally occur.

Finally, the extreme variance of individuals' behavior, as evidenced by the many large standard deviations, may have affected the results of the analyses. One father of the 11 may have been much more affectionate than the others. The frequency of his affectionate behavior may have skewed the results. A larger sample size may help lower the standard deviations.

Relation of Affection in Families, Gender Differences, Family Situations, and Results of Study

The results of this study can be related to some of the past research on affection in families, gender differences in the exchange of that affection, and family situations. As Homans (1950) and Tanner (1975) suggested, affection was expressed frequently in many of these families. The tasks of family life, e.g., eating dinner and playing with children, allowed parents frequent opportunities to interact and be affectionate. Also, in this natural family environment, family members' appeared to feel free to respond to one another. It is interesting to note that a low frequency of negative responses or no responses occurred to family members expressions of affection to one another and this may be a result of observing families in positive, enjoyable activities.

With regard to affectional exchanges in the 11 families, three comments must be made. First, it is possible that fewer affectionate exchanges were observed in the home because of the dual-career status of the parents. Burke

and Weir (1976) found that dual-career couples need less affectionate interaction than single-career couples with the traditional arrangement of the husband employed outside of the home. They suggest that perhaps specific personality traits, e.g., self-reliance, may be associated with career status of women. Women who are employed outside of the home may be less dependent on their spouses for intimacy needs, therefore require less and express less affection. Also, one may assume that the amount of time required for career responsibilities, e.g., hours on the job and commuting time, may affect couples' affection needs by decreasing the amount of shared time (Nock & Kingston, 1988). Almost all of the parents in this study worked outside the home.

Second, no children in this study had been evaluated as delinquent, emotionally disturbed, or behavior disordered. Lytton, Watts, and Dunn (1986) have noted that less warmth has been associated with families having troubled children. In this study, no comparisons were made with families with symptomatic children. Such a comparison could contribute to our knowledge about affectionate exchanges in families.

A third point with regard to the exchange of affection in families is the educational level of both parents. The educational level attained by parents is one component of social class membership. Gecas (1979) suggests that social class status may impact parents' socialization of children as a result of specific values and expectations influenced by educational experience. Langman (1987) suggests "the higher the parental status, the greater the degree of parental

warmth and expression of affection, especially by the father" (p. 241). It is possible that the base rates and the differential rates of expressions of and reactions to affection may have been affected by parents' high educational level.

The limited results of this study support past research outcomes, especially those studies that have revealed greater parental interaction with sons. Maccoby and Jacklin (1974) state in their review of parental socialization that, when significant results were found, there was greater interaction with sons by parents. For example, parents elicited more gross motor behavior from sons. Researchers have found that parents respond more to infant sons' expressions of emotion (Malatesta & Haviland, 1982), play more with toddler sons (Fagot, 1978), and gave more positive responses to school-aged sons (Margolin & Patterson, 1975). It must be noted that past research findings support differential treatment by parents and more parental attention targeted to the cross-sexed child. For example, Parke and Sawin (1980) found fathers to be more affectionate with infant daughters and mothers to be more affectionate with infant sons. Similarly, the present study found that mothers expressed significantly more social interaction and passive affectionate physical contact to sons, although the reverse for fathers was not significant. Siegal (1987) suggests in his summary of studies of parent-child interaction that father-specific effects were not found in the majority of studies investigating the dimension of affection in the father-infant and father-toddler relationship.

No significant results were found in this study with respect to situational factors. The number of people present, as a situational factor, was similar for all families, although children's gender and age composition varied. It is possible that in a similar study in which children were of similar ages, gender differences would have been found. For example, those parents with infants may have spent time in child care during the game routines, taking them away from interactions during the games.

Setting event, i.e., situational factor, effects may also be more likely to appear in more natural, uncontrived situations. For example, changing the type of toy from an isolate-type to a social-type toy to encourage social play (Quilitch & Risley, 1973) and changing an existing cafeteria-style meal routine to a more social family-style routine (VanBiervliet, Spangler, & Marshall, 1981) enabled researchers to see significant differences in social interaction. In contrast, the game situation in the present study was contrived for the purpose of the study and may have prohibited the expression of affection. It is possible that the use of uncontrived routines for individual families may have revealed significant behavioral differences. For example, for one family a game may be a naturally occurring event. For another family, a shared music experience or religious routine may be more natural.

The occurrence of affectionate interactions in families may vary with gender of parents and children or career status of parents. Setting events may also be associated with the frequency and type of affectionate interactions in families. Future studies with changes in sample size and composition and with

more varied setting events may help increase the chances of detecting significant differences in the study of affectionate interaction in families.

