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## Furthering the Understanding of Parent–Child Relationships: A Nursing Scholarship Review Series. Part 5: Parent–Adolescent and Teen Parent–Child Relationships

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### Abstract

**PURPOSE**—The purpose of this paper is to examine nursing’s contribution to understanding the parent–adolescent and the teen parent–child relationships.

**CONCLUSION**—Relationships between parents and adolescents may reflect turmoil and affect adolescents’ health and development. The social and developmental contexts for teen parenting are powerful and may need strengthening. Several interventions to help teen mothers interact sensitively with their infants have been developed and tested.

**PRACTICE IMPLICATIONS**—Nurse researchers have begun to provide evidence for practitioners to use in caring for families of adolescents and teen parents to acquire interaction skills that, in turn, may promote optimal health and development of the child.

### Search terms

Nursing; object attachment; parent–child relations; parenting; parents

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This paper is the fifth in a series of papers published in this journal to examine nursing’s contribution to knowledge development about the parent–child relationship. The overall purpose of this integrative review series is to explore published nursing scholarship concerning the parent–child relationship. In this paper, we aim to (a) examine nursing research approaches to the study of parent–child relationships between parents and adolescents, and teens who become parents; (b) critique the substantive and methodological aspects of nursing scholarship about parent–child relationships; and (c) identify directions for future nursing research. The topic, parent–child relationships, is vast, with considerable contribution from many disciplines. Nursing’s contribution to knowledge development has not been captured and highlighted. What

is unique about knowledge development of parent–child relationships from a nursing perspective, in contrast to other disciplines, is the goal of developing an evidence base to improve the nursing care of parents and children and adolescents.

## Method

Details regarding the search methods and data analysis can be found in Part 1 in this five-part series (Lutz, Anderson, Riesch, Pridham, & Becker, 2009). The literature search returned 2,650 citations and 163 papers that met the criteria for inclusion. After reading the abstracts, the papers were divided post hoc into the four broad domains that constituted each separate paper for this series: (a) *Parents' perspectives on early parenting*; (b) *Interaction indicators and the parent–child relationship*; (c) *Parent–child relationships at risk*; and (d) *Parent–adolescent relationships and the teen parent–child relationship*. The inductive nature of domain development resulted in the fourth category that addressed relationships between parents and their adolescents and between teens who became parents and their children. The last domain is the focus of this paper.

Twenty-one papers met the criteria for inclusion for the parent–adolescent relationship, and 11 papers met the criteria for inclusion for the teens as parents. The literature reviewed was divided into methodological categories termed *discovery model*, *assessment model*, and *intervention model*. The research models of discovery, assessment, and intervention were derived from categorization of types of studies for developing clinical knowledge (Diers, 1979). The discovery model involves the description, development, and identification of phenomena and concepts that define the parent–child relationship. The assessment model focuses upon cues and indicators about the child, parent, family, or environment that are important to forming an appraisal of the parent–child relationship or that serve as correlates of the relationship. The intervention model involves strategies to support, improve, or otherwise have an effect upon the parent–child relationship. A detailed summary of each paper is found in Tables 1 through 5.

## Results

### Parent–Adolescent Relationship

The relationship between parents and adolescents is an emerging focus for nursing research. Adolescence is considered a challenging developmental period because of the plethora of physical, socio-emotional, and cognitive changes taking place. Major concepts guiding this body of research are relationship satisfaction, perceived closeness or connectedness, activities engaged in, and communication. Relationship satisfaction, activities, and closeness are typically measured with survey instruments (Chen & Thompson, 2007; Willgerodt & Thompson, 2005). Communication is the primary indicator of the quality of the adolescent–parent relationship (Vangelisti, 1993) and is measured through surveys and observation. The parent–adolescent relationship affects the adolescent's health and development. For example, adolescents with less open communication, less satisfactory relationships, and less closeness with their parents have been reported to navigate the transitions of adolescence using poorer coping skills and to have more academic difficulties (Collins, 1990), are likely to develop depression and demonstrate suicide proneness, and use less sophisticated contextual analyses for working out moral situations (Johnston et al., 2002) than adolescents who have reported better relationship indicators. Additional outcomes include positive beliefs and intentions regarding condom use (Jaccard & Dittus, 2000), taking an active role in coping with stress (Chen, Langer, Raphaelson, & Matthews, 2004), and a low likelihood of participating in problem behaviors (Jessor, Turbin, & Costa, 1998) among adolescents who perceive communication as open, and the relationship as satisfactory and close.

## Discovery

**Review**—Five papers on the topic of the parent–adolescent relationship contribute to the discovery mode of knowledge development (Diem, 2000; Draucker, 2005; Hattar-Pollara & Meleis, 1995; Lloyd, 2004; Lynam & Tenn, 1989). The investigators described relationship aspects between parents and adolescents that could promote understanding, improve the relationship, or affect the mental health of the adolescents. Details of the studies are reported in Table 1.

The investigators of the five studies used qualitative methods to address the adolescents' changing and challenging behaviors, and the parents' responses and adjustments. How could the parent focus on a positive relationship with the adolescent (Diem, 2000)? How can the family deal with, and accommodate, the new independence of the adolescent (Lynam & Tenn, 1989)? How can a cultural identity be nurtured, valued, and maintained in a new society (Hattar-Pollara, & Meleis, 1995)? Who is the best person to interact with an adolescent who is depressed, and what strategies should be used (Draucker, 2005)? How does a teen pregnancy affect family closeness and connectedness (Lloyd, 2004)?

Results from this series of studies demonstrated that communication, rules and regulations, disciplinary techniques, and activities need to be thought out, discussed, and modified so adolescents can express their independence, feel valued, and rely on their parents, culture, and community. For example, Diem (2000) reported in her sample that the issue of rigid control was demystified and several approaches were tried, such as relaxing control, using logical consequences, and seeking positive experiences. Mothers reported gaining reassurance, knowledge, skill, and confidence. Mothers came to view situations with their daughters dispassionately, consider options, reach decisions that they were comfortable with, and allow their daughters more choices. Relationships with their daughters reportedly improved because “they were encouraged to question and use critical thinking” (Diem, 2000, p. 99).

A successful parent–adolescent relationship, for the Hattar-Pollara and Meleis (1995) sample, was dependent on the mother's staying the course resulting in the child demonstrating social integration into the American and Jordanian cultures and achieving high educational status. Lynam and Tenn (1989), however, found that the parent–adolescent relationship had become one of a “tug-of-war.” A recurrent theme was enabling adolescent independence expressed in the families' changing the ways decisions were made, the power relationships within the families, and the nature of involvement of individuals in decision-making processes. The ability to use communication effectively was greatly influenced by their feelings about the issue under discussion. Communication processes were restructured to foster the adolescent's increasing autonomy, and the primary process was referred to as negotiation. The concepts of reciprocal exchange, mutual respect, and trust characterized a parent–child relationship in which negotiation was valued and successful.

Lloyd (2004) and Draucker (2005) studied families in which the adolescent developed conditions that had a potential to strain the parent–adolescent relationship, namely, teen pregnancy and teen depression, respectively. Lloyd was the first to report that pregnancy may contribute to a new and better relationship among young and middle adolescents and their parents. This idea was not found among late adolescents and their parents, where the pregnancy was a negative influence on the relationship.

Examining the interactions that influenced the course of the adolescent's depression in a positive direction, Draucker (2005) showed that parents were often not the important adult in the life of depressed adolescents. Interactions that maintained a façade that the adolescent was doing well did not have a positive influence on the course of depression; however, interactions with parents or other adults that poked holes in and, ultimately, broke down that façade did.

**Critique**—Analyses conducted among these studies were transparent and congruent with the criteria for authenticity, reliability, and validity. Although the perspectives of both parent and adolescent were emphasized in the background sections of each study, both perspectives were not included in all five papers. For example, in the Draucker (2005) and Lloyd (2004) studies, parents were minimally involved because of the teens' hesitation to include them. Diem (2000) did not include the adolescent perspective in the discussion sessions, nor did Hattar-Pollara and Meleis (1995) include the adolescents in the interviews. The adolescents' perspectives deserved to be included and constituted as a limitation of these two papers. When the parent and adolescent perspectives were both addressed, a complete picture of the parent–adolescent relationship emerged, as in the Lynam and Tenn (1989) study.

**Limitations**—With the exception of Draucker's (2005) study, the theoretical bases for the interview items were not explicit. Sample sizes ranged from 6 parent–adolescent dyads to 52 adolescents and an important adult. Little to no explanation for sample size was provided.

