Connection and Communication in Father-Child Relationships and Adolescent Child Well-Being

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Contemporary research on fathering emphasizes the significance of a quality father-child relationship in a child’s development and well-being. Scholars have suggested that connecting with and communicating with children are critical to a healthy relationship. This study explores the influence of communication and connection on father-child relationships through a structural equation model using the LISREL program. Data were taken from the National Survey of Families and Households (NSFH), and a sample of 362 father-adolescent dyads was studied. Results provide support for the importance of connection in father-child relationships and suggest relationship quality affects adolescent child well-being for both father-son and father-daughter dyads.

Key Words: fathers and adolescents, fathering, adolescent child well-being, connection, communication

Research on father-child relationships has increased substantially in the last two decades (Biller, 1993; Coltrane, 1996; Doherty, Kouneski, & Erickson, 1998; Hawkins & Dollahite, 1997; Lamb, 1981, 1997; Snarey, 1993). Such scholarship has
illustrated that men can make an important and lasting contribution to their children’s lives (Parke, 1996). Further research is needed to explore the questions of how, under what conditions, and to what degree fathers positively influence their children. The findings of such research clarify the conceptual linkages between fathers’ involvement, relationship quality, and child outcomes. Lamb (1997) has summarized, “Many of the studies dealing with paternal influences show that the closeness of the father-child relationship—itself a consequence of sufficiently extensive and sensitive interactions—is a crucial determinant of the father’s impact on child development and adjustment” (p. 7).

This study attempts to link recent theoretical work on fathering with specific evidence of fathers’ influence on their adolescent children through examining a nationally representative data set. Data from the National Survey of Families and Households (NSFH) contains information collected directly from fathers and allows examination of the influence of fathers in caring for children. This study involves a quantitative assessment with NSFH data of two specific concepts, father-child connection and father-child communication, as direct influences on relationship quality and ultimately on adolescent child well-being. For purposes of the study, these constructs are defined as follows: (1) father-child connection refers to a father’s efforts to create and maintain an interpersonal connection with his child by active participation in the child’s life; (2) father-child communication refers to a father’s efforts to facilitate understanding between himself and a child through the exchange of verbal and nonverbal messages. Also, reference to the father-child relationship in the study’s findings should be understood as meaning adolescent children from ages 12 to 18.

LITERATURE REVIEW

THEORIES OF FATHER-CHILD RELATIONSHIPS

Early correlational studies of paternal influence showed that father-child relationship characteristics, such as warmth and closeness, were important correlates of children’s achievement and psychosocial adjustment (Biller, 1974; Radin, 1981). Lamb, Pleck, Charnov, and Levine (1985) pioneered a tripartite model of father involvement that included paternal engagement (direct caregiving, play, etc.), accessibility, and responsibility. Further refinement of this threefold father involvement model has led to the assessment of specific activities that denote father-child involvement in a positive way (McBride, 1990; Radin, 1994). Pleck (1997) refers to this conceptual development as the difference between paternal involvement and “positive paternal involvement.” These models by Lamb et al. (1985; 1987) enabled a new wave of research on father-child relationships that focused on fathers’ positive contributions to children. Thus, theoretical conceptualization in this area has moved from a focus on father characteristics to general dimensions of paternal involvement to specific patterns of positive paternal involvement (Pleck, 1997).

Recently, theoretical formulations concerning fathers and children have evolved toward an emphasis on contextual factors and specific dimensions of father-child relationships. These efforts have included a systems model (Parke, 1996) and a
broad, contextual framework of responsible fathering (Doherty et al., 1998). While these models highlight contextual influences on the father-child relationship, the dynamics within the father-child relationship itself are little discussed. Lamb (1997) has pointed out that often “studies of paternal involvement ignore the emotional quality of father-child relationships” (p. 6), and he has suggested that a critical factor is “how fathers, mothers, children, and other important people in their lives perceive and evaluate the father-child relationship” (p. 13). The quality of the father-child relationship itself deserves serious attention as a mediating factor in how fathers influence child outcomes.

Dollahite, Hawkins, and Brotherson (1997) introduced a conceptual framework building on Erikson’s (1959) lifespan model of development, generative fathering, that suggests quality father-child relationships respond to children’s needs and are sustained by fathers’ “generative work.” The model’s focus on the generative capacities of men is similar to Lamb’s model of positive paternal involvement. Pleck (1997) has noted that “positive paternal involvement may be the essence of what [Hawkins and others] conceptualize as ‘generative fathering’” (p. 102). The generative fathering model suggests the needs of children and the parent-child relationship establish a context in which differing domains of generative work (e.g., relationship work) are linked to specific parenting capacities and activities (such as connecting with children) (Dollahite et al., 1997). Pleck’s (1997) identification of “positive paternal involvement” as similar to dimensions of generative fathering suggests the utility of further theoretical and empirical exploration of these concepts.