Strengths of Study

Four aspects of this study strengthened the investigation of family members' exchange of affection. They are the specific characteristics of the sample, the use of the families' natural environment, the extensive use of observation sessions, and the use of operational definitions.

The sample was a unique blend of family characteristics. Each family consisted of two parents in a first-time marriage, with dual careers, and with a child in day care. Most parents were employed outside of the home. All of the parents had some college education with more than half of them possessing a college degree. The parents of the 11 families provided dynamic and educated subjects.

Naturalistic observations, e.g., in the homes of families, give a more accurate picture of family interaction. Deaux (1984) suggested that observation in a natural setting provides the researcher with a description of what subjects will do in a given situation, as opposed to what they might do. Observation in contrived, artificial settings, e.g., the laboratory, can only approximate what a person will do. For example, O'Rourke (1963) found that fathers increased their emotional expression and mothers more actively made decisions in a home setting as opposed to a laboratory setting. In the artificial setting more stereotyped sex-role behaviors for fathers and mothers were observed. In an

observation session parents may try to display children's good qualities, though Vincent, Harris, Cook, and Brady (1975) found that parents changed their own behavior better than they changed their children's behavior. They also found that, for adults, nonverbal behavior was not easily changed or fabricated. Hetherington and Parke (1986), in a review of direct observation in the home versus the laboratory, suggest that parents and children may use less negative behavior and more positive, socially acceptable behavior during observation sessions. The use of naturalistic observation may lessen the impact of the observer on subjects (Lewis & Feiring, 1982).

Six, separate direct observation sessions were used to collect data for this study. Using six observation sessions and the previously mentioned naturalistic setting of the home allowed the subjects time to become accustomed to the observer's presence. It is possible that this reduced observer reactivity. Observer reactivity can be a specific problem when observing parents and children (Yarrow & Waxler, 1979). For example, Zegoib, Arnold, and Forehand (1975) found that mothers increased their warm interactions with children when they knew they were being observed. Lewis and Feiring (1982) suggest that repeated observations may desensitize family members to the presence of observers in the home.

Allowing family members to continue with regularly scheduled dinner activities provided a familiar, uncontrived routine. Although contrived, the game sessions provided activities that pleasantly involved all family members except infants. It is possible that more observer reactivity occurred during the meal

routines as opposed to the game routines. Less attention to the observer may occur during games because of the more interactive and more enjoyable nature of the activity. The more familiar and unstructured setting of the home, even with contrived activities, may help minimize the effects of observer reactivity.

Research on affection in families has not used consistent operational definitions and research findings have been inconsistent (Maccoby & Jacklin, 1974; Siegal, 1987). It is possible that the results of studies that use discrete categories of affectionate behavior will be different than those that use global measures. For example, in the study of the marital relationship, a global rating of marital quality may not specifically tap the dimensions of marital adjustment or marital satisfaction.

Also, the study of the parent-child relationship may be more revealing with the study of discrete behaviors. For example, Barber and Thomas (1986) used the discrete behavior of physical affection separated from the general construct of support in their study of daughters' self-esteem. Without the separation, the fact that physical affection was a significant predictor of daughters' self-esteem would not have been found. Similarly, Rollins and Thomas (1979) suggested that many of the findings of parental control were inconsistent. As researchers have studied parental control as a dimension of the role of socialization of children, it has been advantageous in that research to identify and study subdimensions of control (Hoffman, 1980), i.e., induction, coercion, and love withdrawal. Within a subdimension, e.g., induction, the study of specific parental behaviors used to influence children has been helpful. Also, support

(or the similar concepts of warmth and nurturance) as a major construct of parental socialization of children has been subdivided into specific areas, such as physical affection and companionship.

The four aspects that strengthened this study, i.e., sample characteristics, use of families' natural environment, use of six observation sessions, and the use of operational definitions, provided an excellent means to examine interactions in families. Further studies of family affection should consider these aspects as a way to detect subtle family differences.

Future Study

Five major aspects should be considered in future studies of family members' affectionate interactions. These aspects include the sample, the routines, a longitudinal perspective, the measures used, and the type of data analysis. Research questions could include (depending upon the type of sample chosen) comparing one career and dual-career families, comparing families with different age groups of children, and comparing two groups of families, e.g., one with sons only and one with daughters only. A longitudinal perspective would allow researchers to observe changes in affectional exchanges in families over time.