**Summary**—Significant questions were addressed using innovative approaches. Analyses were transparent, and study limitations were addressed. While the discovery approach, by its very nature, uses interviewing techniques with limited samples, the insights gained served as background to inform and enrich work in the assessment and intervention domains for practice and research. The results confirmed the importance of communication to underpin satisfying relationships, the turmoil that the changing relationship can stimulate, and factors external to the family, such as acculturation and other significant adults that affect the relationship.

## Assessment

**Review**—Twelve papers contribute to the assessment mode of knowledge development in the area of parent–child relationships (Aronowitz, Rennells, & Todd, 2005; Cha, Doswell, Kim, Charron-Prochownik, & Patrick, 2007; Cha, Kim, & Doswell, 2007; Chen & Thompson, 2007; Cox, 2006; Grey, Boland, Yu, Sullivan-Bolyai, & Tamborlane, 1998; Hanna, Juarez, Lenss, & Guthrie, 2003; Kendall, Leo, Perrin, & Holten, 2005; Kim, 2005; Murata, 1994; Pai, Lee, & Tsao, 2004; Riesch et al., 2000; Willgerodt & Thompson, 2005). See Table 2 for a summary of the details of the studies. Results of these studies show that cultural issues, generational status, family stress, style of parenting, topics of conflict, context, and depth of understanding of one another's perspectives contribute to the evolving parent–adolescent relationship and need consideration. The relationship, in turn, influences adolescent health and behavior. The assessment approach, by its nature, includes standardized indicators of the relationship, typically, communication, satisfaction, closeness, and their correlates.

**Culture**—Aronowitz et al. (2005), Cha, Doswell, et al. (2007), Cha, Kim, et al. (2007), Cox (2006), Kim (2005), Pai et al. (2004), and Willgerodt and Thompson (2005) demonstrated that culture exerts a critical influence on the parent–adolescent relationship. Cox, and Willgerodt and Thompson conducted separate secondary analyses of data from the National Longitudinal Study of Adolescent Health, or Ad Health Data (Udry, 2003), to examine cultural differences and influences.

According to Cox's (2006) analysis, African American mothers tended to be open, direct, highly demanding, and minimally responsive in contrast to Euro-American mothers. This aspect of the parent–adolescent relationship was instrumental in African American youth wearing condoms at first intercourse. The Willgerodt and Thompson (2005) analysis of Ad Health data demonstrated that ethnicity was not associated with relationship satisfaction, activities with either parents, or perceived closeness among Chinese and Filipino adolescents, but generational status was.

Among African American mother–daughter dyads, Aronowitz et al. (2005) reported that although a girl’s closeness to her mother was not correlated to her potential sexual risk, closeness was significantly correlated with confidence that the girl would talk with her mother about boys and sex. Because closeness decreased with a girl’s age, early intervention to enhance closeness may increase the intent to remain safe and avoid risky heterosexual situations.

According to Kim (2005), Korean American parents were highly demanding or controlling and minimally responsive, although warm and accepting. Among American-born Korean American adolescents, perceptions of maternal acceptance decreased as perceived maternal behavioral control increased. This was not the case for Korean-born adolescents for whom maternal acceptance was not related to behavioral control. From the parents’ point of view, with greater behavioral control, mothers tended to decrease whereas fathers tended to increase their views of acceptance.

The Pai et al. (2004) study of Taiwanese mother and late-adolescent daughter relationships centered on attachment. The mothers wished to be close to their daughters, and the company of their daughters brought them comfort. Both mothers and daughters expressed a desire for autonomy. Although the daughters wished to stay in the attached relationship, they felt their mothers did not let them make decisions or express themselves, and they felt stress from the desire to please, serve, and obey their mothers.

Cha, Doswell, et al. (2007) and Cha, Kim, et al. (2007) provided evidence to support the important role of the parent–youth relationship among South Korean college students as they consider late-adolescent sexual involvement. Outcomes differed by gender and by parent.

**Conflict, stress, and context**—Conflict and stress are ubiquitous and affect the parent–adolescent relationship. Riesch et al. (2000) revisited the topics of conflict and confirmed that mundane topics such as chores and sibling relationships were common and frequent. Intensity of discussion increased around issues of respect in the relationship, such as fighting with siblings, talking back, and lying. Contrary to conventional wisdom, the least intense discussions were found to be among the topics of risk situations and behaviors.

Also on the topic of conflict, Murata (1994) observed that mothers who received less support or lacked a confidante were more likely to yell, insult, swear, sulk, or stomp to resolve conflicts. Family stress (mainly of intra-familial type) was related to mothers’ verbally aggressive conflict tactics. Mothers’ verbal aggression was highly correlated with their use of violence that, in turn, was associated with the sons’ internalizing behaviors, such as anxiety, depression, somatizing, and social withdrawal.

Again, drawing upon the Ad Health Data (Udry, 2003), Chen and Thompson (2007) documented that satisfaction with the parent–youth relationship did not directly influence risky sexual behavior among teens, but those with a satisfying relationship were less likely to associate with deviant peers.

**Parent–youth relationships and adolescent chronic conditions**—Kendall et al. (2005) included family conflict in their model to understand how families manage youth with ADHD. Family conflict increased with child age and contributed to greater maternal distress. Grey et al. (1998) examined family warmth, caring, adaptability, and cohesion as variables that may affect the quality of life with children with diabetes. Teens who perceived firm family guidance and control tended to have lower HBA1c levels. Hanna et al. (2003) developed communication about diabetes scales for their study and reported that adolescents perceived a high degree of communication about diabetes management with their parents that decreased with age and was related to metabolic control.

**Critique**—This group of studies moves the field forward in recognizing how the parent–adolescent relationship within the contexts of culture, conflict, and stress may be associated with, predict, or otherwise influence teen health and behavior outcomes. Studies by Aronowitz et al. (2005), Cha, Doswell, et al. (2007), Cha, Kim, et al. (2007), Kendall et al. (2005), and Grey et al. (1998) were preliminary to intervention development to strengthen aspects of the parent–adolescent relationship to assist families in feeling closer, to make explicit values and attitudes about sexuality, to decrease youth participation in risky sexual behavior, to achieve an appropriate sense of involvement in youth’s chronic illness management, to avoid deviant peers and risk situations, and to develop problem-solving skills. Developing communication and relationship satisfaction skills using mundane topics of conflict as training exemplars may be a beneficial approach to parents and adolescents experiencing high-stress situations.

Theories of acculturation; stress, coping, and adaptation; self-regulation; the theory of planned behavior; and the information, motivation, behavior theory guided the assessment-level studies. Variable measurement was accomplished with well-regarded instruments that possessed appropriate psychometrics. Sample sizes tended to be adequate and diverse. Other than those in the Kendall et al. (2005), Hanna et al. (2003), and Grey et al. (1998) studies, samples were from the community. Procedures were reliable, valid, and replicable. Statistical analyses tended to be sophisticated using descriptive, correlational, multiple regression, and structural equation modeling techniques. Limitations were clearly identified. Increasing use of existing large, longitudinal databases is an important cost-effective step to describe parent–youth relationships and youth attitudes and behaviors, thereby discerning important statistical patterns, mediators, moderators, and relationships.

**Limitations**—This body of research would be strengthened if samples were based on explicit power analyses and if the perspectives of parents and adolescents were both represented. Representing both parent and adolescent perspectives was true in the Chen and Thompson (2007), Aronowitz et al. (2005), and Riesch et al. (2000) studies. Kendall et al. (2005) limited their perspective to the parent, while the other eight studies limited their perspectives to the youth.

## Intervention

**Review**—Four papers were located that described and evaluated an intervention to improve the parent–adolescent relationship. Table 3 contains the details for each study. Of these papers, one targeted the relationship for its own value (Riesch et al., 1993), two targeted improving the relationship to reduce risky sexual behavior (Anderson et al., 1999; Lederman, Chan, & Roberts-Gray, 2008), and one targeted preventing type 2 diabetes in a sample of obese young adolescents (Grey et al., 2004). Riesch et al. (1993) conducted an experimental study showing that parent–adolescent communication among 459 urban, low- to middle-income community dwelling families was modifiable. By improving communication, it was thought that the relationship could not only be maintained, but also strengthened.

Anderson et al. (1999) implemented and evaluated a family-life education program, and demonstrated that parent–child communication about sexuality topics, when measured quantitatively, improved in the intervention group, a difference that was not maintained to the 12-month follow-up. Using a qualitative approach, the investigators reported mutual communication behaviors, such as making physical contact, sitting close, making eye contact, talking and laughing together, watching each other, and parent–youth sessions generating an atmosphere of warmth and goodwill. Parents and youth reported that homework gave them the opportunity to discuss previously taboo topics. Lederman et al. (2008) implemented the Parent-Adolescent Relationship Education Program using two approaches. The first, referred to as the Interactive Program, included role-play, practicing skills, and parent–adolescent discussion.