One of the fundamental characteristics of the generative fathering model is the interdependence between parents and children. This context gives rise to the corresponding domain of relationship work. The model proposes two primary elements of such relationship work—facilitating healthy attachments with children and encouraging the understanding of children. The specific patterns of paternal involvement that link to fulfilling these elements of relationship work are identified as connecting with children and communicating with children (Dollahite et al., 1997). These conceptual constructs represent specific dimensions of positive paternal involvement. Additionally, the model suggests that children will benefit from such types of involvement. Thus, the generative fathering model proposes clear conceptual links between specific aspects of father involvement, quality of the father-child relationship, and children’s outcomes. Using these concepts as a theoretical foundation, this study explores the relevancy of these elements and their influence on father-child relationship quality.

FATHER-CHILD RELATIONSHIP QUALITY AND CHILD WELL-BEING

Father-child relationships are important to understand because their quality affects the well-being of children directly (Lamb, 1997; Snarey, 1993). Children’s needs for a predictable caregiving environment, nurturance, and support are enhanced by positive parent-child relationships (Hetherington & Parke, 1993). Reviews of empirical research generally indicate that children deprived of a positive paternal relationship may be at increased risk for problems such as drug misuse, delinquency, and depression (Blankenhorn, 1995; Hetherington & Stanley-Hagan, 1997). School-aged and
adolescent children show better academic achievement and school adjustment, more positive self-concept, and more healthy personality adjustment when relationships with fathers are positive (Biller & Kimpton, 1997). A short-term longitudinal study of father-adolescent relationships demonstrated that paternal involvement predicts greater acceptance by both the father and adolescent child (Almeida & Galambos, 1991). Both connecting and communicating with children have been suggested as elements influencing quality of father-child relationships (Brotherson, 1995; Dollahite et al., 1997).

**CONNECTION IN FATHER-CHILD RELATIONSHIPS**

The quality of father-child interaction has its roots in the attachment relationship during a child’s early years. Parents who respond to children’s needs for food, safety, and security develop a protective bond that motivates caring for a child (Bowlby, 1982). Efforts made in promoting a warm, connected relationship continue to be important through a child’s school-age years and adolescence (Amato, 1986; Hosley & Montemayor, 1997). Barber (1992, 1997) has identified the sense of connection between a parent and adolescent child as one of three vital factors that provide stability and well-being to adolescents. Additionally, findings from the National Longitudinal Study of Adolescent Health indicate that “connectedness to parents/family” is perhaps the most important protective factor for adolescents in reducing behavioral risks (Resnick et al., 1997). Of particular importance for the connection between fathers and children may be involvement of fathers with their children in varying activities that provide an atmosphere for emotional interaction and mutual effort. Examples of father-child involvement that promote connection include going on recreational outings together, playing together, and working together (Brotherson, 1995; Palkovitz, 1997). Thus, father-child connection seems to represent an important factor in existing research related to relationship quality and child well-being.

**COMMUNICATION IN FATHER-CHILD RELATIONSHIPS**

Father-child communication consists of relating to children by exchanging verbal and nonverbal messages meant to enhance trust and understanding (Nydegger & Mitteeness, 1991). This may include conversation, written communication, touch, and listening to children (Dollahite et al., 1997). Youniss and Smollar (1985) have found that communication between fathers and adolescent sons is often more open and disclosing than between fathers and daughters. Fathers may be more talkative with adolescents about problem issues and encourage problem-solving with their children (Hauser et al., 1987). Fathers’ positive communication with school-aged and adolescent children is significantly associated with more positive outcomes on self-control, self-esteem, and social competence (Amato, 1987). Communication between fathers and sons may be more likely to occur in the context of shared activities and interests, whereas fathers and daughters may tend to more directly engage in conversation outside of activities and in direct face-to-face interaction (Brotherson, 1995). This study attempts to explore quantitatively the influence of communication in father-child relationships.
GENDER IN FATHER-CHILD RELATIONSHIPS

As children move into adolescence, fathers’ involvement may begin to differ based on a child’s gender. Role modeling becomes more important during adolescence. Pleck (1997) notes that fathers tend to be more involved with their sons than with their daughters, particularly during the period of adolescence. They tend to have fewer conversations with their adolescent daughters than with their sons (Hosley & Montemayor, 1997). Barnett and Baruch (1988) suggest that fathers may relate more easily to male children during adolescence because of common interests and activities. Gender of the child may therefore also play a role in the significance of interactions between fathers and their adolescent children. While a variety of studies have examined parent-child relationships and adolescent outcomes, fathers tend to be underrepresented in such research (Hosley & Montemayor, 1997). Additionally, since paternal involvement overall tends to decline as children enter adolescence, it is important to distinguish in what areas father involvement has an influence on adolescent child well-being. For these and other reasons, this study focused on paternal relationships with adolescent children and implications for adolescent child well-being.