In future studies it would be advantageous to make specific changes in the sample, including increasing the sample size and using a more homogeneous age grouping within the family. However, such a sample may be difficult to recruit. Realistically, it may be difficult to find a sufficient number of

families with children of the same age, of the same gender, and the identical number in each family with the accompanying characteristics of dual-career, first-time marriage, one child in day care, and parents married approximately the same number of years.

Observing parents' and children's interactions while participating in stereotypical male- and female-linked tasks, especially with older children, could prove revealing. Verbal and construction games, similar to those used in this study, would provide those tasks. Observing parents caring for their children during routine caregiving, e.g., bathtime, may provide a rich source of interaction. A longitudinal perspective may be productive. Observing families as children mature from infants, to toddlers, to preschoolers, and finally to school-age, may allow researchers to find differential parental affectionate behavior based on children's ages.

Continuing to use a more molecular conceptualization of affection, i.e., operational definitions of affectionate behaviors, may help in determining specific characteristics of the affectional relationship of parents and children. Separating affectionate interactions into behavioral expressions and responses may help clarify the trends in parental differential behavior. Studying the specific behavioral antecedents or consequences of affectionate expressions may also help professionals understand the expression of affection in families.

The use of sequential analysis of parents' and children's interactions, including the expression of affection and responses to those expressions, may enable researchers to observe the process of interaction as a continuing family

phenomenon as opposed to a "snapshot" of family interaction. Bakeman and Gottman (1986) suggest that sequential analysis will help "when we want to know how behavior works, or functions, within an ongoing interaction" (p. 9) and when we want to "explore dynamic, process-oriented aspects of behavior" (p. 17). Sequential analysis would also help in the investigation of the bidirectional, mutual exchange of affection among family members. Not only parents' effects on children, but also children's effects on parents could be studied. Peterson and Rollins (1987) suggest that studying "the pattern and sequence of behaviors," the reciprocity of parent-child interactions, could be valuable, especially in relation to family members' role-making processes, i.e., the continual changing and redefining of parents' and children's appropriate behaviors based on specific family members' situations and responses to one another.

Patterns of behavior in families may be detected when behavior is seen not only as a consequence of one behavior, but also an antecedent to a following behavior. For example, a hug may be a positive reaction to a smile that was a positive reaction to an affectionate word. Also, affection in families may be seen as a family process in addition to being a family environmental descriptor or a type of dyadic exchange. As a family process, affection may mediate parental and child behavior, e.g., parents use affection to communicate approval of appropriate child behavior.

It is also important to continue studying affectional interaction in the marital relationship as it relates to parenting for two reasons. First, a couples'

affectionate interactions provide a model for children. One way in which children learn sex-role and marital role behaviors is by observing on a day-to-day basis their parents' interactions, e.g., expressions of affection and resulting responses. Second, the affectional dimension of marital satisfaction may critically relate to the level of parenting competence. Parents who have mutual marital satisfaction may be more responsive and supportive of their children.

Although many of the research results about parental differential socialization of children are contradictory, trends have been found. Continuing to study this area of the parent-child relationship and the effects of situational factors will help further our understanding of families' affectionate interactions.

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VITA

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She attended Peabody College of Vanderbilt University (formerly Peabody College) from 1964 to 1967 and graduated from the University of Tennessee at Chattanooga (formerly the University of Chattanooga) in 1968 with a B.S. degree in home economics education. From 1968 to 1971 she taught fifth grade in the Hamilton County schools and served as assistant food service supervisor at Moccasin Bend Psychiatric Hospital in Chattanooga, Tennessee. In 1972 she earned a M.Ed. in special education with a concentration in early childhood special education and emotional disturbance from the University of North Carolina, Chapel Hill. The following 10 years found Ms. Richey teaching and supervising in a church-based day care center, owning and operating a Tennessee-licensed day care center, and mothering three children.

During the years 1983 to 1992, Ms. Richey attended the University of Tennessee at Knoxville and taught part-time in the Department of Curriculum and Instruction and the Department of Remedial and Developmental Studies at Tennessee Technological University in Cookeville, Tennessee. Ms. Richey graduated with a Ph.D. in human ecology from the College of Human Ecology of the University of Tennessee in May, 1992. She is a member of the National

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Ms. Richey is married to David Dean Richey. They have three children-- Amanda, a freshman at Memphis State University; Patrick, a ninth grader at Cookeville Junior High School; and Adam, a fifth grader at Sycamore Elementary School in Cookeville, Tennessee.