The second, referred to as the Attention Control Program (ACP), was delivered in a traditional didactic approach. The Interactive Program approach was found to be superior to the Attention Control Program in achieving (a) youth-enhanced social control through parental rules and (b) youth-enhanced self-control through increased knowledge about prevention and maintenance of a broader repertoire of resistance responses when pressured to have sex. Grey et al. (2004) included measures of interpersonal relationships in their feasibility study of a coping-skills training (CST) intervention to prevent type 2 diabetes in middle-school youth. Relationships were not explicitly defined but were part of a framework of factors to address in this project. The relationship score improved among the experimental-group parents of youth who participated in the CST intervention in contrast to no change among the control group.

**Critique**—Acknowledging that the parent–adolescent relationship is fundamental to adolescent health and developmental outcomes and that nurses work closely with dyads at critical times in their lives, it is concerning that so few intervention studies were found in the literature. However, intervention studies need to be developed upon a reasonable body of prior work to yield a high evidence score, and they are expensive; thus, the existence of four well-conducted studies is laudable for a profession relatively young to the research community. All four studies were theoretically grounded, attempted to intervene with the relationship while the youth remained susceptible to adult influence, promoted active adult participation in the intervention, conducted the intervention in the youth’s natural settings, and were preparing the dyad for the impending changes of adolescence. The Anderson et al. (1999) study also included community input, which resulted in the content of the intervention being palatable to the community, but also compromised the measures the team could use.

The studies included samples that were ethnically and socioeconomically diverse and were adequately powered for their outcomes. Anderson et al. (1999) and Grey et al. (2004) randomized the schools; Lederman et al. (2008) randomized consented dyads; and although intending to randomize families as they consented to participate, Riesch et al. (1993) allocated families to intervention or comparison based on families’ availability to attend the intervention sessions. Measures, typically, were well established with confirmed reliability and validity. However, Anderson et al. (1999) reported that during pilot work, they discovered youth from settings similar to those where the project would be delivered were unable to understand the complex language or lack of cultural relevance of existing measures. Therefore, they designed an instrument specifically for the developmental and multiethnic status and needs of their sample, with questions mirroring the variables in the curriculum, and established face validity with focus groups and content validity with expert judges.

Analyses, primarily, were quantitative and addressed attrition and preexisting differences between groups. Data were displayed such that study findings were well supported. Anderson et al. (1999) conducted observations of the parent–youth dyads from a qualitative approach that illuminated rich findings not apparent in the quantitative analyses. Dose of content and attendance at the intervention sessions were well documented among all studies.

**Limitations**—Results from the intervention studies produced minimal change in the dependent variables and demonstrated small effect sizes. Although not stated by any of the research teams, parents and youth may be hesitant to enroll in parent intervention studies because it may signal that something is not right in the family or seeking assistance with the parent–adolescent relationship may be stigmatizing. Therefore, a selection bias may be present in these studies. Consistent with the recommendations by Glasziou, Vanden-broucke, and Chalmers (2004), intervention studies must include (a) assessments of effects from both adult and youth perspectives, (b) random assignment to intervention and comparison conditions, (c) an adequate sample size, (d) direct observations of behavior, (e) long-term assessments and booster sessions, (f) extensive description of the sample, (g) skill practice sessions, (h) step-

by-step protocols for the intervention, and (i) manipulation checks, effective intervener training, and methods to insure fidelity of intervention delivery. All the studies reviewed here included an adequate sample size, extensive description of the sample, and skill practice sessions. Except for the Grey et al. (2004) pilot study, all studies included measures of immediate and lag effect. Longer term studies, conducted over several years, to take into account continued adult and youth development are needed. None of the studies included booster sessions of content, addressed the content being manualized, staff training, fidelity of intervention delivery, or manipulation checks. The bidirectional influence of adult and youth is addressed in the Riesch et al. (1993) study, with an instrumentation that included an observation measure, and in the Anderson et al. (1999) study through qualitative observations of interaction. Continued efforts to include fathers should remain a priority in nursing research on relationships.

### **Summary: Parent–Adolescent Relationships**

Taken together, findings from this group of discovery, assessment, and intervention studies demonstrate that parents, usually mothers, but also fathers were included, experience significant challenges to the parent–child relationship when children become adolescents. Typically, the parent is responding or reacting to developmental changes in the child. Culture, socioeconomic status, and societal expectations create pressures for parents to maintain rigid control. Changing this controlling approach to parenting is seldom accomplished alone, but rather in consultation with family members, other parents, or formal groups and classes. Communication was conceived as not just the exchange of information but as a part of a meaningful relationship. While a theory base may not have always been explicit, an ethological framework was implicit, and the variables assessed were those from research conducted in other disciplines with known potential for statistical relationships with personality, family, and developmental variables. A major strength of this work is that most samples were culturally diverse. Qualitative and quantitative approaches were used in appropriate ways. In this Web-, podcast-, and electronic-intervention-delivery era, the means for identifying and reaching large numbers of parents and children for effective participation may change drastically. Yet, as pointed out by Anderson et al. (1999), the parents in particular wanted to network with other parents and remain involved with their children. All the investigators, but most notably Chen and Thompson (2007), concluded that parents tended to underestimate the importance of their relationships to their youth.

### **Adolescents as Mothers: Parent–Child Relationships**

A group at risk of developing less than optimal parent–child relationships are adolescent mothers. Nurse researchers have demonstrated keen interest in describing and promoting healthy relationships among teens and their children, to promote optimal health and development of the adolescent and her child, and to prevent child maltreatment and other problems. In general, these studies have addressed effects of the familial and social environment on the dyadic interaction. Details about the studies are contained in Table 4 and Table 5.

#### **Discovery**

Only one paper was found that exemplified the discovery mode of knowledge development on parent–child relationships among adolescent mothers. For 16 years, SmithBattle and Leonard (2006) followed a cohort of teenage mothers and selected family members. In the most recent report describing the fifth study in the series, the teen mothers were themselves parenting teens, and the focus of this paper was the parent–teen relationship.



Using paradigm case analyses, this work (SmithBattle & Leonard, 2006) illuminated the reciprocity of developmental trajectories among teen mothers and their children through the children's teen years. Mothers whose lives became unified by mothering provided well-developed expectations, routines, and a meaningful world for their children. The authors noted that the desire to be a good parent "propels mothers to reinvest in education, support their families with gainful employment, and help children succeed" (SmithBattle & Leonard, 2006, p. 363). Mothers with weak identities sustained an existential void, and their children drifted into risky situations and behavior.

Longitudinal studies such as this (SmithBattle & Leonard, 2006) are invaluable to discover how the parent-child relationship evolves and what factors play the most important roles in child health and development. This study also demonstrated the critical nature of providing support to very vulnerable families through reliable community resources, policies that reduce poverty and discrimination, and educational options friendly to low-income families. Although the sample was small, the longitudinal nature provided a remarkable view of the challenges and successes of teen mothers over time. Biased interpretations are a potential weakness that was offset in this study by the expertise of the consultants and teams who reviewed the data.

## Assessment

**Review**—Six papers (Diehl, 1997; Dormire, Strauss, and Clarke, 1989; Patterson, 1997; Rich, 1990; Ross and Youngblut, 2005; Ruff, 1990) were located and placed in the assessment category of knowledge development on parent-child relationships among adolescent mothers. Details of the studies are displayed in Table 4. Assessment of the relationships often was accomplished using Nursing Child Assessment Satellite Training (NCAST) scales (now Parent Child Interaction Scales, <http://www.ncast.org>) for teaching or feeding tasks (Barnard, 1980). The scales are described in detail in Part 3 of this series (Pridham, Lutz, Anderson, Riesch, & Becker, 2010). Diehl (1997) and Dormire et al. (1989) used the NCAST scales as dependent measures. They were interested in what factors influenced the quality of the teen mother and the interaction with her infant. Diehl examined education, self-esteem, and father involvement. Dormire et al. examined social support and parenting stress. If fathers were involved, teen mothers felt socially supported, which influenced their self-esteem, and they scored high on the assessment of the interaction. Social support also was found to ameliorate parenting stress, which contributed to high teen mother-infant interaction scores.

Rich (1990) also used the NCAST measures but was interested in studying the teen mother-infant relationship in a residential facility. Mother scores did not differ significantly from the NCAST reference sample, although infant scores did. Ruff (1990) used the NCAST measures to document the parenting capabilities of a sample of adolescent African American mothers. She found that sensitivity to infant distress and responsiveness was extremely low. Both studies demonstrated improvement in teen mother-infant interaction over time, but interventions are called for that include the creation of a strong desire to be a capable mother, an educational emphasis on parenting, and the presence of models for parenting.