STATEMENT OF THE PROBLEM AND HYPOTHESES

This study’s purpose is to examine the relationship between four variables: (a) father-child connection, (b) father-child communication, (c) father-child relationship quality, and (d) child’s well-being. Figure 1 shows father-child communication and father-child connection as direct causes of father-child relationship quality. The father-child relationship quality directly influences the child’s well-being. Thus, father-child relationship quality mediates the effect of father-child communication and father-child connection on child well-being.

Figure 1. Hypothetical model for father-child relationship quality and child well-being.
The conceptual model introduced in Figure 1 graphically presents the theoretical constructs, or latent variables, of communication, connection, father-child relationship quality, and child well-being. In this hypothetical model, the arrows between the latent variables indicate the anticipated direction of effects. Each of the latent exogenous variables, communication and connection, has a proposed directional relationship to father-child relationship quality. The effects of these exogenous variables on child well-being are conceptualized in the model as being mediated through the latent construct of father-child relationship quality, so that a direct relationship is proposed between father-child relationship quality and child well-being.

We also suggest that gender of the child may be a significant influence on the relationships between these concepts in the model. Thus, relationships between the four latent variables are also split by gender and explored in the study through a multi-sample analysis. This multi-sample analysis allows us to test interaction effects where some of the linkages may be stronger for father-son dyads than for father-daughter dyads.

The hypotheses we propose are as follows:

- Fathers and adolescent children who have higher levels of communication will also have higher expressed levels of father-child relationship quality.
- Fathers and adolescent children who have higher levels of connection will have higher expressed levels of father-child relationship quality.
- Adolescent children who have higher expressed levels of father-child relationship quality will have higher levels of child well-being.
- Higher levels of positive communication will have a greater association with higher levels of father-child relationship quality for male children than for female children.
- Higher levels of connection will have a greater association with higher levels of father-child relationship quality for male children than for female children.

METHODS

SAMPLE

The sample was selected from the National Survey of Families and Households (NSFH) in Wave 1, 1987-88 (Sweet, Bumpass, & Call, 1988). This is a national probability sample of more than 13,000 households. A primary respondent for each household could be an adult male or female. Fathers selected for the subsample used in this study were men who were the primary respondents from married couple households and living with at least one biological child between the ages of 0 and 18. Each child selected for inclusion in the sample was a biological child of the primary respondent. Also, the sample was limited to focal children between the ages of 12 and 18. This restriction was necessary because the NSFH instruments did not ask appropriate questions for children outside this age range. The NSFH staff identified a focal child for each household based on the child’s age and the first letter in his or her first name. Differentiation of children by gender into two groups was used for the multi-sample analysis.
The NSFH data set is one of the few readily available that includes a sufficient number of fathers and adolescent children to examine the hypotheses of this study. It also includes measures that relate directly to the study’s research questions. Research on paternal involvement suggests that fathers on average showed minimal increases in involvement over the last two decades (Pleck, 1997). It is therefore likely that these data from 1987-88 approximate current patterns and, with trends toward increased father involvement, may have even greater relevance than when originally gathered.

Our subsample includes 362 married fathers living with at least one biological child between 12 and 18 who was selected as a focal child. In the multi-sample analysis the sample size for male children was 184 and for female children was 178.

MEASURES

The advantages of a nationally representative sample are important, but they come at a necessary price in that we were limited to measures that were included in the NSFH questionnaires.

Communication. Communication was measured by three survey items concerning parent-child conversation, praise of children, and non-verbal communication (hugging child). The indicator variable for conversations was measured by the question, “How often do you spend time with the children having private talks?” on a scale from 1 to 6 (1 = never or rarely to 6 = almost every day). The items measuring praise of children and non-verbal communication were measured by asking how often the primary respondent (fathers) behaved in a particular way with the child, these being “praise child” and “hug child.” These two items were scaled 1 to 4 (1 = never to 4 = very often). Cronbach’s alpha for these items was .60. Structural equation modeling allows separating measurement error variance from the structural model, and this will mitigate the relatively low reliability of this set of items. It is recognized that hugging a child may decrease with age of the child, so that fathers of 17-year-olds may report hugging them less often than fathers of 12-year-olds. We included this item, however, because it has face validity as an indicator of tactile communication. Additionally, positive non-verbal touch is one of the most powerful forms of parent-child communication, and hugging is a clear marker of this type of communication (Noller & Callan, 1990). The giving of praise has face validity as a verbal communication method. Gottmann (1998) suggests that praise from fathers plays an important role in children’s emotional development. Talking with the child has face validity as verbal interaction. Ideally we would have more indicators of communication, but these three are appropriate indicators.