Because many children of adolescent mothers receive significant hours of caregiving from grandmothers, Patterson (1997) examined both the child-mother and the child-grandmother relationships. Teen mothers with whom there was a secure child attachment provided rich, free-flowing, vivid descriptions of their relationships. Children with an insecure attachment to their mothers typically achieved a more secure attachment to their grandmothers.

Comparison of mother-child attachment between adolescent mothers and adult mothers with preschool children was the focus of a paper by Ross and Youngblut (2005). Adolescent mothers did not perceive more stressful attachment toward their preschool children than did their adult counterparts. Race (African American and Hispanic), child temperament (difficult), and family

structure (being single) explained a more stressful attachment primarily because of a disadvantaged environment (income less than \$20,000) at time 2. The authors stressed the importance of helping the teen mother to understand the individuality of her child so that she may respond in flexible and effective ways to what the child brings to the relationship.

**Critique**—Except for the Ross and Youngblut (2005) study that was guided by Belsky's (1984) ecological model, and Patterson's (1997) study guided by Bowlby's (1958) attachment theory, frameworks to guide variable selection were not described, although the NCAST implies a social learning/ecological framework. Except for the Ross and Youngblut (2005) sample, the samples in this set of studies were of convenience and were not based on an explicit power analysis. One author reported that she was well known to the teens, which could constitute a bias among participants in their response to questions. All samples were multi-ethnic and low income. Infant and child age was widespread, from a hospitalized newborn infant to children 4.5 years old. All the studies measured variables with instruments that were psychometrically sound. Procedures were well described and replicable. Statistical analyses were primarily descriptive and correlational. When the NCAST measures were used, comparison to the reference sample was achieved. A positive influence of involvement of the infant's father and grandparents for adolescent mother-child interaction was found in three of the papers. Although with grandparent involvement, larger samples that would allow ethnic comparisons are needed. Ruff's (1990) assessment of teen mothering behaviors could be adapted by nurses to address and improve the quality of the mother-infant interaction, making it more rewarding to the mother, and potentially fostering a more positive relationship.

This group of studies demonstrated that strong relationships between adolescent mothers and their infants are possible and can be similar to those of older women, but the social context in which these relationships develop requires significant strengthening. A dynamic example of a strong social context supportive to adolescent mothers was that described in the residential center studied by Rich (1990).

**Limitations**—This group of studies was conducted with very small samples with the intent to document correlates and descriptors of the teen mother-child relationship. Results provided indirect support for the importance of context in the parent-child relationship and would have been enhanced by multivariate assessment of the relationship in context. While pertinent knowledge was gained, its contribution to nursing scholarship is limited without replication.

## Intervention

Four papers were located testing interventions to promote the relationship between the adolescent mother and her infant. In all four trials, indicators of the relationship between teen mother and infant improved over time, but not necessarily because of the intervention. Two of the studies used the NCAST measures as outcome measures (Kitzman et al., 2000; Koniak-Griffin et al., 2003), and two used an NCAST framework for the intervention (Drummond, Letourneau, Neufeld, Stewart, & Weir, 2008; Letourneau, 2001). Details of these investigations are displayed in Table 5.

**Review**—Letourneau (2001) conducted a pilot test of the NCAST-based Keys to Caregiving intervention, followed by a single-blind, pretest, posttest, quasi-randomized trial with one intervention and one control group conducted within a community-based social services agency for adolescent mothers (Drummond et al., 2008). Although no differences were found between groups for sensitivity to infant cues and contingent responsiveness, there were interaction effects. Participants in the intervention group showed a significantly greater increase in contingent responsiveness and a considerable reduction in variation from pretest to posttest, while variation remained the same in the control group.

Prenatal and infancy home visitation has been studied extensively using an ecological framework by Kitzman et al. (2000) since 1989. Positive effects of the intervention have been reported for numerous important outcomes, such as fewer second pregnancies and childhood injuries, but expected differences were not found for either teaching or infant total scores on the NCAST (Barnard, 1980) between those who received the nurse visits and those who did not.

Koniak-Griffin et al. (2003) reported on an early intervention program of preparation for motherhood involving intensive public health-nurse home visiting interventions with a group of predominantly low-income Latina adolescents. The intervention, delivered from pregnancy through 1-year postpartum, included pregnancy preparation, health counseling and teaching, and parent education. NCAST instruments (Barnard, 1980) were used to examine mother-child interaction at 6-month intervals from 6 weeks to 24 months postpartum. Forty-five other adolescent mothers received traditional public health visits defined as services from county health departments lacking special funding for adolescent programs. Although important outcomes were realized for the intervention group (fewer infant emergency room visits and less marijuana smoking among the mothers), no group differences were found for either mother or child interaction scores; for both groups, the scores markedly increased from birth to 12 months.

**Critique**—These studies were well executed with careful consideration for potential confounders. A limitation among them is the lack of discussion of intervention fidelity. Little explanation is offered by the authors for the lack of improvement in NCAST scores among the samples, but the cultural sensitivity of the NCAST may be a factor. The trial conducted by Drummond et al. (2008) had numerous limitations: small sample size, 21% recruitment rate, 75% retention rate, incomplete data on two participants, turnover of research staff, a gatekeeper who controlled access to subjects, and potential control group contamination. These issues, so common among samples of vulnerable mothers and children and in effectiveness trials, were dealt with clearly and honestly in a manner that could be helpful to other researchers. Although this pattern of findings among the maternal-infant interaction variables raises questions about the sensitivity of the NCAST scales (Barnard, 1980), the Kitzman et al. (2000) and Koniak-Griffin et al. (2003) studies provide evidence for the benefits of home visitation and have implications for healthcare services.

## Summary and Conclusions

Taken together, results of this compendium of nursing studies concerning parent-adolescent relationships and teen parent-child relationships demonstrate that the parent-child relationship must *evolve by adapting* to predictable parent and child developmental periods and to situational challenges, such as acculturation and teen pregnancy. A number of individual maternal factors among the teens who became parents, such as self-esteem and education, were integral to the quality of the parent-child relationship. Infant characteristics such as gender and temperament served as correlates to the parent-child relationship. Familial and societal characteristics, such as involvement of the infant's father and grandparents, support of family or other close interpersonal relationships, community, and the social environment, were vital to maintaining and strengthening the parent-child relationship. Overall, the findings are consistent with those in the non-nursing literature. The paucity of studies, in particular of the parent-adolescent relationship, suggests considerable future direction for more intense investigation from a nursing perspective with the focus of improving nursing care of families.

Nurse researchers could influence the field of parent-adolescent and teen parent-child relationships if studies were conducted on large-enough samples, were more explicitly guided by theory, used the state-of-the-art data analyses techniques, and were developed as programs

of research. As a discipline, we need to invest in scholars who embrace research careers along these lines of inquiry. Funding for such research may be available from the National Institutes of Health, the Robert Wood Johnson Foundation, the Substance Abuse and Mental Health Services Administration, the Centers for Disease Control and Prevention, and the W. T. Grant Foundation, among others.

### Limitations

The a priori search strategy used for this series of papers included terms indicative of a relationship between a parent and a child, such as reciprocity, attachment, and relationship. After an extensive review of the abstracts of the papers, an inductive categorization of the research literature was developed. The topic of adolescents as parents, although a crucial topic, did not emerge as a theme in the literature, with extant research activity by nurses. Several noted nurse researchers conduct research among samples of adolescents who are parents, but do not focus specifically on the relationship of the teen parent with the child but on numerous factors extremely relevant to parenting, such as risk for subsequent pregnancy, care and feeding of the infant, and finishing secondary education. Also, these nurse researchers may have developed a stream of research on teen pregnancy and parenting but did not address indicators of the relationship in all of their publications. The title of this paper connotes that relevant research has included both parents—mothers and fathers. Some papers did not include fathers among the study sample, many did, but fathers were not the exclusive focus of any one study. No nursing, peer-reviewed study exclusively examining the adolescent father's relationship with his child was found, indicating a fertile area for future research.

#### How Do I Apply This Evidence to Nursing Practice?

Nurses constitute a trusted profession from whom parents and families seek guidance on parenting and child health and development issues. Based on the literature reviewed here, our discipline has not sufficiently developed and disseminated the knowledge and skill for our practitioners to guide families through the stage of adolescence. The work of other disciplines has laid much of the foundation for nursing's work. What is unique is that nursing has as its goal the improvement of care delivered to parents and children while other disciplines tend to limit scholarship to discovery. The studies reviewed in this paper lay the foundation for assessments and observations of parent-adolescent and teen parent-child behaviors that could provide indicators of the relationship quality, in particular, the qualitative approach described by Anderson et al. (1999) for parents and adolescents, and by Ruff (1990) for teens and their children. Culturally appropriate, community or clinic-based interventions that could help adults achieve and maintain a family environment of warmth, acceptance, openness, conflict management, and relationship satisfaction of parenting need development and testing. Similarly, environments that make it possible for adolescent mothers to read their infants' cues and respond sensitively need to be achieved and maintained. Our discipline, through its scholarship, demonstrates understanding of the important social contexts for positive parent-adolescent and teen parent-child relationships. Nurse researchers, in partnership with other disciplines, should continue to provide evidence for policy development that supports appropriate social contexts for parenting.

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Table 1

## Summary of Nursing Research on Parent–Adolescent Relationships: The Discovery Approach

Source	Design	Focus/Dependent Variable	Sample Description	Results
Diem (2000)	Qualitative feminist participatory approach	Pressing concerns of parenting young adolescents	23 mothers (10 Canadian, others included Ojibwa, French, Polish, Italian, and Finnish) 32% had not completed high school Canada	The most pressing concerns were found to be difficulties dealing with daughters that included the daughter's anger and changed behavior, their uncertainty about dealing with their daughter, and the desire to have a calm, enjoyable relationship. The strategies for change included exploring ways to relax their control, finding logical consequences, a sense of authority and direction in their relationship, and recognizing positive experiences.
Draucker (2005)	Qualitative grounded theory	Depressed adolescents and their interaction with important adults	17 adolescents, 18–21 years old; 9 African American, 8 White, 35 female, 44% students, 13% unemployed, 94% single, 5 had one child, 3 were pregnant 52 adults, 1 father, 3 mothers, and 8 professionals (coach, teacher, nurse, etc.) United States	Adolescents, parents, and professionals discussed how both adolescents and adults ignore, hide, or minimize the adolescents' distress by putting up a façade. The three common interaction patterns that were identified were maintaining the façade, poking holes in the façade, and breaking down the façade.
Hattar-Pollara and Meleis (1995)	Descriptive qualitative	Parenting teens in a new culture	30 Jordanian mothers, 35–59 years old, $M = 45$ , Education—20% less than primary school, 37% primary school graduate, 33% high school graduate, 10% junior college. Years in the United States: 6–33, $M = 13.5$ United States	Mothers described two forces that were the context of their parenting role: (a) the force of history, culture, country of origin, and ethnic community; and (b) the expectation to raise happy, well-adjusted, and socially integrated children. They accomplished their goals by enforcing a strict moral framework, vigilance, and advocacy on behalf of the children.
Lynam and Tenn (1989)	Qualitative	Communication and teen independence	Youth were 12–16 years old, $M = 15.1$ years Mothers' and fathers' race, age not reported Six families Canada	Six themes were identified but could not be separated from climate. Therefore, themes were re-analyzed within the social development context of communication. Issues were frequently complicated by emotion; negotiation became an effective approach because families had to listen to one another to do so. The teens, on the one hand, expressed their need to be valued and treated as an equal. They emphasized that they needed to be able to trust their families, particularly in terms of revealing their feelings and expecting confidentiality for their expressions. Parents, on the other hand, revealed their fears of potential dangers for their children, feeling a sense of loss at "letting go," and requiring evidence that the teens had earned their trust in order for them to relinquish some control. To gain trust, parents

Source	Design	Focus/Dependent Variable	Sample Description	Results
Lloyd (2004)	Qualitative grounded theory	Teen–parent communication prior to, and during, the teen’s pregnancy	30 predominantly Hispanic teen mothers whose mean age was 17 years; 28 were single or engaged for marriage; all English speakers United States	needed to know that their teens would keep them informed and that the teens possessed “good judgment.”  Seven themes were identified. Poor relationships and low levels or poor communication were found among this sample with both mothers and fathers prior to becoming pregnant. Younger adolescents used stronger terms to describe this; older adolescents described their relationship in more detached terms. Having a baby was seen to increase family connectedness and communication and to provide hope for the future among younger but not older adolescents.

Table 2

## Summary of Nursing Research on Parent–Adolescent Relationships: The Assessment Approach

Source	Design	Focus/Dependent Variable	Sample Description	Results
Aronowitz et al. (2005)	Descriptive correlational survey	Female risky sexual behavior Measures: <i>Information</i> HIV knowledge, 18-item scale; <i>motivation</i> —behavioral intention scenario with an 8-item scale; <i>social norms</i> two 8-item scales; <i>future time perspective</i> with a 13-item subscale of Zimbardo Time Perspective Inventory; <i>closeness to mother</i> with 11-item scale; <i>sexual communication</i> 16-item scale; <i>behavioral skills</i> —confidence to talk with mother, 5-item scale; and heterosocial behaviors with structured interview.	39 African American middle-school-age daughters and their mothers from community centers in central New York. 53% lived with one parent; 54% were impoverished; adolescent age minimum was 11 years and maximum was 14 years ( $M = 12.4$ ). $SD$ not reported; Mothers' (or primary care providers') minimum age was 32 years and maximum age was 78 years ( $M = 35$ ). $SD$ not reported. United States	HIV knowledge was limited among the daughters, with 61% answering the 18 items correctly. Mothers' knowledge was 77%. The more the mothers knew about HIV, the more the daughters knew. All adolescents intended to avoid risky situations. Social norms with friends correlated positively but moderately with mothers' social norms. Closeness to the mother was negatively correlated to HIV knowledge and positively correlated with daughters' confidence that they would speak with mothers about boys and sex. Most girls had not been in risky heterosocial situations, but the older they were, the higher their scores on the interview. Impoverished mothers and adolescents tended to have less HIV knowledge, and the adolescents had more social norms that advocated risky behaviors than non-impoverished ones. Daughters of mothers with high future time perspectives were less likely to have risky heterosocial experiences. Closeness to mother likely facilitated the adolescents' perceptions of mothers' values related to heterosocial behaviors and created environments where daughters felt more confident in discussing sensitive issues. It is important to enhance and maintain sense of closeness between mother and daughter.
Cha, Doswell, et al. (2007)	Cross-sectional correlational design using an exploratory survey method	Intention of engaging in premarital sex. Measures: <i>attitudes</i> —modified Treboux Premarital Sexual Attitude Scale; <i>subjective norms</i> —modified Parental and Friends Approval of	298 unmarried students attending a college or university in Seoul, Korea. 165 were males, age 22 years ( $SD = 2.12$ ), and 133 were females, age 21	Female students reported they had higher quality mother–adolescent communication than male students. There was no significant gender difference in



Source	Design	Focus/Dependent Variable	Sample Description	Results
		Sexual Behavior Scale; <i>perceived behavioral control</i> —Sexual Abstinence Efficacy Scale; <i>intention</i> —modified Doswell Intention of Sexual Behavior Scale. <i>Perceived risk of sexual behavior</i> —3 items, <i>quality of family communication</i> —Parent–Adolescent Communication Scale	years ( $SD = 1.67$ ). 69% of females and 52% of males lived with parents, with 88% dependent on parents financially. South Korea	terms of the quality of father–adolescent communication. Good quality of parent–adolescent communication significantly predicted a higher abstinence efficacy and perceived disapprovals of premarital sex for males. Parent–adolescent communication did not predict abstinence efficacy and subjective norms of premarital sex for females.
Cha, Kim, et al. (2007)	Cross-sectional descriptive survey	Condom use at first sexual experience. Measures: <i>sample characteristics</i> —Background and Sexual Behavior Questionnaire in Korean; <i>parent–adolescent relationship</i> —20-item Parent Adolescent Communication Scale; <i>Condom Efficacy Scale</i> —14-item modified Condom Self Efficacy Scale; <i>Intention of condom use</i> —modified Doswell's Intention of Sexual Behavior Scale	82 male South Korean university students, with a mean age of 23 years ( $SD = 2.6$ ), 50% lived with, and 88% financially dependent on, parents. 85% had no girlfriend, 67% perceived most of their friends had had sex, less than half reported sexual experience. South Korea	A better quality of mother–son communication predicted a higher intention to use condoms and a higher condom self-efficacy. The quality of mother–son communication did not predict the intention to use condoms after adjusting for condom self-efficacy. The quality of the father–son relationship did not significantly predict the intention to use condoms. A better quality relationship predicted higher condom self-efficacy, which predicted a higher intention to use condoms. Consistent with prior literature, when adolescents have a good relationship with their parents, they are more likely to intend to and actually use condoms. Authors intend to take findings and develop culturally specific, theory-based, and family-based interventions to reduce risky sexual behavior among South Korean adolescents.
Chen and Thompson (2007)	Secondary analyses of the National Longitudinal Study of Adolescent Health data	Adolescent risky sexual behavior Measures: not explicit, but a measure of parental approval of premarital sex, socioeconomic status, association with deviant peers, and risky sexual behavior	A sample of 6,342 adolescents (3,217 females and 3,125 males) were living with both parents. Mean age was 16.5 years. United States	Adolescents from socioeconomically disadvantaged families and those who were associated with deviant peers engaged in more risky sexual behaviors. A satisfying parent–child relationship did not directly influence adolescents' risky sexual behaviors. Adolescents who were more satisfied with their relationships