Connection. Connection concerns time spent with the adolescent child. Connection could be measured in many ways. In this study it was measured by three survey items concerning father-child interaction in the context of leisure activities, work or play activities, and educational activities. Each indicator variable was measured by the question, “How often do you spend time with the children … (1) in leisure activities away from home (picnics, movies, sports, etc.); (2) at home working on a project or
playing together; (3) helping with reading or homework.” The three items were coded “leisure activity,” “work or play activity,” and “educational activity,” and all were measured on a scale from 1 to 6 (1 = never or rarely to 6 = almost every day). Cronbach’s alpha for these items was .65. As with our measure of communication, structural equation modeling allows separating measurement error variance from the structural model, and this will mitigate the relatively low reliability of this set of items.

**Father-Adolescent Child Relationship Quality.** Father-adolescent child relationship quality was measured by one item concerning quality of parent-child interaction. This indicator variable was measured by the question “During the past 30 days, how often did you have an especially enjoyable time with (child)?” and was scaled from 1 to 6 (1 = never or rarely to 6 = almost every day).

**Adolescent Child Well-Being.** Adolescent child well-being was measured by two survey items, one the father’s evaluation of child global well-being and the other the father’s evaluation of the child’s well-being in six specific areas, that were combined into a single scale. The global indicator of well-being was measured by asking, “All things considered, is (child’s) life going ...?” and rating this on a 1 to 4 scale (1 = very well to 4 = not well at all). The item was recoded so that a higher score indicated higher well-being. The second indicator was measured using a six-item scale of child well-being. The six items were added together, and then the mean item score was calculated. Each item stated, “I am going to read some statements that might describe a child’s behavior. Please tell me whether each statement has often been true, sometimes true, or has not been true of (child) during the past three months.” The items were measured on a scale of 1 to 3 (1 = often true to 3 = not true). Items in the scale were: (a) “is fussy or irritable;” (b) “keeps self busy;” (c) “is cheerful and happy;” (d) “is fearful or anxious;” (e) “bullies others;” and (f) “gets along well with others.” Items were recoded so that higher scores indicated higher child well-being. Cronbach’s alpha for these items was .58 for child well-being. This particular scale has very low reliability, but structural equation modeling allows separating measurement error variance from the structural model, and this will mitigate the relatively low reliability of this set of items. Also, this scale is only one of the indicators we have for child well-being.

**DATA ANALYSIS**

Analyses in this study were performed in four stages: (1) a covariance matrix was created for exploring the associations among each indicator; (2) LISREL was used to estimate the measurement and structural models for the entire sample; (3) a series of multi-group structural equation models were estimated to assess differences in the model for father-daughter and father-son dyads (here successive parameters were equalized, or held to be invariant); and (4) a statistical solution was obtained for the final structural model that facilitated exploration of magnitude of effects among the four constructs.

Goodness of fit indices selected to evaluate model fit in this study included the goodness-of-fit index (GFI), the non-normed fit index (NNFI), and the root mean
square error of approximation (RMSEA). The GFI and NNFI range between 0 and 1, with values higher than .9 generally accepted as representing a reasonable model fit to the data. For the RMSEA, smaller values suggest a better fit, and guidelines indicate that .08 or below demonstrates a reasonable model fit (Browne & Cudeck, 1993).

RESULTS

MODEL ESTIMATION

Estimating structural equation models in which there are multiple groups involves several steps. The initial step requires analyzing the model fit of the conceptual model as it is originally proposed, then allowing for theoretically justifiable advances in the model based on modification indices. Next, the model is compared across groups by testing for equality of specific parameters or by constraining parameters to be invariant across groups. The results of these analyses are shown in Tables 1 and 2.

Table 1
Model Fit for Combined Sample for Conceptual Model: Full Model Including Both the Measurement and Structural Components (N = 362)

<table>
<thead>
<tr>
<th>Model</th>
<th>df</th>
<th>(\chi^2)</th>
<th>Significance</th>
<th>Significance of Difference</th>
<th>Fit Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Conceptual</td>
<td>24</td>
<td>79.93</td>
<td>0.001</td>
<td>NA</td>
<td>.95, .86, .08</td>
</tr>
<tr>
<td>b. Conceptual with</td>
<td>23</td>
<td>53.54</td>
<td>0.001</td>
<td>.001 (a-b)</td>
<td>.97, .92, .06</td>
</tr>
<tr>
<td>correlated errors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the first step, we estimated the full model including the measurement and structural components. This full model has a chi-square value of 79.93 with 24 degrees of freedom (see Table 1). Not surprisingly, this is statistically significant using our sample of 362 father-child dyads. More important, the fit indices reflect that this model has a marginal fit to the data. Though the goodness-of-fit index (GFI) was .95, the non-normed fit index (NNFI) was .86 when .90 is considered a minimum. The root mean square error of approximation (RMSEA) was .08 when it should be less than .08.

The second step involved allowing the measurement error associated with two indicators of communication to be correlated. Two of the indicators, praising the child and hugging the child, involve communication with an affective element. Two of the indicators, praising the child and personal conversation (talking), involve
communication with a verbal element. Both of these pairs of items show a moderate
to strong correlation. However, the correlation between hugging and talking lacks an
additional shared characteristic (affective or verbal) to combine with the fact that
they are both measures of communication. Also, as noted earlier, hugging is a prob-
lematic item for older children. The result of this is that the unique variances (error
variance) for hugging and talking may have a negative correlation. The second
model allows for this negative correlation between the two items and results in a chi-
square of 53.54 with 23 degrees of freedom. This is still a significant chi-square
value, but more important, it represents a significant improvement in chi-square.
Comparing the differences in chi-square for the two models (Model A - Model B),
we have a chi-square of 26.39 with just a single degree of freedom. This denotes a
highly significant improvement in the fit, \( p < .001 \). Additionally, the overall fit for
the second model is adequate and every fit index improves; with a GFI = .97, a
NNFI = .92, and a RMSEA = .06, all values are within the acceptable range.

Table 2

<table>
<thead>
<tr>
<th>Model</th>
<th>df</th>
<th>( \chi^2 )</th>
<th>Significance</th>
<th>Significance of Difference</th>
<th>Fit Measure GFI, NNFI, RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Congeneric</td>
<td>46</td>
<td>72.01</td>
<td>0.008</td>
<td>NA</td>
<td>.96, .93, .04</td>
</tr>
<tr>
<td>b. Tau equivalent (equal loadings)</td>
<td>51</td>
<td>75.34</td>
<td>0.015</td>
<td>0.649 (a-b)</td>
<td>.96, .94, .04</td>
</tr>
<tr>
<td>c. Parallel form (equal loadings and error terms)</td>
<td>60</td>
<td>89.09</td>
<td>0.009</td>
<td>0.132 (b-c)</td>
<td>.95, .94, .04</td>
</tr>
<tr>
<td>d. Parallel form with Beta and Gamma invariant</td>
<td>63</td>
<td>89.43</td>
<td>0.016</td>
<td>0.952 (c-d)</td>
<td>.95, .95, .03</td>
</tr>
</tbody>
</table>

**MODEL SOLUTIONS**

Having obtained a model with an acceptable fit to the data, the next series of steps
involved comparing the model between father-son and father-daughter dyads. This
was done by constraining specified parameters to be equal (or invariant) in each suc-
cessive comparison. A congeneric model was estimated first. This model applies the
solution from step two to both subsamples (father-son and father-daughter) by esti-
mating the solution for both groups simultaneously. This unconstrained model
resulted in a chi-square of 72.01 with 46 degrees of freedom. These results are not directly comparable to the single sample solutions because twice as many parameters are being estimated. While this is a statistically significant chi-square value, all measures of fit are acceptable. The fit indices for the congeneric model are GFI = .96, NNFI = .93, and RMSEA = .04.

One conceptual limitation of the congeneric model is that it fails to test whether the variables have the same meaning for father-daughter dyads as they do for father-son dyads. There are two ways of testing this. One method requires the same loadings of indicators on latent variables to be equal (constrained as invariant); the second requires the loadings and also the corresponding error terms to be identical. These are called tau equivalent and parallel form models, respectively, and results for these models are shown in Table 2. Comparing fit indices, the tau equivalent model is not significantly worse than the congeneric model, and the parallel form model is not significantly worse than the tau equivalent model. Just as important, there is not a significant difference between these models. These results furnish remarkable evidence that the meaning of the four variables—communication, connection, relationship quality, and child well-being—can be described as equivalent in both types of dyads. Given the measurement invariance for father-daughter and
father-son dyads, the loadings and error terms were constrained to be equal in the subsequent analysis.

Since both types of dyads were shown to have equivalent measurement models, a fourth step is to compare their structural models. This fourth step gets to the heart of our research objective to evaluate the effects of the four variables on each other and to compare these across father-daughter and father-son dyads. To do this, the fourth model imposed the restriction that all structural parameters (gamma and beta estimates) are identical for both types of dyads (see last row in Table 2). This final model resulted in a chi-square value of 89.43 with 63 degrees of freedom, which was not significantly worse than the parallel form model that did not impose this restriction. The difference in chi-square between these models was just .034, which, with three degrees of freedom, has a significance level of .952. Of most importance, goodness-of-fit indices for the final measure all demonstrated a good model fit within an acceptable range with GFI = .95, NNFI = .95, and the RMSEA = .03.

The measurement model for the fourth step is available from the senior author. In summary, all of the factor loadings were statistically significant and substantial. The correlations and standard deviations from which all models were produced appear in the appendix.