Source	Design	Focus/Dependent Variable	Sample Description	Results
Cox (2006)	Secondary analysis of Ad Health data for Waves I and II	Youth condom use at sexual debut	For teens, <i>M</i> age = 17.6 years; 56% females; 11% African American; 75% two-parent households; <i>M</i> = \$51,000 household income. 153 mother–adolescent dyads United States	with parents, however, were less likely to be associated with deviant peers and, in turn, reduced their engagement in risky sexual behaviors. Adolescents with parents who reported communicating about sexual issues actually engaged in more risky sexual behaviors. The satisfying relationship was protective to the adolescent.  Logistic regression analysis to demonstrate that maternal demandingness reliably predicted adolescent condom use, and race was a significant predictor. For African American youth, as maternal demandingness increased, so did condom use, but for Whites, increasing maternal demandingness predicted lower condom use.
Grey et al. (2004)	Descriptive	<i>Quality of life of adolescent with diabetes. Measures: self-perceptions to manage diabetes—35-item Self Efficacy for Diabetes scale; self-reported depressive behavior—27-item Children's Depression Inventory; issues in handling IDDM—28-item Issues in Coping with IDDM scale; behaviors to manage problems or situations—54-item Adolescent Coping Orientation for Problem Experiences; Diabetes Family Behavior; Family Adaptability and Cohesion Evaluation Scale; Diabetes Quality of Life: Youth; and HbA1c</i>	52 families of children with insulin-dependent diabetes mellitus. Income was >\$40,000 in 58% of families; most were White; child's mean age was 16.1 years ( <i>SD</i> = 1.9); diagnosed with diabetes for 8 years ( <i>SD</i> = 0.8), 49% female, 55% had injections >3 times/day, with an HbA1c of 9.8 ( <i>SD</i> = 1.7) United States	The coping strategy of rebellion and ventilating were used to cope with problems in their lives. Families were relatively warm and caring but provided less guidance and control than average adolescents. Families were reported to be relatively flexible and connected. The challenge will be to find the degree of parental involvement that is comfortable for all involved, without risking poorer control from over-involvement or under-involvement. Because family warmth and caring, and adaptability and cohesion were not associated strongly with quality of life, the adolescents in this study may have negotiated a comfortable degree of involvement, whereas those who did not consent to the study may not have.
Hanna et al. (2003)	Descriptive survey	Parental involvement in diabetes management responsibility and metabolic control from the adolescent perspective Measures:	27 adolescents, mean age = 15 years, <i>SD</i> = 1.9, minimum age = 11 years, maximum age = 18 years; 52% female;	High level of communication amounts and agreement, low level of seeking parental support, high level of receiving

Source	Design	Focus/Dependent Variable	Sample Description	Results
		Independent Functioning in Diabetes Management Checklist, Independent Decision Making in Diabetes Management Checklist, Communication of Diabetes Management, Parental Support for Diabetes Management; All adapted for this study.	89% Caucasian; duration of diabetes— $M = 7$ years, $SD = 1.3$ ; HbA1c— $M = 8.5$ , $SD = 1.3$ ; 63% living with both biological parents. United States	parental support. Seeking and receiving support increased from early to middle adolescence but then decreased in late adolescence. Communication agreement was related to worse metabolic control; in other words, metabolic control was worse when the adolescent reported less agreement with parents about diabetes management responsibility.
Kendall et al. (2005)	Descriptive correlational	Explain family living with children with ADHD. Measures: <i>social characteristics; child behavior problems</i> —118-item Child Behavior Checklist; <i>mother's distress</i> —53-item Brief Symptom Inventory; <i>family conflict</i> —90-item Family Environment Scale	157 families from California and Oregon; 31% African American, 36% Hispanic American, 33% Euro-American; mothers had a minimum age of 21 years and a maximum age of 79 years, $M = 38.3$ , $SD = 8.7$ ; Children's ages had a minimum of 6 years and a maximum of 18 years, $M = 10.8$ , $SD = 3$ ; 51% single-parent families; well-distributed family incomes United States	Children with more comorbidities had more behavior problems; increases in behavior problems were associated with distress in the mothers; mothers reporting distress had higher family conflict; families with older children had more conflict. No associations between ethnicity and income were found for family conflict. Ethnic differences in what constitutes problem behavior in children need further examination. Behavioral interventions that do not take maternal distress into account may not be effective.
Kim (2005)	Descriptive cross-sectional	Parent Acceptance and Rejection Questionnaire (PARQ)	106 young adolescents, 26 Korean born age— $M = 12.7$ years, $SD = 1.2$ ; U.S. residency— $M = 6.3$ years, $SD = 4.3$ ; 80 U.S.-born age— $M = 12.3$ years, $SD = 1.1$ ; 104 mothers, 26 Korean-born youth age— $M = 41.7$ years, $SD = 4.6$ ; U.S. residency— $M = 6.7$ years, $SD = 5$ ; education— $M = 15.9$ years, $SD = 2.8$ ; work hours/week— $M = 20.6$ , $SD = 24.3$ ; U.S.-born youth age— $M = 42.3$ years, $SD = 4$ ; U.S. residency— $M = 17.8$ years, $SD = 5.2$ ; education— $M = 14$ years, $SD = 3$ ; work hours/week— $M = 29$ , $SD = 20$ . 97 fathers, Korean-born youth age— $M = 43$ years, $SD = 5$ ; U.S. residency— $M = 8$ , $SD = 6$ ;	Young adolescents and their parents agreed that parents tended to be loving and warm, and moderate to firm in behavioral control. Korean-born adolescents were more accepting of parental control than American-born Korean adolescents. Mothers and young adolescents viewed behavioral control as less acceptance, while fathers viewed behavioral control as warmth/affection.

Source	Design	Focus/Dependent Variable	Sample Description	Results
			education— $M = 17$ years, $SD = 3$ ; Work hours/week— $M = 50$ , $SD = 17$ ; U.S.-born youth age— $M = 46$ years, $SD = 4$ ; U.S. residency— $M = 20$ , $SD = 5$ ; education— $M = 17$ years, $SD = 3$ ; work hours/week— $M = 49$ , $SD = 13$ . United States	
Murata (1994)	Descriptive	Stress, social support, and conflict tactics	23 mother–son pairs Sons' $M$ age = 8.8 years Mothers' $M$ age = 35.5 years African American United States	Low-income African American mothers reported a mean of 15 recent stressful family events in contrast to 11 for Anglo-Saxon, protestant families. Self-esteem and instrumental aid were the most available forms of social support. Mothers' use of verbal aggression was high. No serious behavior problems were found. Family stress was found to be significantly related to mothers' verbally aggressive conflict tactics, and mothers' verbal aggression was highly correlated with their use of violence, which was associated with sons' internalizing behavior.
Pai et al. (2004)	Cross-sectional, descriptive	Climacteric and the mother–daughter relationship	70 mother–daughter pairs. Daughters' $M$ age = 17 years Mothers' $M$ age = 46.9 years Taiwan	Based on scores on the Parent Child Relationship scale, sense of attachment was ranked first by mothers and daughters. Statistical differences in the perception of the relationship were found between mothers and daughters on all 5 scales: sense of attachment, absence of sense of autonomy, sense of indebtedness, sense of respect, and instrumental valance.*
Riesch et al. (2000)	Descriptive survey	Topics of conflict between parents and young adolescents Measures: Issues Checklist	178 young adolescents— $M$ age = 12.6 years, $SD = 1$ ; 55% female, 55% firstborn. 144 mothers— $M$ age = 39 years, $SD = 5.4$ ; education— $M = 14.6$ years, $SD = 2.7$ ; 34 fathers— $M$ age = 41 years, $SD = 5$ ; education— $M = 16$ years, $SD = 3$ ;	Typical issues included chores and getting in sibling fights. Discussions are not typically angry. Mothers had more issues than adolescents or fathers. Topics not chosen were what is typically termed health risk behavior (tobacco, alcohol, language use). The topics endorsed most