Our primary interest is in the structural solution, which is presented in Table 3 (also shown graphically in Figure 2). This is the result that addresses our hypotheses. In making comparisons across groups, father-daughter versus father-son, it is appropriate to compare unstandardized estimates. In making comparisons of different effects within groups, it is appropriate to compare standardized coefficients.

Because the final structural model constrained the unstandardized effects so that they were equal, the corresponding unstandardized coefficients are identical for both types of dyads. It is noted that when the unstandardized coefficients are equal, the standardized coefficients are necessarily unequal except when the corresponding variances are equal.

Positive associations were hypothesized for the relationships between the latent constructs of connection and communication on father-child relationship quality, as well as for the relationship between quality and child well-being. The results indicate that communication has virtually no effect (0.00, ns) on relationship quality for both types of father-adolescent dyads. However, connection has a significant and equal effect (0.41, \( p < .001 \)) on relationship quality for both types of dyads. The standardized coefficients for both father-son and father-daughter dyads is .37, reflecting a moderate effect. Relationship quality has a significant effect (0.09, \( p < .001 \)) on child well-being for both types of dyads. The standardized coefficient for father-son dyads is .25, and for father-daughter dyads the standardized coefficient is .32. Both of these show a moderate effect.

Thus, the results showed no association between father-child communication and father-child relationship quality for both genders, when father-child connection is controlled. Father-son and father-daughter dyads both showed a moderate, positive relationship between father-child connection and relationship quality. The \( R^2 \) value of .13 signifies that the variable of connection accounts for approximately 13% of the variance in relationship quality for both father-son and father-daughter dyads. Finally, the effect of relationship quality on child well-being was .25 for
Table 3

Structural Solution for Final Model (n = 184 Father-Son Dyads and n = 178 Father-Daughter Dyads)

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Father-Son Dyads</th>
<th>Father-Daughter Dyads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized</td>
<td>Standardized</td>
</tr>
<tr>
<td>Communication</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Connection</td>
<td>0.41</td>
<td>0.37</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>0.09</td>
<td>0.25</td>
</tr>
<tr>
<td>Child Well-Being</td>
<td>1.51</td>
<td>0.87</td>
</tr>
<tr>
<td>Residual for Child Well-Being</td>
<td>0.21</td>
<td>0.94</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
father-son pairs and .32 for father-daughter pairs, again both being highly significant. This small difference is attributable to differences in variances since the unstandardized coefficients were invariant. The results were $R^2 = .06$ for the relationship between relationship quality and child well-being for the father-son dyads and $R^2 = .10$ for father-daughter dyads.

**DISCUSSION**

This study investigated the relationships among the constructs of father-child connection, father-child communication, father-child relationship quality, and adolescent child well-being. Relationships between the four latent variables were explored through structural equation modeling, and the effects of gender on the associations were examined in a multi-sample analysis. The overall fit of the model was assessed as being adequate according to the goodness-of-fit indices. The findings resulted in a number of patterns that deserve further exploration.

**CONNECTION IN FATHER-ADOLESCENT RELATIONSHIPS**

A positive relationship between connection with children and quality of the father-child relationship was suggested as an important finding. In the final structural model solution (see Table 3), this relationship was significant at $p < .001$, showing a highly significant association between these factors. The standardized path coefficient of .37 for both father-son and father-daughter dyads indicates an association of moderate strength that lends explanatory power to the model. The findings support the hypothesis that higher levels of father-adolescent connection tend to have a positive and significant influence on the quality of the father-child relationship.

This finding provides direct support for connection as a useful theoretical concept to understand influences on father-child relationship quality. First, it suggests the value of conceptualizing connection as a key component of relationship work in the generative fathering model (see Dollahite et al., 1997). It also fits with Pleck’s (1997) concept of “positive paternal involvement” and the worth of paternal engagement with children in a variety of activities. These results support research that suggests fathers’ generative activities with children in a variety of contexts, including work, play, recreation, and teaching or learning, are central aspects of fathers’ connection with children (Brotherson, 1995; Palkovitz, 1997). Considering fathers’ overall level of involvement tends to decline as children move into adolescence (Pleck, 1997), the finding that connection remains a primary path of influence on father-adolescent relationship quality suggests an important topic for continued emphasis. Adolescence may be a time when connection through mutual activities is an especially important part of the father-child relationship for both sons and daughters, as it is a time when children are developing independence and parent-child relationships are changing (Barber, 1997; Hosley & Montemayor, 1997; Palkovitz, 1997).
We hypothesized a positive, direct relationship between communication and father-child relationship quality, but results indicated no support for this hypothesis when the effect of connection was controlled. The results make clear that communication is also not more relevant for children of either gender. Three possibilities may be suggested for this finding.

One interpretation of this finding would be to accept as accurate the idea that there is no relationship between these variables. Fathers’ influence during adolescence is most likely to be related to their influence as role models or key sources of support (Hosley & Montemayor, 1997). The time that fathers spend with children during adolescence lessens, and they have fewer conversations. Other influences such as peers are also more consequential (Hosley & Montemayor, 1997). It is possible then that communication plays a very limited role during adolescence for fathers and their children in creating quality relationships. However, some research has shown that communication does continue to play a role in creating quality father-child relationships during adolescence (Brotherson, 1995; Snarey, 1993), and it is often cited as an important element of parent-child interaction (Barber, 1997; Hosley & Montemayor, 1997). The lack of support for the hypothesized relationship indicates a need for further exploration of how father-child communication functions during adolescence.

A second possibility is that the indicators used to measure the latent construct of communication (Cronbach’s alpha = .60) do not sufficiently capture the relevance of this variable (i.e., the relationship is not significant due to measurement error). The use of structural equation modeling mitigates the low reliability, but this is still problematic. Some important elements of communication between fathers and adolescent children (i.e., communication style in discipline) were not available for measurement in the NSFH data set. The items available as indicators of the communication construct in the NSFH data were verbal conversation, verbal praise, and hugging. While we contend that these indicators capture elements of communication, they may be insufficient measures of communication patterns between fathers and adolescent children. It has been argued that some instruments do not accurately capture the dimensions of communication or intimacy between fathers and children. For example, Hosley and Montemayor (1997) point out that many “scales assessing intimacy define intimacy from a traditionally feminine point of view (i.e., sharing feelings) rather than being sensitive to the ways in which fathers feel they are being intimate” (p. 176). This suggestion deserves more study and careful exploration of the issue of valid measurement of the communication construct.

A third interpretation that seems reasonable is that the communication important to high quality father-adolescent relationships occurs in the context of connecting activities. Hosley & Montemayor (1997) assert that fathers of adolescent children “may express intimacy through shared activities and instrumental behaviors” (p. 176). Brotherson (1995) asserts that participation in a semi-structured environment that encourages mutual interaction (play, work, recreation, etc.) is a highly common pattern for connecting in quality father-child relationships. Additionally, such a context provides the shared activity needed for fathers to maintain communication dur-
ing a child’s adolescence, typically a time when fathers’ involvement in such activities declines overall (Hosley & Montemayor, 1997; Snarey, 1993). Common elements of communication in this context tend to include humor and teasing (Larson & Richards, 1994). Thus, a father’s manner of interacting with his adolescent children may often be intricately linked with his communication patterns. This interpretation of the data would suggest that communication is not entirely disconnected from relationship quality, but that such communication is being accounted for largely by measuring connection, since the activities that contribute to connection provide the primary context for healthy communication between fathers and adolescents.

**RELATIONSHIP QUALITY AND ADOLESCENT CHILD WELL-BEING**

No direct effect was hypothesized between the variables of communication and connection and a child’s well-being; rather, the model suggested such effects are mediated through relationship quality. The results support this position and are consistent with the generative fathering model, which links relationship quality with healthy child outcomes (Dollahite et al., 1997).

The path coefficient for the relationship between relationship quality and child well-being was .25 for father-son dyads and .32 for father-daughter dyads, and each was highly significant at \( p < .001 \). This demonstrates a moderate positive effect for relationship quality on child well-being. This connection gains conceptual strength in considering other scholarly work that argues for the importance of better father-child relationships (Biller, 1993; Lamb, 1997; Parke, 1996). In a recent review of studies on fathers’ influence on children’s social and emotional development, Biller and Kimpton (1997) found that a positive father-child relationship contributes to outcomes such as a positive self-concept and better peer interactions. Cummings and O’Reilly (1997) have commented on the need to “map relations between fathers, children and emotional security in a family context” (p. 64). This study contributes to this need by highlighting the positive influence of quality father-child relationships on socioemotional well-being of adolescent children. This finding moves beyond rhetoric and provides substantive evidence that fathers have an important and measurable impact on the well-being of their adolescent children.

**STRENGTHS AND LIMITATIONS OF THE STUDY**

As with any study, there are both strengths and limitations present in the results and insights obtained from the available data that deserve comment.

The availability of a data set using a nationally representative sample was important for exploring the hypotheses of interest and was a strength of the current study. The data can be generalized to a wide population as a result of the study’s representative sample. It is probable that connection functions as a key element in father-adolescent child relationship quality for many fathers and children in the United States. Also, relationship quality between fathers and children is consequential for the well-being of both sons and daughters in adolescence. The ability to apply these findings to both father-son and father-daughter dyads is a benefit of the current study and the representative nature of the sample.
The study also provides a strong conceptual linkage between the construct of father-child connection and "positive paternal involvement" (Pleck, 1997) and provides evidence that connection is an important factor in the quality of father-child relationships during adolescence (Barber, 1997; Dollahite et al., 1997). It thus illuminates conceptual linkages in the model of generative fathering and provides feedback that can be used to refine such concepts. It also reinforces findings from research such as the National Longitudinal Study of Adolescent Health that affirms the importance of parent-child connectedness to an adolescent’s healthy outcomes (Resnick et al., 1997).