Source	Design	Focus/Dependent Variable	Sample Description	Results
			80% White, 15% Black, 3% Hispanic, 2% Asian, 1% Native American United States	frequently by mothers, fathers, and young adolescents were chores and sibling relationships, and those endorsed least frequently were timing of meals, potential risk situations, and behaviors such as smoking, drinking, dating, and picking books and movies. The topics discussed most and least frequently followed the same pattern. In terms of intensity of discussion, fighting with siblings, talking back, lying, grades, and chore activities were cited as most intense, while the taking care of things and potential risk situations and behaviors were the least. When compared with other findings from the literature, this sample scored slightly above previous samples of non-distressed families but below distressed families.
Willgerodt and Thompson (2005)	Secondary analyses of the National Longitudinal Study of Adolescent Health data	Family relations among Filipino and Chinese adolescents. Measures: <i>generational status</i> —foreign born, parents foreign born, U.S.-born adolescents and parents; <i>ethnicity</i> —216 Chinese and 387 Filipino adolescents; <i>parent-adolescent relationship</i> —6 items for mother, 5 items for father; <i>parent adolescent activities</i> —10 items per parent; <i>family closeness</i> —4 items; <i>demographics</i> —3 items	216 (57% male) self-identified Chinese adolescents with a minimum age of 13 years and a maximum age of 19 years, $M = 15.5$ , $SE = 0.28$ . Minimum family income: \$2,000, and maximum: \$600,000, $M = \$59,000$ , $SE = 6.39$ ; 387 (58% male) self-identified Filipino adolescents with a minimum age of 12 years to a maximum of 20 years, $M = 16$ , $SE = 0.47$ , minimum family income: \$0,000; maximum: \$450,000, $M = \$41,000$ , $SE = 4.22$ USA	Ethnicity was not associated with relationship satisfaction, activities with either parents, or perceived family closeness. Third-generation youth were more satisfied with their relationship with their parents, engaged in more activities with their mothers, and perceived higher levels of family closeness compared with first- or second-generation youth. Older adolescents were less satisfied with relationships with mothers and fathers; males were more satisfied with their relationship with their mothers, but females engaged in more activities with their mothers. The authors suggested including additional variables such as household composition and size in future studies.

IDDM, insulin-dependent diabetes mellitus.



\* Parent Child Relationship scale (Lo, 1998).

Table 3

## Summary of Nursing Research on Parent–Adolescent Relationships: The Intervention Approach

Source	Design	Focus/Dependent Variable	Sample Description	Results
Anderson et al. (1999)	Quasi-experimental, three waves of data collection: pre, post, and 12 months post; 1 post intervention process evaluation focus group	Parent–child communication and sexual risk-taking behavior; Measures: reaching adolescent and parents—RAP Impact Evaluation Schedule, developed for the study	251 early adolescents—60% girls; 84% 9–11 years age span; 46% Hispanic, 21% African American, 13% Euro-American; 80% college bound; 60% lived with both parents, $M = 10.8$ Parent sample is not described United States	The RAP group demonstrated a significant change between pretest and posttest, indicating improved communication with their parents as compared with the delayed-RAP group (effect size—0.19, observed power = 0.59). This difference between groups did not continue to the 12-month instrument administration. Qualitatively, observations revealed that both children and parents taught each other the answers to fact questions, learned something new about each other related to feeling questions, and then shared their thoughts about their goals and aspirations. These sessions generated an atmosphere of warmth and mutual goodwill. In interviews, the parents stated that the parent–youth sessions and the homework assignments gave them the opportunity to talk about previously sensitive or taboo topics with their children. By 12 months, the RAP group participants increased the frequency of their responses between pretest and 12 months compared with slight decreases among the delayed-RAP group in the developmental cluster (“I’m not ready”) and the value cluster (“It’s against my beliefs”). Lessons learned: abstinence-based education desired; parents are involved; community is involved, which was positive for recruitment and interest, but parents objected to explicit questions about sex.
Grey et al. (2004)	Quasi-experimental feasibility study	Interpersonal relationships of the adult and youth. Measures: (a) <i>clinical</i> —BMI, 3-h glucose, HbA1c, and lipid profile; (b) <i>health behaviors</i> —Youth: Revised Godin-Shepard Activity Survey, 24-h dietary recall, Adults: Health Promoting Lifestyle Profile; (c) <i>psychosocial well-being</i> —Youth: Health Behavior Questionnaire, Children’s Depression Inventory	Youth: $n = 41$ , $M = 12.5$ , $SD = 1.0$ , 16 girls, 15 boys, BMI > 95th percentile; 51% African American, 44% Hispanic, 5% Caucasian; Adults: 51% income < \$19,990, 44% = \$20,000–\$59,999, and 5% > \$60,000 (only data available on the adult) United States	All youth received the school-based intervention on exercise and nutrition, but the intervention group received cognitive-skills training. Youth in the intervention group were found to have outcomes in the anticipated direction. No report of interpersonal relationships was given. Adults also demonstrated outcomes in the desired direction. It is not reported whether the relationships measure was targeted upon the adult–youth relationship.

Source	Design	Focus/Dependent Variable	Sample Description	Results
Lederman et al. (2008)	Quasi-experimental	Social and self-controls Measures: ETR Associates Scales: (a) frequency of communication with parents about sex; (b) comfort in communication with parents about sex, parental rules; (c) parent involvement with youth activities; (d) valuing parents' opinions; (e) communication with peers about sex and valuing peers opinions; (f) knowledge about prevention; (g) self- controls; and (h) behavioral options for resisting pressure to have sex	92 young adolescents in two conditions: interactive program (IP) ( $n = 90$ ) and attention control program (ACP) ( $n = 102$ ). Ages: 14% = 11 years, 29% = 12 years, 29% = 13 years, 25% = 14 years, 3% = 15 years; gender: 59% females, 41% males; race/ethnicity: 36% Hispanic, 29% African American, 24% Caucasian, 11% Asian and other; household: 61% = two-parent homes, 27% = single-parent homes, 12% = other arrangements. Parent sample not described. United States	Frequency of communication with parents about sex decreased over 2 years; there is a significant increase in the frequency of talking with friends; level of comfort talking with parents remained constant; the IP parental rules increased in contrast to ACP and decreased the amount of parent involvement in both groups, parents' feelings and ideas were very important or somewhat important; members of the IP group showed increases in knowledge about transmission of, and protection against, pregnancy; no differences across groups or time in youths' self-efficacy for prevention. Prevention programs could be strengthened by focusing on aspects of family interaction other than conversations about sex. Advocacy is needed for the involvement of parents.
Riesch et al. (1993)	Experimental	Parent-child communication, family satisfaction, and problem-solving ability; Measures for youth and adult: (a) Family Adaptability & Cohesion Evaluation Scale III, (b) Parent Adolescent Communication Inventory, and (c) Solving Problems In-Family Interaction	404 mothers ( $M$ age = 39.9 years), 188 fathers ( $M$ age = 42.6 years), and 459 young adolescents ( $M$ age = 12.7 years); 80% White, 15% African American, and 5% Asian, Native American, or Hispanic United States	Mothers who participated in communication-skills training reported better perception of communication with their children, higher satisfaction with their families, but no change in conflict resolution; fathers who participated in communication-skills training reported no change in perception of communication with their children, higher satisfaction with their families, and better conflict resolution ability; young adolescents reported better perception of communication with their mothers (but not fathers), higher satisfaction with their families, and better conflict resolution ability than mothers, fathers, and young adolescents in the control group.

BMI, body mass index.

Table 4

## Summary of Nursing Research on Adolescents as Parents. The Parent–Child Relationship: The Discovery and Assessment Approaches

Source	Design	Focus/Dependent Variable	Sample Description	Results
<b>Discovery</b>				
SmithBattle and Leonard (2006)	Hermeneutic case analysis	Parenting practices and factors that shape children's lives	10 families: 10 mothers (6 non-Hispanic White, 4 African American), 1 partner, 9 grandparents, 8 index children; Teens now 15–17 years old, 4 girls, and 6 boys; Mothers now between 31 years and 35 years old; Income ranged from low to high, but most marked by poverty and limited resources United States	Fifth wave of data collection and analyses. Two very low-income Black families were paradigm cases. The teens had drifted into mothering, and they continued to drift in their 20s and 30s with little sense of future, an over reliance on their own mothers, and their children drifted into risky situations. When mothering was perceived as a rite of passage into adulthood and a life commitment, the teens' worlds and identities became structured with a sense of future and expectations for themselves and their children.
<b>Assessment</b>				
Diehl (1997)	Descriptive, correlational	Adolescent mothers' interactions with their infants <i>Measures:</i> NCATS scores for parent and child, Hudson Index of Self-Esteem, Denver II, indicators of father involvement, and living situations	36 mothers: mean age = 16.1 years; 36% African American, 47% Caucasian, 17% Hispanic; 1 was married Infants were 1–17 months old, $M = 6.9$ months United States	Mothers with more education responded more appropriately to infant distress and were more contingently responsive to the behavior of the infants. Mothers with higher self-esteem responded more positively to infant distress. Mothers who reported paternal financial or child-care support had significantly higher parent contingency, cognitive-growth fostering, and social-emotional-growth fostering scores.
Dormire et al. (1989)	Descriptive, correlational	Social support, stress, synchrony of parent–infant interaction. <i>Measures—Maternal:</i> Norbeck Social Support Questionnaire; NCATS; Parenting Stress Index <i>Infant:</i> NCATS Child Scale	18 first-time mothers between 15 years and 19 years old ( $M = 17.5$ , $SD = 1.2$ ); 16 African American; all low income; 3 were married; 1.3 adults and 1.1 children in the home. Newborn infants were term ( $M = 38.9$ weeks, $SD = 1.4$ ); Birth weight: $M = 3,262$ , $SD = 563.6$ g. United States	The sample was found to have less social support and higher stress than normative samples. Social support was significantly related to interactive capacities of the adolescent mothers with their infants. High scores on social support were related significantly to diminished parenting stress and vice versa. Stress was found to be strongly associated with the inability to

Source	Design	Focus/Dependent Variable	Sample Description	Results
Patterson (1997)	Descriptive, correlational	Examine the relationship between child–mother and child–grandmother with children of adolescent mothers. <i>Measures:</i> Structured interview and the Ainsworth et al. Strange Situation procedure	32 adolescent mothers: age— $M = 22.6$ years, $SD = 2.3$ ; 19% unemployed, 13% in school. Grandmothers: age— $M = 39.4$ years, $SD = 4.2$ ; education—44% high school, 31% some college; 63% teen mothers themselves. Child: $M$ age = 4.5 years; 16 boys, 16 girls; 22% African American, 78% White United States	intervene in a comforting way with a distressed infant.  Time with mother was not related to attachment security, in contrast to the amount of waking time spent with grandmother, which was strongly and positively related to secure attachment. If children insecurely attached to their mothers, they were 4.5 times more likely to enjoy secure grandmother attachment.
Ross and Youngblut (2005)	Descriptive comparison, secondary data analysis	Mother–infant attachment <i>Measures:</i> Attachment subscale of the Parenting Stress Inventory (PSI), family income, maternal education, number of children in the home, race, family structure, maternal employment; <i>Infant:</i> sum of adaptability, demandingness, mood, hyperactivity/distractibility subscale of the PSI, gestational age	43 adolescent–adult pairs: adult mothers' $M$ age = 25.6 years; 41% single; 49% unemployed; 69% high school educated; adolescent mothers' $M$ age = 16.6 years, $SD = 1.42$ ; 51% single; 57% unemployed; 64% high school educated; 51% Caucasian and 49% African American; 86 preschoolers: $M$ age not reported United States	Adolescent mothers and adult mothers perceived their attachments similarly at T1 and T2. Age was not a significant predictor of attachment scores, but child temperament (difficult), partner status (single), and race (African American and Hispanic) were.
Ruff (1990)	Descriptive, correlational	Mother–infant interaction <i>Measures:</i> NCAFS mother and child scores	95 unmarried, adolescent, African American mothers: $M$ age = 17.0 years; mean grade level attained = 10.5; 13% had a previous pregnancy and subsequent abortion; 77% of deliveries were vaginal; infants: newborn to 12 weeks; 52% males; birth weight was 5–8 lbs; 10% breast-fed United States	Mothers: sensitivity to cues was high at T1 and T2, response to distress was low and got lower at T2, and social-emotional-growth fostering was low at T1 but increased at T2; cognitive-growth fostering was extremely low at T1 and T2. Infants: clarity of cues improved from T1 to T2, responsiveness to parent was low at T1 and T2, but improved at T2. Very carefully conducted study with huge implications for practice.
Rich (1990)	Descriptive	Maternal–infant bonding among a group of homeless adolescents. <i>Measures:</i> NCAFS mother and child scores	19 mother–infant pairs. Mothers: all homeless; $M$ age = 16.7 years (15–18 years); 11 were African American, 2 were Latino, 4 were Caucasian; 50% had a previous pregnancy; most infants were delivered vaginally; all formula fed. Setting: Capable Adolescent Mothers Program United States	The sample achieved a parent score of 41.9 out of 50 (NCAST mean 41.6). Reasons for the surprising result may be that the sample had (a) a strong desire to be good mothers, (b) educational emphasis on parenting, (c) excellent role models, and (d) experience with child care. Infant scores for the study subjects were significantly different from the NCAST reference group, perhaps because of the very

Source	Design	Focus/Dependent Variable	Sample Description	Results
				young age of the infants (all under 4 weeks) or because of infant state. The total feeding score was lower than the NCAST reference sample, most likely because of the infant scores.

NCAFS, Nursing Child Assessment Feeding Tasks; NCAST, Nursing Child Assessment Satellite Training; T1, time 1; T2, time 2.

Table 5

## Summary of Nursing Research on Adolescents as Mothers. Parent–Child Relationships: The Intervention Approach

Source	Design	Focus/Dependent Variable	Sample Description	Findings
Drummond et al. (2008)	Quasi-experimental	Adolescent mother–infant interactions <i>Measures:</i> Nursing Child Assessment Teaching Scale	Adolescent mothers: ages 16.7–19.7 years; <i>M</i> grade completed = 10.3; difficult life circumstances on a scale from 0 to 8, <i>M</i> = 4.5; Edinburgh Postnatal Depression Scale— <i>M</i> = 7.6 on a scale of 2–20—higher score meaning more symptoms. Infants: immediate postpartum to less than 5 months; receiving care through a community agency that responds to the issues and challenges of teen pregnancy through casework services Canada	Mothers and infants in both the treatment and control groups became significantly more contingently responsive over time, but the variability in the intervention group decreased. Difficult life circumstances and depression were not significant confounding factors.
Kitzman et al. (2000)	Randomized clinical trial	Adolescent mothers and infants <i>Measures—Maternal:</i> prenatal visits, NCATS, ATOD, STI, BMI, subsequent pregnancies, work history, anxiety, depression, mastery, breast-feeding, HOME scores <i>Infant:</i> Birth weight, Apgar, EGA, NCATS infant responsiveness scores, well-child visits, immunizations, illnesses, hospitalizations, and injuries	1,139 primarily African American first-time mothers with at least two sociodemographic risks (unmarried, less than high school education, and/or unemployed). Of these, 64% ( <i>n</i> = 729) were less than 18 years old. Infants: less than 29 weeks gestation United States	There was no program effect on maternal teaching behavior, but children born to nurse-visited mothers with low psychological resources were observed to be more communicative and responsive toward their mothers than were children born to low-resource mothers in the comparison group.
Koniak-Griffin et al. (2003)	Randomized clinical trial	Infant health and maternal infant interaction <i>Measures—Maternal:</i> substance use, education, repeat pregnancies, Shortened Acculturation Scale, NCATS, Home Scale, self-esteem, depression, mastery, stress, Community Life Skills Scale, and Social Skills Inventory <i>Infant:</i> NCAST score, ER visits, hospitalizations, immunizations	101 teen mothers, ages 14–19 years, and their children, as old as 24 months, primarily Latina and African American United States	No significant group differences in the change in NCATS mother, child, or total scores were found over time. Significant time effects were found for all three measures from 6 weeks to 24 months postpartum, and then showed little change in the second year of life.
Letourneau (2001)	Two groups, posttest only, pilot study	Parent–infant interactions during teaching and feeding <i>Measures—Maternal:</i> NCAFS and NCATS, Edinburgh Postnatal Depression Scale, Difficult Life Circumstances Scale. <i>Infant:</i> visual expectation paradigm text, Bayley Scales of Infant Development II, Mental Development	18 teen mothers: <i>M</i> age = 18 years, <i>SD</i> = 1; education— <i>M</i> = 10 years, <i>SD</i> = 1.32; Hollingshead— <i>M</i> = 26, <i>SD</i> = 7.6; infants: 7–13 weeks old; EGA— <i>M</i> = 9, <i>SD</i> = 1.05; birth weight— <i>M</i> = 3,221 g, <i>SD</i> = 38.3	Significant differences were found between the intervention and comparison groups on 2 of 4 parent–infant interaction total scores, 3 of 4 parent subscales, and 1 of 4 child subscale scores. Infants in



Source	Design	Focus/Dependent Variable	Sample Description	Findings
		Index	Canada	the intervention group reacted an average of 204 ms faster to stimuli than infants in the control group.

ATOD, alcohol, tobacco, and other drugs; BMI, body mass index; EGA, estimated gestational age; ER, emergency room; HOME, Home Observation for Measurement of Environment; NCAFS, Nursing Child Assessment Feeding Tasks; NCAST, Nursing Child Assessment Satellite Training; STI, sexually transmitted infection.