Perhaps the most limiting factor in this study was the usage of NSFH instruments. Although it would have been interesting to look at a similar model for fathers and younger children, the appropriate questions for comparison were not asked regarding younger children in the NSFH study. In addition, although the use of structural equation modeling mitigates the low reliability of some indicators, this is still a concern. The items selected as indicators for each construct were derived from the limited number of items available in the NSFH data set. Thus, the study was affected to a significant degree by the lack of availability of items that could have benefited measurement of the constructs being examined. The interpretation of findings from this study should thus be modest and shared with recognition of the limitations that exist in the data.

**IMPLICATIONS FOR RESEARCH AND APPLICATION**

This research study provides insight into several questions and opens the door to further exploration of father-child relationships. Although a significant amount of research has been done on fathers’ relationships with younger children, much less has been done on fathers and adolescent children (Hosley & Montemayor, 1997). This research provides insight into fathers’ influence on adolescent children through testing a conceptual model nested in a larger theoretical framework of generative fathering. This research is valuable because it provides some conceptual understanding of how fathers influence adolescent children and their well-being. Also, it suggests specific dimensions of the relationship that may be important. Further research needs to be done to gain a greater knowledge of these processes and relationships. For example, do the same patterns apply with fathers and younger children? And what other key factors may be critical to the father-adolescent child relationship quality and child well-being? It may be valuable to construct and test more refined measurements of father-child communication and father-child connection that will yield better information.

The concept of father-child connection is a theoretical idea that merits further consideration. Such concepts as “positive paternal involvement” or “connectedness to parents” are closely linked with the idea of connection in the conceptual model of generative fathering. This and other research suggests that specific dimensions of how fathers connect with children ought to be of primary concern to researchers (Brotherson, 1995; Lamb, 1997; Palkovitz, 1997; Pleck, 1997). There is room for continued conceptualization and research of connection between fathers and children.

While this research project focused primarily on fathers and their adolescent children, it is important to recognize that these relationships take place in a larger context...
social context. A number of other contextual influences that contribute to father involvement include the marital or co-parenting relationship, sources of informal and formal support, and cultural models of fathering (Doherty et al., 1998; Dollahite et al., 1997; Parke, 1996). Inclusion of these factors in further research would enable specific understanding of how they may affect fathers’ influence on children. These are some of the directions available for further research.

Application of the findings from this research may be of some utility in family life education or clinical contexts. If credit is given to the finding that fathers make a difference in the quality of their adolescent children’s lives through connecting with them, it may be useful for programs serving fathers and children to examine what they do to facilitate such connection. For example, parent education efforts aimed at fathers might benefit from a focus on facilitating activities with children that promote healthy connection through involvement in shared activities of mutual interest. This might include such activities as hiking together or participating in games with each other. Such program efforts may be more appealing to fathers than traditional educational programming and may meet some of the most critical needs for helping fathers connect with and make a difference in their children’s lives. In clinical settings, it may be useful to examine the presence or absence of healthy connecting activities in the father-adolescent child relationship. Working with adolescents and fathers directly to further understand specific activities that develop and sustain connection in the father-child relationship will extend the utility of these findings.

CONCLUSION

This study tested the validity of hypotheses derived from research and theory on father-child relationships through a structural equation modeling analysis of selected factors, including communication, connection, father-child relationship quality, and child well-being. Some of these hypotheses were confirmed and others were not supported, with potentially important findings about father-child relationships also emerging from the analysis. The importance of the association between connecting with children through activities and the quality of a father-child relationship was supported, as was the positive influence of father-child relationship quality on child well-being. This research confirms theoretical suggestions that fathers play an important role in the lives of children, but also raises new questions about how fathers specifically influence the quality of parent-child relationships and a child’s well-being. Considering the seeming anxiety of current commentary on fathers in the lives of children (Blankenhorn, 1995; Popenoe, 1996), this research reaffirms the need for perspectives that explain fathers’ potentially positive contributions to children. We have shown that it is not his mere presence, per se, but his connection to children that is pivotal. It is important to recognize that strong connections can have beneficial effects, but the opposite is also true: poor connections can have adverse effects. Fathers, it seems, really do matter.
REFERENCES


Panel A
*Correlation Matrix of Variables for Combined Sample (N = 362)*

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Panel B

*Correlation Matrix of Variables for Father-Son Dyads (n = 184)*

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